

THE IMPACT OF CONTEMPORARY EXHIBITIONS IN HISTORICAL BUILDINGS

Retaining significance and authenticity during adaptation

by

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Date

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ABSTRACT

Historical interiors hold within them significance which provides us with cultural identity, as well as historical and aesthetic value, and their physical materials offer us a connection to the past. These interiors and their functions often become obsolete and need to acquire a new function that is more suited to our modern-day society. One such change in function which was identified to be steadily on the rise in Cape Town is the reappropriation of historical interiors into contemporary exhibition venues. It was noted that during this process many of these historical interiors end up as neutral contemporary white boxes, where the whole historical interior is replaced or concealed by a pristine white interior and this leads to a loss of its internal historical aesthetic value.

To counter this and to retain the significant aesthetics of these interiors for ourselves and our future generations, heritage legislation offers a certain amount of protection through their respective guidelines and principles during adaptation. However, these guidelines do not offer concrete methods on the responsive adaptation of historical interiors into contemporary exhibition spaces. To address this problem and provide a substitute for the white box, alternative methods for the responsive adaptation of the historical interior into a contemporary exhibition space are highlighted and investigated.

Through this investigation, this study aims to provide responsive approaches which interior designers may adopt during adaptation that respect, acknowledge and highlight the significance of the reappropriated space in the design of contemporary exhibition venues.

Keywords: Interior design, adaptation, historical interiors, significance, authenticity, contemporary exhibition venues.

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GLOSSARY

Authenticity – something that is genuine or left from the original source (COED, 2005: 57). Authenticity in the context of this study means the remaining original materials and surfaces of the historical interior prior to and after adaptation.

Charters/heritage guidelines – comprises of the Burra Charter (1999; 2013), Venice Charter (1964), Athens Charter (1931), English Heritage (2008), South African National Heritage Resources Act (SANHRA) (1999), the International Council On Monuments and Sites (ICOMOS) (2010) and Conservation Principles for the Sustainable Management of the Historic Environment in Wales (CADW) (2011). This study refers to these charters and their guiding principles, which favour the preservation and retention of the significance and the aesthetic and authentic values of historical interiors during adaptation.

Contemporary – the occurrence or existence of something in the present period (CED, 2009: 164). This term refers to exhibition venues and display methods that are currently being used during adaptation.

Diachronic - the way something has developed and evolved over time (Oxford Dictionary, 2015: Online). The term is used in this study to describe contemporary exhibition interventions that permit the perception of existing historical layers of old interiors.

Embodied experience – the visual and physical experience of the surrounding environment through the human body (Pallasmaa, 2005: 40). In the context of this study the physical experience pertains to the exhibition interior and its materials.

Exhibition constituents – consist of the object (content), occupant (subject) and space (context).

Existential experience – the way interiors, specifically those of a historical nature, have an emotional, physical and psychological effect on us. Spatial experiences such as these are personal, unique, meaningful and memorable.

Fragmentation – the breaking up of an element or component into small pieces or different parts (CED, 2009: 307). In this study the term is used to describe a responsive adaptation method in which new interventions are broken up into smaller elements and inserted into existing interiors.

Historical interiors – in South Africa, any building older than 60 years is classified as a historical building. The type of building, its function and cultural importance determines the significance of the interior and whether any alterations to it can be made, and if so, to what extent (SANHRA, 1999: 15 & 16).

Layering – the term is used to describe a responsive adaptation method in which new interventions are layered against existing interiors as it allows us to compose and visually examine interiors (Rowe & Slutzky, 1968: 48). The principle of layering is broken up into material, spatial and object layering. In material layering new materials are layered onto existing materials. In spatial layering new architectural elements are layered from surface planes. In object layering the content is layered as architectural elements inside the space.

Narrative – relates to the sequential experience of space as we move through it (Austin, 2012: 107). Through this experience the existing spatial narrative of spaces are communicated to us through the building materials, revealing significant changes and events that occurred in the past.

Spatial experience – the perception and experience of three-dimensional space (McCarter & Pallasmaa, 2012: 15). This study focuses on the experience of the adapted interior.

Universal spaces - spaces that are generic across the globe or that share similar characteristics of disengagement with the body (Borden et al., 2000: 6). The term is used in this study to describe an exhibition space which we experience as impersonal, ahistorical and detached, with which we can only visually and intellectually engage.

White box – white cubic exhibition spaces that lack architectural detail and sensory stimuli, and that are excessively bright and detached from the outside world. This results in the spatial experiences of alienation.

NOTE ON “THEIR” - While the researcher acknowledges the grammatical inconsistency of referring to “the viewer” in pronoun form as “they” or “their”, this is a conscious decision on behalf of the author in order to escape, firstly, gendered presuppositions in the use of he/she or him/her and, secondly, the cumbersome nature of using such a double referent in a longer piece of writing.

CHAPTER ONE

BACKGROUND

1.1 BACKGROUND

It is not uncommon for historical interiors to be adapted to new contemporary uses, assuming totally different functions from those for which they were initially designed. Changes in function keep these interiors relevant and functional for modern-day society and its requirements. These adapted spaces, often turned into exhibition venues, are found in many cities around the world. Examples range from major spaces such as the Tate Modern in London, Castelvécchio in Verona and the Musée d'Orsay in Paris, to smaller examples such as the Casa Labia in Cape Town.

This specific change in function has become increasingly popular in South Africa, and specifically in Cape Town. Here, historical spaces, often situated in prime locations such as old churches and warehouses, are often selected due to their scale and size, allowing for easy reappropriation. Examples in Cape Town include galleries such as the Stellenbosch Modern and Contemporary Gallery (SMAC), What If The World Gallery, Michael Stevenson Gallery, Goodman Gallery, as well as the Museum of Contemporary African Art (MOCAA), designed by Thomas Heatherwick Studios at the Cape Town Waterfront scheduled to open in 2016.

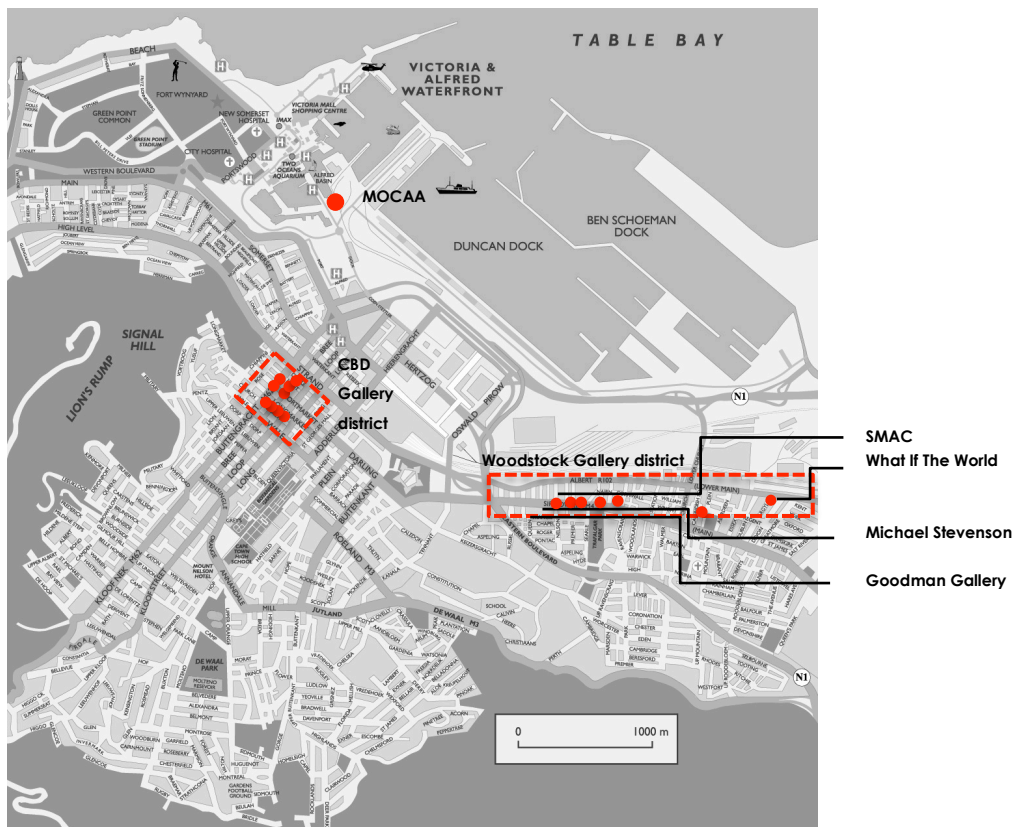


Figure 1.1 Proliferation of Cape Town galleries

During adaptation, both the existing exterior of historical buildings and their interior spaces need to be taken into consideration, as these contribute to their heritage significance. These buildings are important as they often may act as landmarks that help with orientation in the cities in which they are located. These spaces represent specific cultures through their architectural forms and the way in which they have been built and, as a result, offer a sense of cultural identity and a connection with the past (Tuan, 2011: 159). Their significance therefore provides meaning for present and future generations and should be respected.

To protect the significance of these historical buildings from being destroyed, both international heritage charters and local conservation legislation can be referred to. International heritage charters include the Burra, Venice and Athens Charters, English Heritage and the International Council On Monuments and Sites (ICOMOS). These charters identify good practice when it comes to the protection of historical spaces by recommending conservation principles and guidelines that offer significant spaces a degree of protection. On the other hand, heritage legislation such as the South African National Heritage Resources Act (SANHRA) stipulates specific rules for the retention of the significance and authenticity of historical buildings. However, this specific legislation does not necessarily protect all historical spaces and their interiors during adaptation (see Appendix A). This grey area where some interiors are protected and others are not raises concern. The guidelines are as a result not enough to help interior designers adopt a more responsive approach during adaptation.

1.2 CURRENT ADAPTATION TECHNIQUES IN EXHIBITIONS

To address the concern raised, an argument was made by Jonathan Lloyd in 2008 for the specific protection of historical interiors in order to retain their significance. According to him protection is often only extended to the exteriors of historical buildings (Lloyd, 2008: 32). This follows the argument that the exterior of historical spaces performs a public function and therefore should be retained, whilst their interiors are private, and as a result may be gutted (Highfield, 2002: 10). This approach results in façadism, also known as 'façadomy', and is prevalent in historical and modern cities such as Brussels, Paris, Chicago and Barcelona (Benhamou, 2003: 13). This practice has also been adopted in Cape Town in recent years as is evident with the renovation of Mandela Rhodes Place. In other less extreme scenarios, significant elements such as decoration and ornamentation are removed during the reappropriation of historical interiors for other uses. Contemporary interventions such as these neglect the significance, identity, aesthetics, or previous uses of historical interiors and in so doing disregard the importance of these spaces, resulting in the new spaces often existing independently of their historical envelopes. This affects a viewer's spatial experience of these historical spaces.

In the exhibition environment, this approach has frequently manifested as a neutral spatial envelope, commonly known as the 'white box'. During this approach existing spaces are neutralised with walls and ceilings painted white and lacking any architectural detail. Due to this neutralisation of space, the spatial characteristics and disengaging experience of the white box is criticised by many (Newhouse, 1998; O'Doherty, 1999). Special emphasis is also placed on the spatial qualities of such neutral environments, the likes of which are criticised by many for the effect they have on the perception of both art and interiors (McEvilley, 1999; O'Doherty, 1999). These contemporary interiors furthermore compromise the experience of historical spaces as they reduce their sensory-rich environments into universal spatial experiences. As a result, these spatial qualities of the white box are fundamentally at odds with the guidelines proposed by heritage legislation and, when inserted into historical interiors, create a rift between existing architectural elements and those of the contemporary intervention, and raises concern.

This concern calls for a more responsive approach to be taken during adaptation that allows for a sensitive integration and harmonious dialogue between existing architectural elements and materials and new additions. International heritage legislation and the South African National Heritage Resources Act on the conservation of historical spaces can be consulted when adapting historical interiors to contemporary exhibition spaces. This legislation provides basic conservation principles and heritage guidelines that offer advice to responsive adaptation. These principles prevent historical spaces from being significantly altered and therefore help to retain their significance.

Furthermore, a number of literature sources by architects can be referred to in terms of providing insight into responsive adaptation. These texts comprise literature by Thiis-Evensen (1989), Pallasmaa (2005), Scott (2008) and Schultz (2010), as they all offer understandings on the effect architectural form has on spatial perception and experience. Reference is made to both heritage legislation and policies and the literature of these authors. This foundational, theoretical research together with its application to empirical examples provides valuable insight into responsive adaptation and the ways in which it can be executed.

1.3 THE RESEARCH PROBLEM

Historical buildings are meaningful due to their cultural and aesthetic significance and their ability to provide our urban environments with distinct identities. A change in function is often required to keep these spaces relevant, and results in their interiors often being negatively impacted during adaptation to new uses. These interventions may have negative ramifications for the significance and authenticity of historical spaces. It is therefore imperative for interior designers to understand the impact their interventions will have on the significance of historical spaces when designing these

prior to adaptation. In exhibition design, the insertion of white boxes into historical interiors has become immensely prevalent and threatens the nature and significance of these interiors. Taking this into account, this study addresses the creation of contemporary exhibition spaces in historical interiors through the following sub-questions.

1.4 THE RESEARCH QUESTION

How can historical interiors be responsively adapted into contemporary exhibition venues?

Sub-questions

1. Why should the significance and authenticity of historical interiors be retained during adaptation?
2. How did contemporary approaches in the design of exhibitions develop and what significant events contributed to these developments?
3. What approaches to contemporary exhibition environments would ensure that the significance of historical interiors is retained?

1.5 RESEARCH GOALS

The adaptation of historical interiors into contemporary exhibition venues is relevant to interior designers as they are often employed to execute this change in function. In Cape Town, this study is of particular relevance because of the historical nature of the city and the growing trend in establishing contemporary galleries in historical areas. In many of these conversions the white box is adopted, resulting in contemporary interventions that reduce sensory-rich interiors to universal spatial environments. As a result, the significance of historical interiors are often compromised and this causes concern. By exploring the adaptation of historical interiors into contemporary exhibition venues, this study highlights responsive approaches that may be adopted during this intervention process by categorising, clarifying and elaborating on various themes. The study illustrates how these themes may be applied through the use of empirical cases. The majority of these cases are specifically situated in Cape Town, where the researcher resides, and Western Europe due to the shared communalities in their historical architecture.

1.6 RESEARCH METHODS

QUALITATIVE RESEARCH

Qualitative research methods are used as this study investigates the qualities of adapted historical spaces into contemporary exhibition venues, qualities which cannot be measured in numerical form (Denzin & Lincoln, 2000: 8). Qualitative research combines and studies literature and empirical information to find themes that help formulate an understanding of the world in which we live (ibid.: 2 & 3). In this study, arguments in literature are investigated and compared with key points. These are then

further illustrated using empirical examples, ultimately highlighting responsive adaptation methods when converting historical interiors into contemporary exhibition venues (Welman et al., 2005). From this type of research, the reader can expect a thorough understanding relating to responsive adaptation methods that can be used during adaptation of historical interiors, instead of a conclusive answer (Henning, 2004; Lambin, 2000: 143). Therefore, due to the nature of this study and the types of research questions asked, such answers cannot be measured as a specific value or percentile (Huysamen, 1983). As a result, the qualitative method was adopted as it aptly makes allowance for such variables (Welman et al., 2005).

DATA COLLECTION

In this study information was obtained from multiple disciplines to answer the research questions. The literature (non-empirical data) investigated is concerned with conservation and heritage legislation and guidelines, the evolution of contemporary exhibition environments, and spatial perception and experience. Visual data and artefactual evidence are interpreted and used to illustrate key ideas throughout the study as these cannot converse with the researcher to convey their own narrative and meaning (Denzin & Lincoln, 2005: 63). The method of understanding texts such as literature, photographs and drawings through interpretation is known as hermeneutics (Denzin & Lincoln, 2005: 710). This act of interpretation is particularly useful when designers of spaces, curators, theorists and governing bodies are not available for comment (ibid.: 703). The use of hermeneutics, or interpretation, of this data made it possible to investigate and extract meaning from the interiors being investigated in order to yield answers to the responsive adaptation of historical interiors into contemporary exhibition venues.

Primary sources

Visual texts in the form of photographs, architectural drawings and spatial diagrams of architectural precedents as well as artefactual evidence providing first-hand experiences of interiors form the primary sources in this study. These are analysed and interpreted to help illustrate important concepts and the practical application of the secondary theoretical literature which refers to historical interiors that have been repurposed into contemporary exhibition venues.

Artefactual evidence

As this study is concerned with the spatial qualities of adapted interiors, it was important to experience these spatial environments first-hand, and not solely through photographs, drawings and literature. These first-hand encounters resonate with the idea that information relating to spatial environments and their experience cannot be observed purely through text, photographs and the visual sense alone, but require the perceptible body to form part of the investigative experience. First-hand encounters made it possible to experience the layout of these exhibition venues and allowed the

researcher to investigate details, materials and textures in spaces that may not be visible in images or photographs. Artefactual investigations conducted during this study are indicated in tables 1.1 and 1.2 and include both international and South African examples.

International			
Exhibition venue	Previous function	New function	Location
Castelvecchio	Fortress	Museum	Verona
Tate Modern	Power station	Contemporary art gallery	London
Musée d'Orsay	Train station	Contemporary art gallery	Paris
Rotonda di via Besana	Church	Exhibition venue	Milan
Sforza Castle	Castle	Museum	Milan
Brunick Castle	Castle	Exhibition venue & museum	Brunick

Table 1.1 Table of international artefactual examples

Cape Town			
Exhibition venue	Previous function	New function	Location
Museum van de Caab	Wine cellar	Museum	Franschhoek
Blank Projects	Commercial building	Contemporary art gallery	Woodstock
What If The World Gallery	Synagogue	Contemporary art gallery	Woodstock
Michael Stevenson Gallery	Warehouse	Contemporary art gallery	Woodstock
Goodmann Gallery	Factory	Contemporary art gallery	Woodstock
SMAC Gallery	Bakery	Contemporary art gallery	Woodstock
Villa Casa Labia	Residential Villa	Exhibition venue & museum	Muizenberg
SAM	Parking garage	Exhibition venue & retail	CBD
Castle of Good Hope	Fortress	Exhibition venue & museum	CBD
Koopmans-de-Wet Town House	Residence	Museum	CBD

Table 1.2 Table of South African artefactual examples

Secondary sources

Secondary data comprises literature. Nueman (2007: 45) mentions that to be able to conduct credible and respectable research, theory (literature comprising reasoned sets of ideas) is required, and the relationship of theory to empirical reality is necessary to prevent the study and findings from being mere hypothetical, abstract and theoretical speculations. The literature for this study comprised books, journals, dissertations and official documentation. These covered topics relating to historical spaces, conservation, adaptation, exhibition spaces, spatial experiences and spatial perception and were used in conjunction with various examples and artefactual investigations.

DATA ANALYSIS

This study makes use of bricolage. This is a research method where diverse ranges of information are combined together to form "a pieced-together set of representations that are fitted to specifics of a complex situation" by the *bricoleur* (researcher) (Denzin and Lincoln, 2005: 4). As an interdisciplinary approach, *bricolage* recognises the potential of investigating the truth between opposing ideas of the disciplinary and interdisciplinary relationship, and encourages the dual consideration of these opposing ideas to produce rich, combined results (Kincheloe, 2001: 679).

Various methods of inquiry and analyses are used, ranging from exploratory, explanatory and descriptive analyses, to help with the investigation process. Such a combination of theories, research techniques and methodological methods allows the *bricoleur* researcher to develop, in essence, their own methodological tools (ibid.).

Exploratory, explanatory and descriptive analyses are conducted by asking how-, what- and why-styled questions. According to Denzin and Lincoln (2000: 502 – 503), (what) questions encourage an inquisitive approach towards the subject matter, (how) questions explore the composition and structure of key ideas within the area of research that relates to the research question and (why) questions offer explanations for the reasons for discursive actions that unfold in a specific direction. Each of these questions contribute in their own manner towards obtaining an in-depth understanding of the subject matter.

To understand the significance of historical interiors, it is necessary to first understand (what) makes these spaces significant, (why) their significance needs protection and (how) their significance can be retained during adaptation. To obtain answers to these questions, heritage legislation and policies along with theoretical literature by Pallasmaa (2000; 2005) and Scott (2008; 2013) are examined in terms of spatial experiences and the adaptation of historical interiors.

To understand what constitutes contemporary exhibitions, an understanding is needed firstly of (what) events led to the development of contemporary exhibition interiors such as the white box, (why) this development happened and (how) this spatial environment affects the significance of the historical interior when adapted. Literature by Gilman (1918), Alexander (1979), Staniszewski (1998), O'Doherty (1999), Kantor (2002), Klonk (2009) and Birkett (2012) is examined to obtain answers to the evolution of exhibition spaces, the white box and the effects these interiors have on the viewer's experience and perception of art and space.

To highlight ways that allow the significance of the historical interior to be retained during adaptation, (what) guidelines are proposed by heritage legislation, (how) these guidelines can be understood and practically implemented and (why) this approach is

responsive, needs to be established. Heritage legislation and policies, along with literature by architectural theoretician Thiis-Evensen (1989) and existing architectural precedents, are studied to highlight ways in which, firstly, responsive adaptation can be approached and, secondly, contemporary architectural elements can be designed and configured during adaptation. Texts by Michel (1996), Tzortzi (2007) and Traue (2000), are investigated to obtain an understanding of the influence architectural form has on the viewer's experience and perception of space.

Bricolage is therefore used as a critical, multi-perspective, multi-theoretical and multi-methodological approach to this inquiry (Rogers, 2012: 1). It forms a complex, dense, reflexive and collage-like creation that represents the researcher's images, understanding and interpretations of the world or phenomenon under analysis (Masucci, 2015: Online). According to Kellner (1999: xii), "the more perspectives one can bring to their analysis and critique, the better grasp of the phenomena one will have and the better one will be at developing alternative readings and oppositional practices". Two key opposing points can be found in this study. The first one refers to the universal white box versus the diachronic and sensory exhibition interior. The second encounter of opposing areas of inquiry is found between responsive adaptation methods that can be used when designing new interventions versus the way new interventions can alter spatial movement and circulation. The former is concerned with the static perceptions of interventions, whilst the latter focuses on the kinetic experience of interventions.

According to Denzin and Lincoln (2000: 5), such a diversity of information obtained from multiple viewpoints and analysed using various methods of inquiry adds "rigor, breadth, complexity, richness, and depth" to the inquiry. This has allowed the researcher to investigate and illustrate the complexity involved in the responsive adaptation of historical interiors through this combination of theoretical and empirical data.

Furthermore, this method of interpretation and representation changes constantly, resulting in an emergent design as more information is obtained and added to the study, and involves aesthetic issues that go beyond approaches that are purely theoretical or purely practical (Denzin & Lincoln, 2005: 4). In this regard, historical spaces are first explored before moving on to exhibition venues, concluding with responsive adaptation methods and spatial circulation. The research initially focuses on existing constructed spaces, to newly constructed interiors, to marginal interventions and their applications. *Bricolage* made it possible for the researcher to change direction and develop the research method continuously as the study progressed and more themes emerged.

A THEMATIC ANALYSIS

This study is broken up into main themes which address the sub-questions. These themes have been arranged in the form of a narrative as they emerged during the course of this study, instead of chronological order. Firstly, this narrative explains the importance of historical spaces. Next, it offers an understanding of what constitutes contemporary exhibition venues, followed by responsive ways in which historical interiors can be reappropriated into contemporary exhibition venues and the effect this might have on the viewer's perception and experience of space.

In addition, selected themes have been extracted from Thiis-Evenson's *Archetypes in Architecture* (1989) and are used in chapters specifically concerned with the responsive adaptation of historical interiors and spatial circulation. Thiis-Evensen (1989: 19 - 21) specifically investigates and classifies archetypes according to their universal architectural expression and the psychological effect and spatial experience these create for people. During this investigation only themes that relate to adaptation are referred to and applied.

1.7 DELIMITATIONS

This study does not set out to interrogate heritage regulations. Instead, the literature used in this study refers specifically to the preservation of the significance and authenticity of historical spaces when adapting them into contemporary exhibition venues. The study does not investigate the use of historical spaces for other purposes such as retail, commercial and hospitality and is not concerned with newly constructed exhibition venues. Only selected examples concerned with contemporary exhibition interiors in appropriated historical spaces are referred to and analysed. This study does not concern itself with the curating of exhibitions, but focuses purely on the interior architectural interventions themselves.

1.8 DISCURSIVE SHORTCOMINGS

During the literature review, studies were found that deal with contemporary exhibition spaces, as well as the responsive adaptation of historical interiors. The studies referred to investigated topics on the following: Alexander (1979) and Klonk (2009) explores the evolution of contemporary exhibition interiors; O'Doherty (1999) and Birkett (2012) investigates the experience of white box exhibition spaces; O'Doherty (1999) and Fitzpatrick (2004) investigates the relationship between white box exhibition spaces and their content. However, it was found that no investigation has yet been conducted that places these investigations together or categorises, clarifies and elaborates on the responsive implementation of contemporary exhibitions into significant spaces so as to retain their significance during adaptation. It is hoped that this dissertation will contribute to interior design discourse by synthesising this literature and, in turn, highlighting methods that may be adopted when designing contemporary exhibition venues inside existing significant historical interiors.

1.9 ETHICS

The researcher has undertaken to give an accurate account of all the data and to acknowledge all sources utilised for this research. An application for ethical clearance, as required by the Research and Ethics Committee of the Cape Peninsula University of Technology, was submitted and approved and a declaration signed that this is the researcher's own work.

1.10 LAYOUT OF THE STUDY

Chapter one provides an introduction and background to the study, and stresses the relevance of research relating to the establishment of contemporary exhibitions in historical interiors in a manner that allows their significance to be retained. Chapter two deals with the importance of historical interiors and why they need to be protected. Chapter three covers the evolution of exhibition spaces from exclusive to inclusive environments, and the effect this had on their interiors. Chapter four explains the development of white box exhibition venues and the effect they have on historical interiors, visitors and the content on display. Chapter five highlights alternative approaches to the adaptation of historical interiors into contemporary exhibition venues that are responsive to their historical contexts, and chapter six relates to spatial experience through perception and movement to help create rich and engaging exhibition interiors. Finally, chapter seven concludes the study and highlights findings and opportunities for further research.

CHAPTER TWO

THE NATURE OF HISTORICAL BUILDINGS

2.1 INTRODUCTION

In this chapter, it will be argued that historical buildings are significant as they provide connections to the past. It will be argued that a change in function of these historical interiors is often inevitable, and can be positive for a number of reasons. These may include an increase in the lifespan of the building to provide future generations with a reference to significance and cultural identity. Other reasons for their adaptation may include economical viability and environmentally sustainable practice. In addition, it will be shown that historical interiors are sensory spaces with which visitors engage both physically and emotionally. It will be argued that visitors' interactions with materials of historical interiors are unique and personal, and aid the recollection of personal memories. It will further be suggested that the materials of significant interiors offer insight into the history of these spaces, and allow the past to be reimagined.

A concern will be raised relating to the loss of significance when historical interiors are modified. Ways to counter or minimise this loss will be highlighted by making reference to the South African National Heritage Resource Act, SANHRA (1999), as well as the Burra Charter (2013), Venice Charter (1964), Athens Charter (1931) and ICOMOS (2010). Ways in which heritage legislation provides both guidance for and restricts the process of adaptation will be discussed, with the emphasis on the retention of their existing significance and authenticity. Examples will be used to illustrate various principles relating to such adaptation.

2.2 CONSERVATION AND REAPPROPRIATION OF HISTORICAL BUILDINGS

Historical buildings are deemed 'significant' as they provide connections to the past. In South Africa, buildings are classified as historical when they are older than 60 years. According to the SANHRA 25 of 1999, these buildings are understood to be unique structures that hold a sense of authority, value and cultural identity within them (SANHRA, 1999: 15 & 16).

Furthermore, Pallasmaa (2005: 31) believes that historical buildings and their interiors communicate their initial function, along with significant events that occurred in their past by means of their materials, method of construction and present state. The physical engagement with these materials therefore enables time periods to be perceived that stretch beyond the lifetime of one single human being (Pallasmaa, 2005: 52). In addition, these significant buildings often serve as iconic landmarks within the landscape or city and speak of the history, culture and traditions of their location and surroundings. These buildings provide a sense of reality; a person's experience of

these spaces is grounded to a specific time, in a specific place, at a specific location (Pallasmaa, 2000: 82). Furthermore, these structures enrich and contribute to a person's understanding and sense of cultural identity alongside the area on which they stand (Tuan, 2011: 159). Their historical interiors, on the other hand, possess unique experiential atmospheres that enrich these spaces with memorable characteristics, identities and perceptual qualities and have an immediate sensory and emotional effect on visitors when encountered (Pallasmaa, 2014: 232).

Furthermore, despite the fact that many significant buildings are situated on prime locations in various modern cities, many of them and their interiors have become obsolete due to social, technological, or contextual factors (Scott, 2013: 113; CADW, 2011: 9). As a result, these buildings and their interiors no longer contribute to the economy of these cities as they are in a state of redundancy, left abandoned, or disused, and fall into a state of decay. They are, nevertheless, protected from being demolished by heritage legislation. One such example is the Athlone power station situated next to the N2 highway near Cape Town (Fig. 2.1). The power station, originally built to meet the high energy demands of the city, currently stands vacant largely as a result of the power plant being left inactive for extended periods in the past, causing its machinery, and the building itself, to deteriorate (City of Cape Town, 2015: Online). The plant was completely decommissioned in 2006 due to the high costs of repairing the damaged parts; parts of the plant, namely the cooling towers, were demolished in 2010.



Figure 2.1 Adapting historical spaces keeps them relevant.

In cases such as these adaptation is necessary in an effort to keep these buildings and their interiors relevant, functional and financially viable. Adapting these derelict buildings into spaces that can be used by the public allows for the significance, memory and cultural identity of these spaces to be retained, experienced and appreciated. In the case of the Athlone power plant, many proposals have been made for its redevelopment, which included its transformation into an art gallery similar to the Tate Modern in London (Fig. 2.2). However, none of the proposals have materialised thus far (O'Toole, 2015: Online).



Figure 2.2 Keeping historical interiors obsolete causes them to fall into a state of decay.

It furthermore proves more sustainable to adapt existing buildings rather than demolish them, as fewer materials are required to make them functional and relevant once again when recycled. In the adaptation of large historical interiors into contemporary exhibition environments, fewer interventions are required as their scale and layout allow them to be easily adapted and transformed into exhibition venues. It is hence argued that by changing the function of historical buildings and making alterations accordingly, they may gain new life (Machado, 1976: 27; Scott, 2013: 113). The process of adaptation therefore not only increases the lifespan of buildings, but also contributes to economic sustainability. In addition, these structures are often environmentally sustainable as they have been designed and constructed to operate in accordance with the requirements of their natural environment; they are thus often constructed to make use of natural light and ventilation throughout their interiors (English Heritage, 2008: 44). Ultimately, the recycling of these spaces results in the retention of historical landmarks and ensures that both present and future generations are able to experience the cultural significance and identity they have to offer.

2.3 A SENSORY CONNECTION WITH HISTORICAL BUILDINGS

It is purported that significant architectural spaces are three-dimensional environments that offer active, engaging spatial experiences (Pallasmaa, 2005: 63). Historical interiors are normally sensory environments due to the natural materials selected for their construction, their often richly decorated spaces, or the wide variety in textures and colours in their finishes. Consequently, interactions with their tangible materials, details and finishes are physical and provide for intimate, unique and individual spatial experiences (Pallasmaa, 2000: 82 – 83). Through these spatial experiences and physical encounters with materials, the history of these spaces, significant events that occurred in their past and the initial function for which they were used are perceived (Shirazi, 2009: 326 – 327). These encounters provide visitors with a specific sense of identity relating to who they are and where they belong in the world that surrounds them (Bloomer & Moore, 1977: 18).

Furthermore, both Tuan (2011: 116) and Pallasmaa (2005: 66 – 67) agree that the spatial composition and characteristics of spaces affect visitors in both an emotional and physical way, upon which they actively react. Wittgenstein concurs and argues that this dual emotional and physical connection allows visitors to formulate their own personal, unique interpretation of space (Pallasmaa, 2005: 12). Consequently, such a direct and unique encounter between visitors and their surroundings imparts on each individual different meanings and memories, a point already observed and raised by philosophers during the late 17th and early 18th centuries when an interest in the past and fascination with memory developed (Tuan, 2011: 194). Through these observations, philosophers discovered that when a person interacts with the tangible materials of historical buildings, their connection with the past is strengthened (*ibid.*). This connection with the past subsequently aids the recollection of memories when the person is exposed to stimulants or spatial settings similar to those in which the initial memory was formed.

The experience of historical interiors is therefore unique and different for everyone, offering spatial experiences that are distinct and personal. These spatial encounters affect the visitor physically, emotionally and psychologically, imparting on them individual meaning and activating their personal memories. This process makes historical interiors special and valuable, and offers further reason for their protection.

2.4 A GRAPHIC REPRESENTATION OF TIME

Historical buildings and their interiors are graphic representations of time. Through their materials and their method of construction, these spaces are linked to specific periods. Shirazi (2009: 324, 326 & 327) is of the view that constructed environments are able to freeze and reveal time through their physical appearance: as time progresses, historical spaces obtain more layers, escalating their significance, sentimentality and aesthetic values, and provide them with deeper meaning. The progression of time also

causes their materials to weather and decay. This weathering process concretises time by the way the physical condition of the materials changes (Pallasmaa, 2000: 82). In this weathering process, the essence and authenticity of the natural materials are revealed which, in turn, permits physical analysis of the integrity of the space (Pallasmaa, 2005: 31).

This physical change in the material has a psychological effect on the visitor. According to the Japanese author Jun'ichirō Tanizaki (1991: 15 - 16) in his writings '*In Praise of Shadows*', the weathering process provides natural materials with the "power to calm and sooth" those who encounter them. Pallasmaa (2005: 52) concurs and extends this to architectural spaces, writing that in significant architecture, time is detained and offers an escape from the fast-paced everyday life. This shift and temporary break from the present increases awareness of the continuum of time, and is strengthened through the historical materials with which the visitor physically engages. These materials and the way they have been assembled help construct interior atmospheres, affecting visitors internally, emotionally and spiritually, and contributing to their unique spatial experience.

To retain this direct connection with time and the unique spatial experience offered by these significant spaces, a congruous relationship needs to be established between new and existing elements during adaptation. Through such a relationship, these spaces are able to retain their unique spatial qualities and their personal connection with visitors. In so doing, the connection with the past is kept alive.

2.5 TOWARDS THE MODIFICATION OF HISTORICAL INTERIORS

Italian architect Alberto Grimoldi (1985: 119) raised the concern that historical buildings and interiors run the risk of losing their character and cultural significance when they are continuously modified. This occurs when existing materials are removed and replaced by modern materials, or when existing interiors are concealed. Both of these factors prevent the reading of these historical spaces during perception. As time progresses, more alterations may follow until nothing authentic is left of the spaces, with all their original significance either obscured or erased. The adaptation process might therefore place the significance and authenticity of these interiors at risk. If these risks that contemporary interventions pose for significant interiors are ignored and unresponsive approaches to adaptation are adopted, there is a real danger of in fact breaking connections with the past and causing a loss or ultimate destruction of heritage and cultural identity.

This, however, does not mean that historical interiors should be left untouched. SANHRA (2015: 2), the governing organisation established to manage and control local heritage resources in South Africa, encourages the use or reuse of significant spaces, but stresses the importance of conservation. This is to ensure that the significance that the buildings

add to everyday life is retained, together with the preservation of a person's understanding of how society has evolved and where they come from. To help retain historical integrity, various guidelines have been compiled along with strict regulations in an effort to protect these significant interiors and offer assistance in this regard.

These heritage guidelines and conservation principles are contained in the international charters which include the Athens Charter of 1931, which was established in Athens at the First International Congress of Architects and Technicians of Historic Monuments and which influenced the Venice Charter; the Venice Charter, established in 1964 and adopted by ICOMOS in 1965, and ICOMOS, established in 1965. The latter non-governmental organisation shares ties with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and strongly supports the conservation and preservation of historical monuments and sites. In addition, the Burra Charter, established in 1976, aims to offer a certain degree of protection to places of cultural significance in Australia. This charter has been adopted internationally and forms a big part of ICOMOS. English Heritage (2008) offers a set of comprehensive guidelines and heritage principles for the protection of historical sites in England, whilst CADW (2011) offers conservation principles for Wales. Although these are all located outside of South African borders, the guidelines and principles proposed by these international heritage legislation were found to be very thorough and meticulously set out, and offer set standards and clear understanding for the conservation and preservation of historical places and spaces.

According to these statutory governmental heritage advisors, the principle of conservation is the process of retaining all the layers – both tangible and intangible – of the past and present (ICOMOS, 2010: 2). The heritage legislation and charters propose that any historical and meaningful layers be exposed and recommend that these layers be acknowledged during adaptation (ICOMOS, 2010: 2 - 3 & 9; Burra Charter, 1999: 1 & 3 - 4; SANHRA, 2015: 2). Tangible layers may include fixtures such as lights, doors and built-in cabinetry; fittings such as stained glass windows, surface decorations, wallpaper, floorboards and cast iron ceiling panels; content such as artworks and moveable furniture items, as well as the material of the structure and the way it is constructed. Alternatively, intangible heritage layers refer to the meaning attached to these spaces either through a community, a group of people, or the historical and/or significant function of these historical interiors (English Heritage, 2008: 36; ICOMOS, 2010: 10).

Both these layers, tangible and intangible, provide meaning to historical spaces and contribute to their historical, cultural, aesthetic and communal values, which should be considered during adaptation. To accomplish this, ICOMOS (2010: 8) stresses that new functions need to co-exist harmoniously with historical interiors to retain their cultural

significance and historical integrity. In order to preserve the significance and authenticity of these spaces, these terms need to be thoroughly understood.

2.6 DEFINING SIGNIFICANCE AND AUTHENTICITY IN HISTORICAL INTERIORS

The term *significance* is used to describe something that holds important value or meaning to one person or a group of people. In the case of historical architecture, its value and meaning is in flux, with some regarding a building as significant based on the function of the spaces, and others for their period of construction, or where they are situated (English Heritage, 2008: 36). Furthermore, architectural spaces are regarded as being culturally significant as they provide identity within and about their locations, information about the surrounding community and their beliefs or values, and the events and functions that shaped the specific area where these spaces are sited (Burra Charter, 2013a: 2). According to the Burra Charter (2013a: 2), cultural significance may furthermore be divided into specific categories which refer to the 'aesthetics, historical, scientific, social or spiritual value' of these spaces. These values should be retained as far as possible as they all contribute to the significance of spaces and the importance they hold for society.

Additionally, heritage legislation maintains that significance is embodied both within the physical architecture, materials and location of spaces, and within their spiritual and intangible use (Burra Charter, 2013b: 4, English Heritage, 2009: 35 - 40). The meanings associated with historical spaces, their content, furnishings, equipment and their relation to spaces similar in function and values all contribute to their *significance*. Jokilehto (2006), the President of the International Training Committee of ICOMOS and Senior Programme Advisor to the International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM), thus defines significance as the intangible that manifests itself within the tangible.

Authenticity, on the other hand, refers to both the tangible and intangible values associated with spaces, as well as the original materials and shape of interiors and buildings (ICOMOS, 2010: 9). For Jokilehto (2006: 10), any alterations to these existing elements have a direct impact on the credibility of historical structures, as they compromise the authenticity of the significant spaces in the act of changing them from their original state. True authenticity can thus only exist as long as the original, authentic material source is still in existence with no alterations made to it. To define the authentic value of significant interiors, both their past and present states need to be included, taking into consideration any alterations that were made. Their current condition is then compared to what they originally looked like by referring to all existing material, architectural and aesthetic elements to determine the percentage of authenticity still in existence. Additional data that may be analysed during this process is the following: technology and craftsmanship used in the construction of these spaces, the present versus historical context in which these spaces are located, their

original function compared to what they are currently used for, and any references to traditions, spiritual essence and sense of place and whether these are still visible (ICOMOS, 2010: 9).

To retain the authenticity and significance of historical interiors, their evidential, historical, aesthetic and communal values need to be considered. These values are defined as follows: *evidential value* is anything that is tangible, such as material and architectural elements (English Heritage, 2008: 7). Analysing these makes it possible to determine the age of significant spaces through the construction techniques employed, and makes the different functions that these spaces have acquired over the years evident. *Historical value* provides an intangible link between the past and the present (English Heritage, 2008: 7). This value signifies the people and events associated with these interiors and their various functions. *Aesthetic value*, on the other hand, refers to the physical appearance of significant interiors that impacts and affects the body and its senses (English Heritage, 2008: 7). Reference is made to sensory data such as colour, texture, smell, shape, scale, materials and sounds, and how these impact the body. Lastly, *communal, social and spiritual values* are given to significant places by groups of people (English Heritage, 2008: 7). These values provide significant spaces with shared senses of meaning and cultural identity.

It is vital that all these values be acknowledged and contemplated during adaptation in order to prevent any loss of significance and authenticity during this process.

2.7 RETAINING SIGNIFICANCE AND AUTHENTICITY

For many historical spaces to remain resilient, sustainable and relevant today, a change in function is required. To make this change in function possible, many historical spaces have to be reappropriated by incorporating new interventions. The extent and type of intervention the designer prescribes during this process of modification are reliant on the authenticity and significance these interiors hold, along with the cultural heritage and identity they provide (Heritage Western Cape, 2012: 4 – 8).

According to English Heritage (2008: 43), adding additional layers to historical spaces should not be discouraged, so long as these emphasise the significance, values and meaning of these spaces as far as possible. To retain the authenticity and significance of these interiors, it is necessary to conserve and protect the elements that portray and embody this meaning, and keep them to their true form. This is done by creating a distinction between existing materials and new interventions, making it possible to clearly differentiate the old from the new during adaptation (ICOMOS, 2010: 9). However, it should be considered that in future any (or all) additions and alterations made may need to be reversed. It is therefore imperative that all interventions be

designed in such a way that they can be reversed without negatively scarring the significant interiors (Burra Charter, 2013a: 6).

Furthermore, new interventions should not conceal, detract attention from or cause removal of any significant, concrete evidence of historical interiors that pertains to any time frame or event that occurred in their past. Interventions should instead complement the historical material and nurture and highlight their existing significant and authentic values. Scott (2008a: 168) writes as follows:

Their (designers) effort in resuscitation of the host building is akin to transcription in poetry and music. The designer has it within his or her scope to clarify the intentions of the original builders through their intervention.

The Neues Museum in Berlin, restored by David Chipperfield Architects in 1997, is one such example where the guidelines as set forth by the charters were followed (Dezeen, 2009: Online). The museum was originally constructed by Friedrich Stüler and was partly destroyed in the 1945 bombing of Berlin. During the intervention the architects used modern materials to reconstruct these elements, instead of trying to replicate what was lost (Bizley, 2009: 6). The new inserts highlight the original materials and, through a contemporary interpretation, reflect what was lost.

The original central stair hall serves as an exemplification of this: it was completely destroyed in the blast, leaving only an empty void. During reconstruction, new walls were erected using recycled bricks, and a new roof of dark stained oak trusses was introduced. The grand staircase was replaced by a precast, abstract and contemporary interpretation of the existing one, following the same form as that of the original (Fig. 2.3).

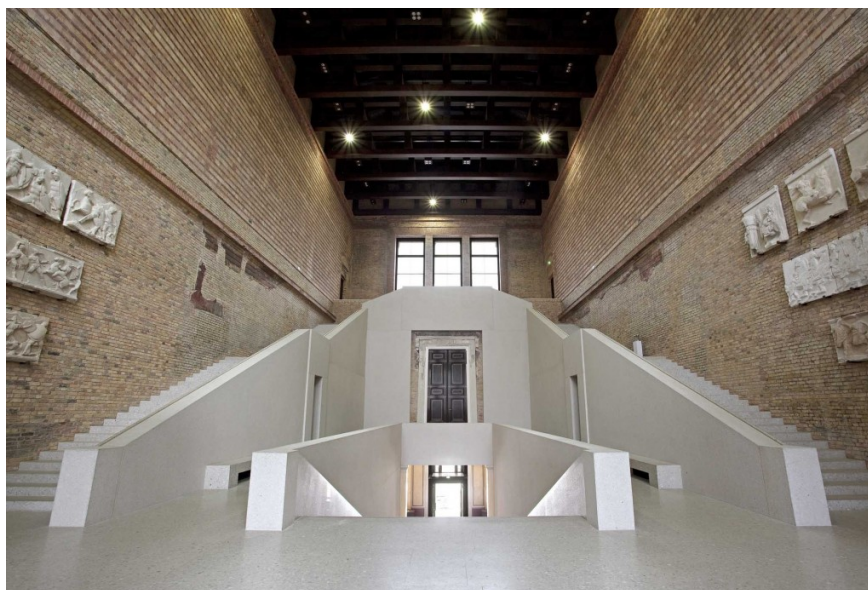


Figure 2.3 Contemporary and abstract reinterpretations serve as remembrance of the lost elements.

In instances where only small parts of the historical elements were missing, the lost part was replaced by a replica made from the same white precast mix of the staircase. Such a reproduction is visible in the capital of the column (Fig. 2.4), allowing for a clear contrast between past and present. Chipperfield's new additions return significance to the structure, referring to what was lost through the use of contemporary materials, whilst highlighting and giving recognition to the existing elements.



Figure 2.4 Contrasts in colour between new interventions and the existing interior retain authenticity.

2.8 THE ADAPTATION PROCESS

Adaptation may be defined as the process of giving historical interiors new functions by either inserting new elements, or adapting these existing spaces to accommodate new functions. According to architect and interior designer Scott (2013: 113), alterations to historical spaces therefore provide an alternative to the demolition or preservation of significant spaces, which subsequently increases their lifespan. He argues that adaptation lies within the realm of interior design, as internal interventions allow historical interiors to be altered to meet modern-day demands (Scott, 2008b: 8). This is in line with the views of Pallasmaa (2000: 83), who states as follows:

The insertion of new function in symbolic structures short-circuits the initial architectural logic and opens up the emotional and expressive range. It is indeed thought provoking, that architectural settings which layer contradictory ingredients project a special charm.

From this it is understood that the co-existence of new, contemporary materials with existing ones makes the unique characteristics of historical interiors more perceptible to the viewer, and strengthens their cultural and historical values. This is possible through the use of contemporary materials, architectonic elements, textures, or colours that are distinctly different from those existing in these historical spaces. It is therefore important for the designer to investigate both tangible and intangible existing values prior to adaptation, to extract information to which they may refer when designing interventions. By understanding and expressing these values, the significance and authenticity of existing spaces may be emphasised and their characteristics, narrative and original construction methods retained and highlighted.

To illustrate the adaptation process, reference is made to both local and international examples of historical interiors that have been reappropriated into contemporary exhibition spaces. International examples include the Musée d'Orsay, Paris, by Gae Aulenti (1981), an old train station which was converted into a contemporary art gallery and exhibition space (Fig 2.5 & 2.6); Sforza Castle in Milan, an old castle now exhibiting both historical and contemporary objects and art (Fig. 2.7 & 2.8) and Rotonda di via Besana in Milan, an old cemetery and former church now being utilised as a temporary exhibition venue for contemporary art (Fig. 2.9).



Figure 2.5 Original interior of the Gare d'Orsay station by Victor Laloux in 1898



Figure 2.6 Adaptation of the station into the Musée d'Orsay gallery by Gae Aulenti in 1981



Figure 2.7 & Figure 2.8 Adaptation of Sforza Castle into an exhibition venue to exhibit temporary and permanent collections



Figure 2.9 The Rotonda di via Besana is an exhibition venue only used for temporary exhibitions.

The adaptation process of local historical buildings into contemporary galleries is also known to South Africa, with many such examples existing in Cape Town. The gentrification and rapid urbanisation in recent years of previously rundown areas such as the City Bowl and Woodstock have furthermore contributed to many new exhibition venues being established in these areas inside significant interiors.



Figure 2.10 Castle of Good Hope as a local example of an adapted historical interior into a contemporary exhibition venue

Examples of this include the Castle of Good Hope, an old fortress that currently functions as a museum and temporary contemporary art exhibition venue (Fig. 2.10), the former city hall and meeting place of the Burgher council, Old Town House, which now permanently houses artwork from Sir Max Michaelis' collection (Fig. 2.11), the old bakery site for Baumann's Biscuits and Duens Bread in Woodstock, Cape Town (since renovated into The Palms lifestyle shopping centre) and art galleries such as the SMAC (Fig. 2.12).

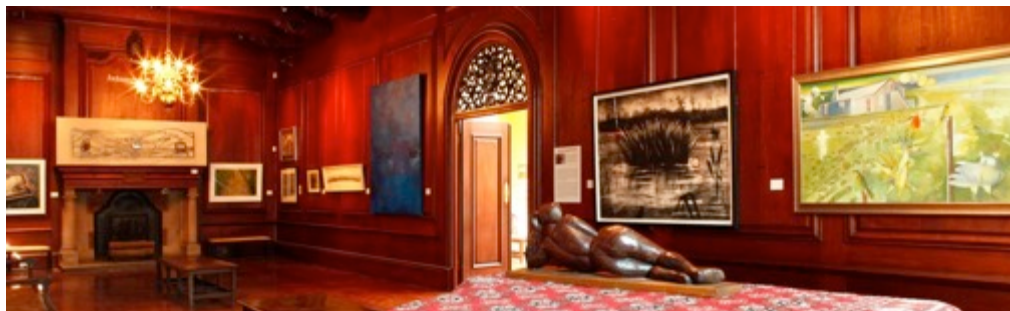


Figure 2.11 The Old Town House serves as a local historical interior that exhibits contemporary art.

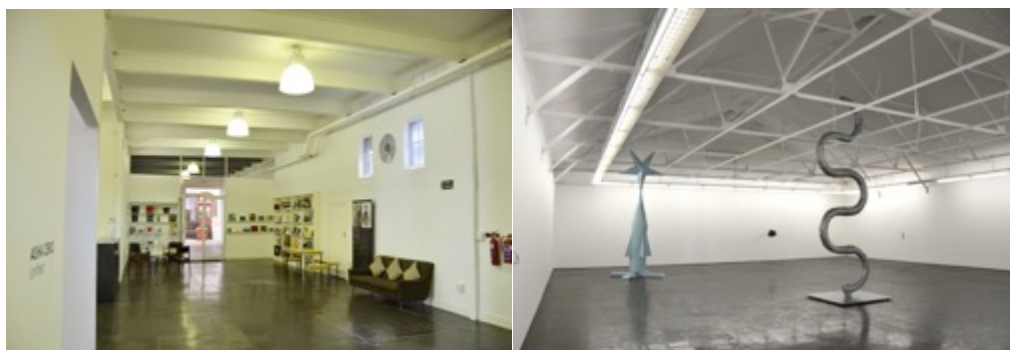


Figure 2.12 SMAC Gallery located inside the adapted old bakery factory in Woodstock

What If The World Gallery in Woodstock, Cape Town, is an example of a historical building which still holds communal and spiritual values and acts as a local landmark after it was changed into a contemporary gallery. The decommissioned synagogue was bought in 2008 and its hall was transformed into a new, contemporary art venue (Fig. 2.13) (Reyes, 2012: Online). From the outside, the previous function can still clearly be read in the architecture and symbolic detail. However, from the inside, any link to this religious function has, to a large degree, been obscured with the introduction of dry walls and the interior being painted white.

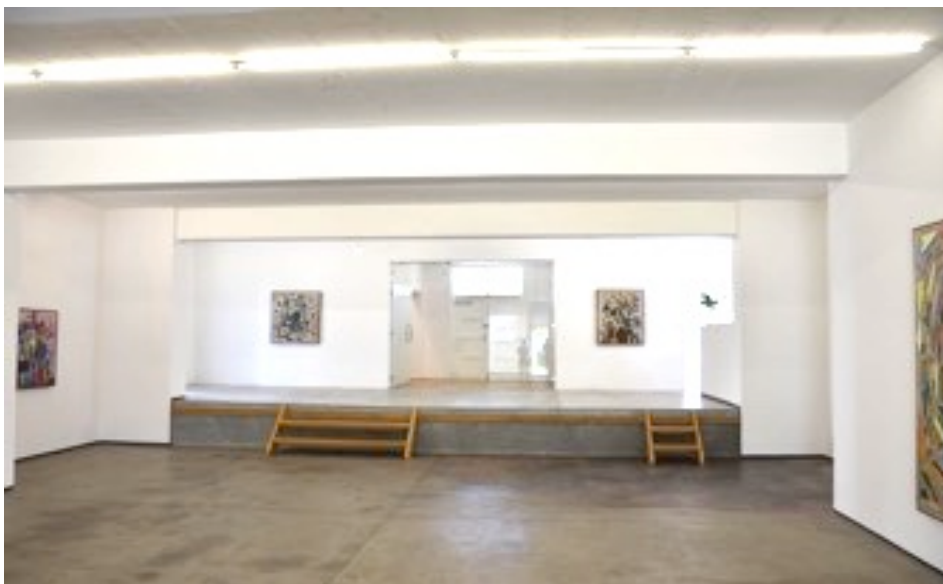
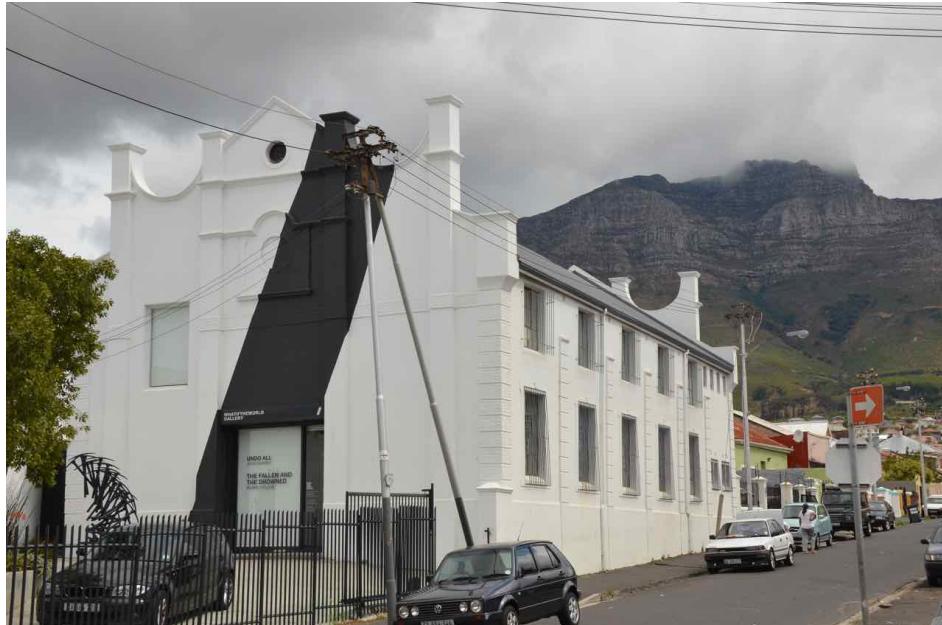


Figure 2.13 Historical significance visible on the exterior (top) but discarded inside the interior (bottom)

This rapid increase in exhibition venues has furthermore led to social exhibition events such as First Thursdays (Fig. 2.14) and Thursday Late (Fig. 2.15), establishing a 'gallery-going' culture. The City of Cape Town is also currently in the process of procuring its own contemporary art museum, the MOCAA. Designed by Thomas Heatherwick Studios, the gallery is located in the historical grain silos at the V&A Waterfront and is set to open its doors to the public in 2016; it will exhibit art from the Zeitz collection (Fig. 2.16).

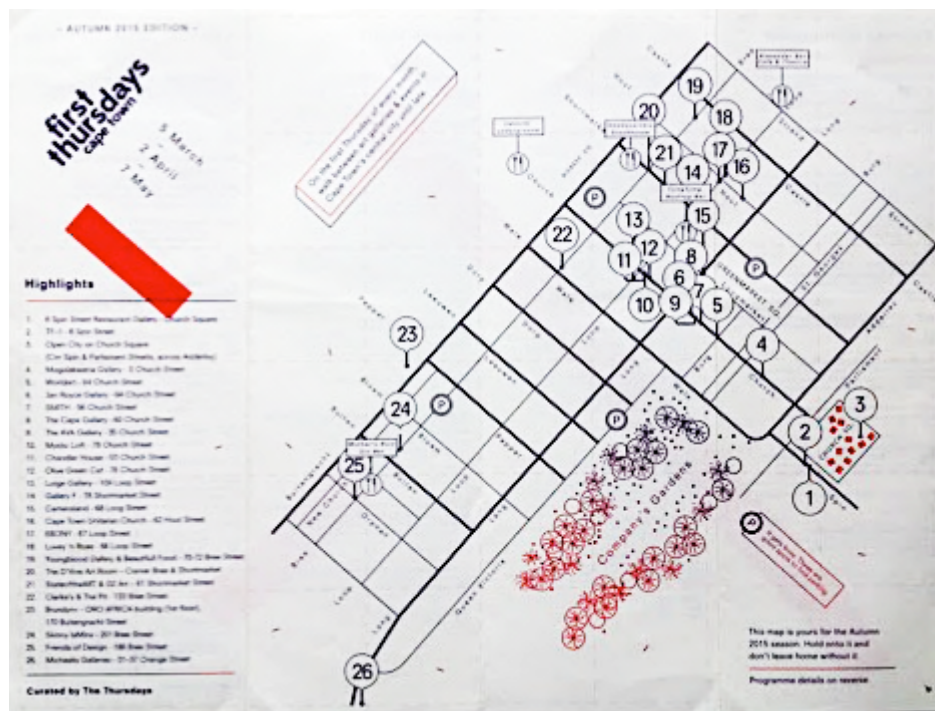


Figure 2.14 First Thursdays map showing new contemporary galleries in the CBD of Cape Town



Figure 2.15 Thursday Late map of contemporary galleries in Woodstock, Cape Town



Figure 2.16 Conceptual image of MOCAA

2.9 SUMMARY

Historical buildings and their interiors are significant as they provide us with a connection to the past. It has been argued here that historical interiors are sensory spaces with which we engage on a personal level using all of our senses. These spatial experiences are emotional, meaningful and memorable.

These spaces, many of which are situated in prime locations, often become redundant and unused for various reasons and, as a result of a lack of maintenance and care, deteriorate and fall into disrepair. In order to prevent this from happening and to help retain the significance and the identity of historical interiors, these structures should be reappropriated to take on a function that is more relevant to the requirements of modern society. This process of adaptation will enable the lifespan of significant interiors to be increased and their meaningful and significant values to be retained for the future. Furthermore the process of adaptation is potentially both economically and environmentally sustainable.

Heritage legislation provides guidelines that may be incorporated during adaptation. These guidelines stress the importance of executing this process with care and recommend that reference be made to both tangible and intangible values already existent in significant spaces. They state that a clear distinction between new additions and existing elements should be made to ensure that contemporary materials are easily distinguished from the existing ones. Furthermore, they argue that any alterations made should be reversible, and that new interventions should emphasise the significant

values of spaces. These measures all allow for the retention of the significance and authenticity of historical interiors during adaptation and should be considered.

In the next chapter the exhibition space is defined, how it was established, and how it has evolved within historical buildings over time.

CHAPTER THREE

EXHIBITION SPACES: THE MOUSEION AND BEYOND

3.1 INTRODUCTION

In this chapter the establishment of the contemporary exhibition venue will be examined and the events and principles that led to the development thereof will be considered. Firstly, the role of the patron in the private collection and commissioning of objects will be discussed. The development of the private exhibition environment, with reference to the *mouseion*, *studiolo*, *wunderkammer*, *kunstkammer* and *cabinet des curiosités*, will be reviewed with regard to their function, location, how they were used and who used them.

Thereafter, an investigation will be conducted to give insight into why these private collections were transformed into public exhibition environments, culminating in museums and galleries. It is also important here to examine how this transformation impacted the layout and arrangement of these newly established exhibition interiors, together with how this change in spatial design affected the viewing of art up to the 20th century. During the 20th century a pivotal change occurred in the exhibition interior with the advent of abstract art, which altered the relationship between this new form of art and the traditional exhibition interior. How this change from traditional to abstract art encroached on the interiors of traditional exhibition spaces will be discussed, ultimately suggesting that modernism – originally promoted by the Bauhaus – along with exhibition principles developed in Europe and America, helped lay the foundation for the design of the contemporary exhibition interior still prevalent today.

3.2 COLLECTING, STUDYING AND DISPLAYING OBJECTS: THE GATHERING OF THINGS – FROM PRIVATE TO SEMI-PRIVATE COLLECTIONS

Traditionally in Western civilisation, artworks, sculptures and artefacts were commissioned only by wealthy patrons (Van Lil, 2009: 29). These patrons consisted of the elitists in society such as the monarchs, aristocrats and wealthy merchants. State institutions such as courts and academies, as well as those of a religious nature also played a vital role in commissioning art and artefacts (ibid.). Many of these commissioned pieces had some spiritual or political value or portrayed some sort of narrative associated with their owner and were collected and exhibited by the patrons as a means to reflect their wealth and power. These collections led to the establishment of various types of private exhibition environments, namely the *mouseion* in Greece, the *studiolo* in Italy, the *wunderkammer* and *kunstkammer* in Germany and the *cabinet des curiosités* in France (Kossak, 2012: 213).

The *mouseion* was originally established by the Greeks in the city of Alexandria during the Hellenistic period (Alexander, 1979: 6). These were places where sacred scrolls and documentation were kept in libraries, and statues of goddesses and philosophers were worshipped in shrines (Kossak, 2012: 215; Alexander, 1979: 7) (Fig. 3.1). Access to the *mouseion* was granted only to artists, academics, poets and philosophers (Alexander, 1979: 6 & 7). Inside these interiors many events took place: ideas were discussed and debated in lecture halls, scriptures were studied in the library, and new knowledge was formed and traded among theoreticians and artists in laboratories and observatories. The interiors also provided accommodation, forming a strong incentive for scholars to study (ibid.).

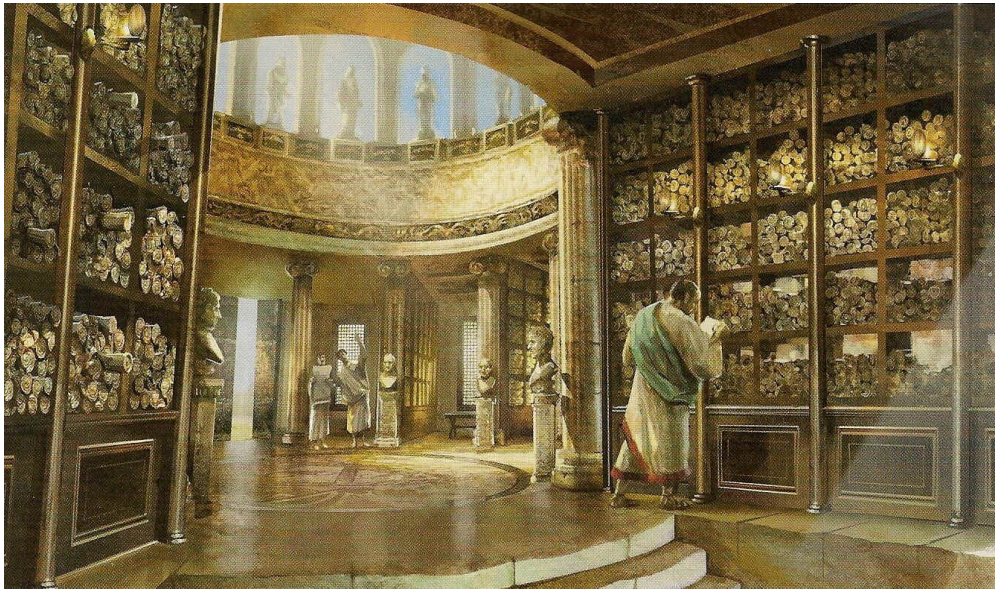


Figure 3.1 The *mouseion* - a private library established to expand knowledge



Figure 3.2 The richly decorated cabinets of Francesco I de' Medici's *studiolo*, 1570 - 1575

The next pivotal development in exhibition spaces occurred in Italy during the Renaissance with the development of *studiolos* (Fig. 3.2). This development was brought on as a result of society's obsession with knowledge expansion during this time. The *studiolo* was one of the first dedicated interiors for collecting, studying and displaying objects, comprising a series of cabinets that housed privately owned collections. These collections consisted of items recovered from exploratory expeditions in search of new continents, and expansion in scientific and mechanical inventions and knowledge (Lourenco, 2003: 20).

The interiors of *studiolos* would vary, depending on their owner and function and were used to collect knowledge and proclaim symbolic power. According to Kossak (2012: 216), a *studiolo* owned by scholars resembled a laboratory or workshop where experiments were carried out and new knowledge was formed. Objects were scattered around the space so as to be available for examination at any point in time. A *studiolo* owned by an elitist was lined with elaborate cabinets in which the various objects were hidden and were brought out individually for short periods to be studied and admired (Fig. 3.3).



Figure 3.3 Studiolo in the Ducal Palace with decorative timber inlays

Originally, *studiolos* could also only be accessed by their owners and their employees. However, during the late 15th century up to the 17th century their 'privacy state' changed when owners started granting their guests access to admire their collections (ibid.).

Between the 16th and 17th centuries, similar types of exhibition rooms developed in England, France and Germany that were semi-private. In England these rooms were known as cabinets, in France as *cabinets des curiosités*, and in German-speaking countries as the *kammer* or *kabinette* (Tate, 2015: Online). In some cases specific objects would be exhibited in rooms, which subsequently resulted in these exhibition spaces being named according to their content on display. Consequently, rooms were divided into *schatzkammers* or treasure cabinets, *rüstkammers* or history cabinets, and the more familiar *wunderkammers* or marvel cabinets and *kunstkammers* or art cabinets (ibid.). The surfaces and cabinets of many of these collection rooms were overcrowded with objects and items, with all available space being used for display.

Wunderkammern contained various objects from nature, artefacts and any new or interesting scientific inventions, and *kunstkammern* were lined with paintings and artworks (Fig. 3.4 & 3.5). These rooms were visually attractive with the quantity of objects on display reflecting the wealth and power of their owners and arranged in a systematic order (Lourenco, 2003: 22). In some cases these two exhibition environments were combined to form a *kunst- und wunderkammer* and made for the simultaneous display of artworks and objects. Furthermore, the content of these rooms was no longer hidden away as in *studiolos*, but displayed in large cabinets inside these rooms or along their walls to be admired and appreciated by other elitists in society upon invitation (AIMI et al., 2001). It is thus argued that the function of these collection rooms was more focused on the display of objects than their study (Kossak, 2012: 216).



**Figure 3.4 Wunderkammer in Halle Gründlers
Kuriositätenschau**



Figure 3.5 Representation of the *kunstkammer*

3.3 EXHIBITING, VIEWING AND OBTAINING OBJECTS FOR THE MASSES: RISE OF THE PUBLIC EXHIBITION SPACE

During the Age of Enlightenment in the 18th century, society's interest in understanding the natural world and the place of human beings within it grew. This growth in interest caused an increase in the establishment of private collections. Over 450 existed in Paris alone as the freestanding *cabinets des curiosités* unit became more readily available (Kossak, 2012: 217). These new *cabinets des curiosités*, unlike the cabinets of *studiolos*, were open and made the constant viewing of objects possible. These cabinets were also no longer confined to specific rooms, but arranged throughout interiors.

These cabinets and the content they held varied, depending on their owner, which either comprised the elitist in society or artists (Kossak, 2012: 218). The more affluent patrons used their cabinets to exhibit their collections to other patrons of the same social order as a means to portray their wealth and power, and to gain social status. Their collections were extravagant and consisted of large displays that would often take over a whole room or interior. The content that was displayed would vary between objects and paintings from around the world that were considered rare and valuable. One such notable collection was that of Sir John Soane, who converted his entire house into an exhibition venue (Fig. 3.6).

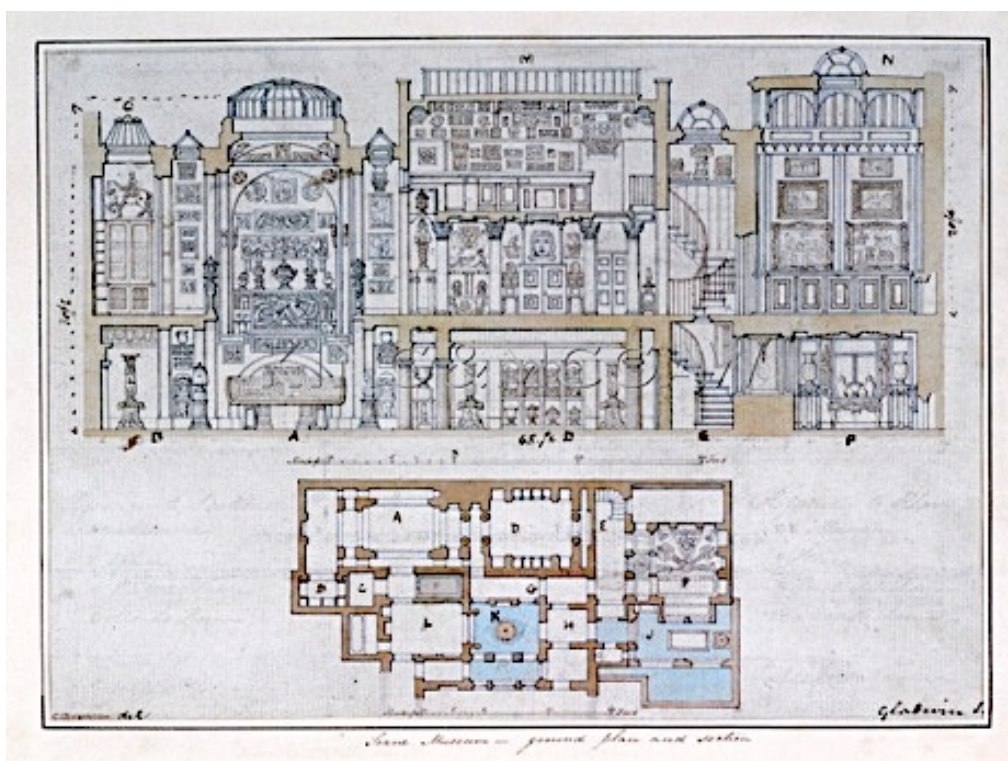


Figure 3.6 Private house interior of Sir John Soane as a display cabinet

The artists, on the other hand, were more interested in how their collections were displayed, and used the surrounding interior components to help enhance and give

meaning to their displays. Such a collaboration of collections and interiors to form one big decorative ensemble was known as a *gesamtenkunstwerk* (Kossak, 2012: 218). These interiors were carefully laid out to form harmonious compositions between their architecture, interior finishing, furniture pieces, cabinets and the artist's own carefully selected collected items, and formed styled symmetrical exhibition spaces. One such example is the Peacock room by the interior designer Thomas Jeckyll and artist James McNeill Whistler. The room, designed for Frederick Richards Leyland to exhibit his china porcelain collection, is covered in peacock paintings, with architectural elements and colours incorporated that resonate with both the artworks and content on display (Fig. 3.7 & 3.8).



Figure 3.7 Historical Peacock dining room - a *gesamtenkunstwerk*

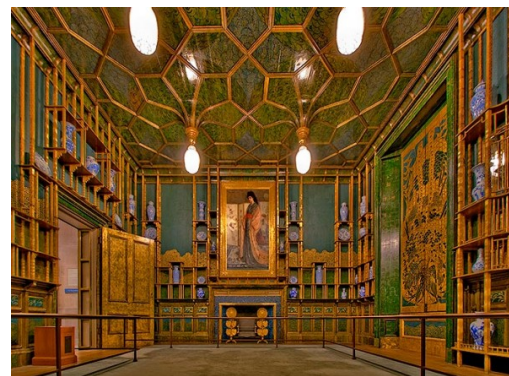


Figure 3.8 Peacock room presently permanently on exhibition

The further development of science and technology caused collections to change again as many of the found and collected objects were discredited with the progress in knowledge. Birkett (2012: 8) describes how, as a result, more and more collectors moved away from collecting odd things in an attempt to break any link with such disparaging collections, as these were now considered common. Instead, an interest in the study of art developed and collectors started shifting their focus towards collecting artworks, giving rise to art connoisseurs.

The method of 'comparative' hanging was adopted in art collections for connoisseurs to be able to establish the value of artworks and identify the artistic characteristics each of the various art schools specialised in (ibid.). This made it possible for students, aesthetes and connoisseurs to compare artworks and, in so doing, detect art movements and traits that were unique to each art school or an individual artist (ibid.).

As the period of enlightenment continued, equality amongst humans was encouraged. This led to many private collections being institutionalised, transforming them into exhibitions that by the mid-18th century were open to the public (Hackett, 1992: Online). As a result, prized collections were no longer only accessible to the privileged few, but also available for the general public to view and admire. According to Bächtmann (1997: 11), this led to a revolution in the social system and the collecting

of artworks and objects alike, as well as the development of display methods used in exhibitions.

This need for the development of new formal platforms in which collections could be exhibited and viewed subsequently gave rise to the establishment of public art galleries and museums. An example is the Louvre in Paris, which over the years was used for numerous purposes. The first public exhibition was held in the royal palace in 1699 by the Académie des Beaux-Arts, and was known as the Paris du Salon (Louvre, 2015: Online). In 1793 this exhibition venue was officially turned into the museum following the French Revolution. During this time the displayed works predominantly comprised private art collections that belonged to the deposed French monarchy and aristocracy (Fig. 3.9) (ibid.).



Figure 3.9 Artwork displayed in the first official public exhibition inside the Louvre in 1699

Other examples of private collections turned into public museums and galleries are the British Museum, established in 1753 to house Sir Hans Sloane's private collection (Fig. 3.10) (Alexander, 1979: 8), and the National Gallery in London in 1838 which displayed the John Julius Angerstein collection, amongst others (Klonk, 2009: 24). Such exhibition environments not only became platforms to view the contents on display, but were also used to educate the general public about art, science and technology. This led to many other private house collections being turned into public exhibition venues such as the Wallace collection of furniture, Leighton House and 18 Stafford Terrace in London and the Musée Jacquemart-André in Paris.



Figure 3.10 The once private Sloane collection laid the foundation for the British Museum.

This shift from private to public collections is also evident in the City of Cape Town, albeit on a much smaller scale, with the majority of these taking the form of 'house museums'. These include Groot Constantia, Rust en Vreugd and Bertram House. These spaces portray the living conditions of privileged families, dating back as far as the 18th century, along with their small private collections. One of the most prominent and oldest house museums is that of Koopmans-De Wet (Iziko, 2014: Online). In this house, a rare collection of ceramics, paintings and traditional furniture items is showcased (Fig. 3.11).



Figure 3.11 Local house museum interior of Koopmans-De Wet House

Another similar collection is that of the South African philanthropist William Fehr located in the Castle of Good Hope. It consists of tapestries, Cape Dutch furniture, paintings, drawings, silverware, glassware, oriental porcelain and topographical charts by royal academicians from the 15th century (Fig. 3.12) (Koperski, 2000: 236-239).



Figure 3.12 Fehr collection on display inside the Castle of Good Hope

Such traditional exhibition interiors can be described as having an almost sacred atmosphere, which is strengthened by the emotions of wonder and admiration evoked once inside these spaces, and the silence that prevails throughout their rooms. According to Duncan (1995: 14-15), Goethe made a similar observation on his visit to the then traditional Dresden Gallery in 1768:

The impatiently awaited hour of opening arrived and my admiration exceeded all my expectations. That salon turning in on itself, magnificent and so well-kept, the freshly gilded frames, the well-waxed parquetry, the profound silence that reigned, created a solemn and unique impression, akin to the emotion experienced upon entering a House of God, and it deepened as one looked at the ornaments on exhibition which, as much as the temple that housed them, were objects of adoration in that place consecrated to the holy ends of art.

The art critic and artist O'Doherty (1999) elaborates further on the way in which artworks were displayed inside such traditional, salon-styled exhibitions. He describes these interiors as being arranged with their content in close proximity to one another, and every available opening inside the space used (O'Doherty, 1999: 16). This was achieved by dividing gallery walls into thirds, comprising a bottom, middle and top tier. Small artworks were displayed at the bottom, big artworks at the top and the important ones in the middle. Despite this tiered arrangement, the displayed content was still mixed irrespective of period, genre, or style (ibid.). As a result, significant and insignificant works of art, as well as authentic and inauthentic art pieces, were all jumbled together in no specific order.

This specific method of display consequently caused many artists and art critics to frown upon displays: it was felt that a clear differentiation was needed between the various contents, with the importance and significant value of each piece being highlighted (Fitzpatrick, 2004: 15 – 16; Fry, 1996: 263). As a result, this disagreement called for hierarchy and clear separation to be visible in exhibition displays. A new understanding was needed to address this issue regarding the interrelation between various pieces on display, as well as between the content and its exhibition environments. This understanding only developed in the late 19th century when artists and curators became more interested in exhibition display.

This new interest in the relationship between the viewer, the content and the space provided curators with the means to address the concerns raised and create environments that contributed to the works both aesthetically and spatially, as well as their perception (Fitzpatrick, 2004: 16 - 17; Klonk, 2009: 28).

3.4 THE TRANSFORMATION OF THE TRADITIONAL EXHIBITION SPACE

To address the issues raised by artists and art critics alike, a new approach to the display of art in traditional environments was required. According to Birkett (2012: 9), traditional galleries such as the Louvre in Paris, which exhibited both historical and contemporary art, started arranging their content chronologically according to historical meanings and locations soon after opening. This caused an increase in visible wall space and consequently required extra attention to be given to the selection of wall covers and colours. These colours, according to Birkett (*ibid.*), were selected to contrast with the work on display or with the frames surrounding them in order to enhance the content and differentiate them from their surroundings. Similar issues regarding the display of art in exhibition venues were being raised in London. Requests to the National Gallery were made by, amongst others, John Ruskin, the architect William Wilkins and the museum keeper at the time, Charles Eastlake, to bring objects closer to eye level with spatial arrangement permitting the comfortable viewing of each piece (Klonk, 2009: 28).

By the late 19th century, museums and galleries in America started following European exhibition precedents. With a similar objective in mind of helping educate the general population about art, these institutions displayed their artworks in a manner that would invite the public to investigate them, and not only admire them for being valuable and rare (Alexander, 1979: 11). However, during the 20th century, American art exhibitions started to move more towards the aesthetic and away from the educational display of art (Duncan, 1995: 16; Alexander, 1979: 12). This became a significant turning point for the exhibition world as new aesthetic exhibitions sought to display only rare, beautiful and authentic artworks instead of imitations, breaking away from traditional art museums that would exhibit replicas of famous art for educational purposes (Birkett,

2012: 11). This move away from the educational towards the aesthetic, they believed, would increase the status and credibility of exhibitions.

One of the key contributors to the aesthetic display of art was the Secretary of the Boston Museum of Fine Arts, Benjamin Ives Gilman (Duncan, 1995: 16; Birkett, 2012: 11; Alexander, 1979: 12). During his time at the museum, Gilman (1918: xii-92) separated the acts of viewing (aesthetics) and studying (education), with the former taking place on the top floors and the latter in the basement of the museum. Incorporating principles of contemporary interior and retail display design, Gilman, together with his assistant director Matthew Prichard, minimised the amount of artwork on display to draw attention only to those of greatest importance. They further lowered artworks to be at eye level, which allowed for a more intimate relationship between the displayed content and the viewer (Fig. 3.13) (Gilman, 1918: 252-253).

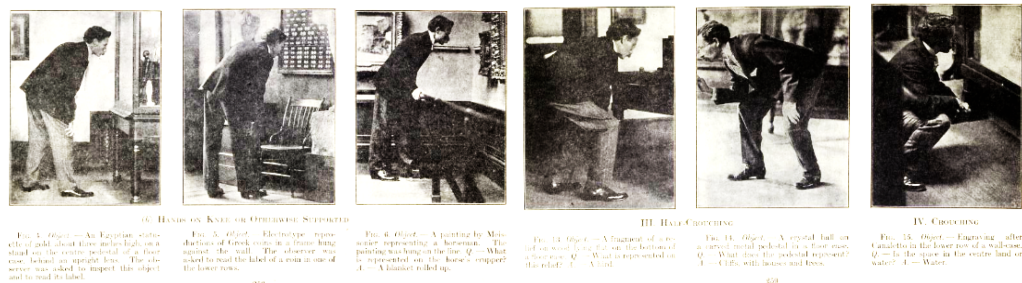


Figure 3.13 Observations by Gilman studying the various eye levels of visitors when engaging with content

Gilman formulated this approach to try and reduce the rate at which visitors progressed through the interior, so that instead of rushing past displays, they would rather spend time engaging with the content (ibid.: 252). In addition, Gilman altered the exhibition layout to make it more intimate. He believed that artworks needed to be displayed in areas that simulate the atmospheric conditions of the home and therefore created smaller, intimate rooms along the main central axis (ibid.: 397 – 409). This intervention helped to reduce the amount of distraction caused by other visitors passing by these rooms, and facilitated a more personal relationship between the viewer and the work on display (ibid.).

Gilman also painted the interior walls an off-white, creamy grey colour, which helped limit architectural distractions caused by interior decoration and ornamentation (ibid.: 428). To further enhance the domestic atmosphere within these new spaces, seating was introduced to combat museum fatigue and allow for a pleasurable exhibition experience while viewing specific artworks (ibid.: 270 - 271). His approach to exhibition design was therefore in direct contrast to the traditional layout of galleries, which consisted of large hallways with endless rows of pictures through which occupants would rush.

Around the same time similar aesthetic approaches were used in exhibition environments in Europe. These were especially evident in German museums where art pieces and objects were separated from one another and the number of objects on display was considerably reduced (McClellan, 2008: 124 – 125). Wall colours would be selected depending on the type of art displayed against them: historical art would be displayed against a deeply coloured background, and modern art pieces consisting of multiple, bright colours would be positioned against white or black backdrops (Klonk, 2009: 96).

An example of such an aesthetic approach is visible in this photograph of the Landesmuseum in Hannover, Germany, with the layout designed and curated by the museum director, Alexander Dörner in 1922 (Fig. 3.14) (Fitzpatrick, 2004: 30). Dörner created 'atmosphere rooms' by changing the colour and materiality of floor, wall and ceiling planes, as well as decorating door and window openings with architectonic elements.



Figure 3.14 Atmosphere rooms provide minimal context for the content.

These decorations and architectural details resembled a specific period or culture and provided minimal context to the display (Staniszewski, 1998: 90; Cauman, 1958: 88). He then matched the relevant artworks to each room, and arranged them in chronological order and style, grouping them according to their place of origin and time created, whilst allowing generous spacing between them.

A typical example of Dörner's atmospheric rooms as described by Fitzpatrick (2004: 30) was the introduction of dark colours to rooms depicting medieval art to create an atmosphere reminiscent of medieval cathedrals, the buildings in which these artworks were originally displayed. Such an atmospheric recreation helped to convey the

emotions and aesthetics associated with these respective interiors to the viewer. Through this intervention, Dörner managed to create various types of spatial contexts inside the museum that would resonate with the artworks in each particular section of the exhibition. These rooms furthermore helped the general public to understand the displayed artworks better, making it possible for them to relate more successfully to the art.

Dörner's atmospheric rooms, along with his display arrangements, helped address the interrelationship between art and its surroundings, providing a marginal context that helped communicate the value, meaning and significance of the artworks on display.

3.5 THE IMPACT OF MODERNISM

With the progression of the 20th century the interrelationship between art and its context was once again challenged, this time due to a shift that occurred in art itself. Artists started thinking about and approaching their work in a more abstract way. This change from traditional to abstract art was a final attempt to completely liberate their work from any form of preconditioning imposed by exhibition interiors (Fitzpatrick, 2004: 21). This new, abstract approach allowed art to be viewed and appreciated solely for the sake of being art, and not necessarily for imparting a deeper meaning or narrative upon the viewer, a notion termed "*l'art pour l'art*", meaning art for the sake of art (Van Lil, 2009: 31). Art was also no longer produced for a specific location. This contributed to a lack of interrelationship with its surroundings as no specific context was required to strengthen an artwork's meaning. As a result, abstract pieces were received and reviewed with mixed feelings, for few could understand this new conceptual, intellectual and philosophical approach to art (MoMA Press Release, 1936: 2).

In effect, the relationship between traditional exhibition interiors and contemporary art became incongruous as the interiors were designed to convey a specific cultural and contextual identity for the art, which modern art deemed redundant. To address this disjunction between art and its surroundings, a harmonious relationship had to be re-established between the two (Troy, 1983: 30). Insight to help establish this connection was gained by incorporating modernist attitudes that underpinned the creation of abstract art and design into the interior of the exhibition.

The Bauhaus School and the De Stijl journal were two prominent institutes that advocated the modern movement. They both turned away from all past design principles to formulate a new design style that was geared towards the creation of simplistic designs. These designs were unadorned, economical, symmetrical, angular, consistent, sequential, repetitive, flat, regular, monochromatic and mechanical, intended for mass production (Dondis, 1973: 144). The Bauhaus imbedded these principles into its design curricula, which subsequently affected the way in which it approached architecture and interiors. The interiors of the Bauhaus were

predominantly white, with no wallpaper or texture added to the walls. They were sparsely furnished with all structural and furniture components consisting of modern materials (Dearstyne, 1962: 14). Consequently, interior spaces changed from traditional, closed, personal environments to those that were open and sparsely furnished (Klonk, 2009: 105). It was not long before this new approach to interior design was also adopted into exhibition interiors.

Ludwig Justi was among the first museum directors and curators in Germany to incorporate some of the spatial characteristics advocated by the Bauhaus into the exhibition venues he controlled, namely the Städelschen Kunstinstitut in Frankfurt (1904) and the Nationalgalerie in Berlin (1914) (Klonk, 2009: 67). Significant exhibition changes reflective of the Bauhaus design principles included a visual decrease in spatial volume by painting the majority of the room white, painting existing timber wall panelling dark and swapping many of the historical frames for more contemporary ones (ibid.: 67 - 68). Another gallery where these types of spatial changes were observed was the Kronprinzenpalais in Berlin. It was originally constructed as a private residence for the cabinet secretary of Germany, with later additions transforming it into a town palace which formed part of the royal residence for the Hohenzollerns (Oomkes, 2012: Online).

After the exile of the royal family in 1918, the palace was appropriated by the Fine Art Department of the National Gallery to serve as an annex to the Weimar Republic's National Gallery (ibid.). Under the curatorship of Justi, the gallery became the first to be dedicated to modern art, and was known as the Galerie der Lebenden (Gallery of the Living) as it only displayed artworks from artists that were still alive (ibid.). Unlike traditional galleries, the Galerie der Lebenden integrated both paintings and sculpture in its exhibitions, with its large rooms and structured layout providing an ample amount of exhibition space. During its adaptation, alterations were made to several rooms with the top floors being affected most (Klonk, 2009: 96 – 135). Many of these changes, especially those made to the top floors, reflected modernist design principles.

Through his interventions, Justi transformed these historical rooms into spaces of neutrality. He stripped away all historical ornamentation and decoration and replaced these with neutral colours and simple architectural details (ibid.). Figure 3.15 depicts these changes: in the first photograph, the room is kept in what appears to be its original state, with many of its existing decorations such as wallpaper-covered walls, ornate cornicing and broad skirting being retained. In the second photograph, a more contemporary, neutral and minimal interior is observed. Existing architectural details such as skirting and cornicing are simplified, whilst decorative wallpaper has been removed. Finally, in the third photograph, a strong relationship with modernist interiors is observed, with nearly the whole interior painted white and very few historical architectural details visible or left defined. In this picture the use of partitioning can also be perceived. Through these images, it is clearly evident that a shift away from the

traditional salon style was made with all the artworks displayed at eye level in a single tier, with the bases of frames aligned. An increase in space between artworks is furthermore evident as the rooms changed from the traditional towards the modernist interior. Moreover, the artworks were no longer assigned to contextual rooms or arranged according to origin or period. Instead, each room was dedicated to a specific abstract artist with this work being changed on a regular and continuous basis (Schuster, 2006: Online).



Figure 3.15 Justi's contemporary interventions in the Kronprinzenpalais

Justi's interventions were the first radical attempts to contemporise exhibition interiors by removing everything traditional and historical from the interior. In this way, his interior alterations and methods of display were significant in the development of a neutral contemporary exhibition space (Klonk, 2009: 101). Ultimately, Justi's approach to exhibiting contemporary art, along with the incorporation of modernist principles that were prevalent and fashionable at the time in interior design, would serve as a foundation for the design of future contemporary exhibition interiors around the world.

The Michael Stevenson Gallery in Cape Town, for example, exhibits similar spatial qualities as the rooms designed by Justi. Originally forming part of an old factory, the space was converted into a gallery circa 2003. Exhibited artworks include contemporary paintings, photographs and sculptures or installation art, and are grouped in rooms according to artist or genre. Walls are predominantly painted white with art displayed on a single tier. Should the colours of the wall change, they are often replaced by neutral pallets of browns and greys (Fig. 3.16). Only some architectural details still remain visible in the interior, whilst the formerly large room has been partitioned into smaller segments. Also still visible is the original parquet flooring which has been sanded down and resealed, alongside an old safe in the back of the interior, reflective of past uses.

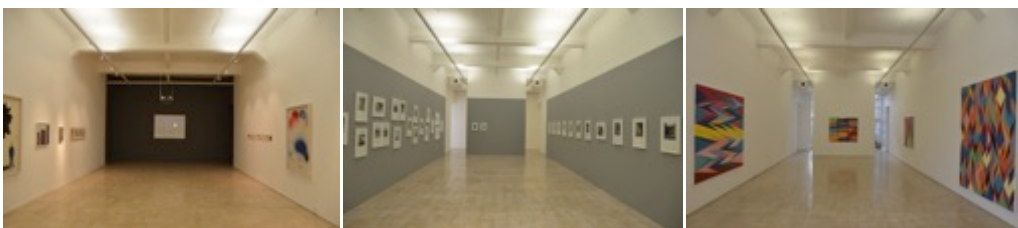


Figure 3.16 Neutral colour variations in the minimalist interior of the Michael Stevenson Gallery

3.6 SUMMARY

In this chapter, the origin of the traditional exhibition space and its development up to the beginning of the 21st century was discussed. It was shown how traditional private collections became less prominent over time and how, through the Enlightenment, this gave rise to public art galleries and museums. Art was initially arranged haphazardly within these interiors, making it difficult to discern an insignificant art piece from a significant one. This method of display caused dissatisfaction among artists and critics alike, leading to the display of artworks in a more chronological manner. It was argued that the most significant change to the exhibition interior occurred during the 20th century when the acts of viewing and studying art were separated from one another, coupled with alterations made to the traditional layouts of exhibition interiors and the way art was displayed.

In Europe, aesthetic changes were observed with the creation of atmospheric rooms by incorporating nuanced architectural interventions into exhibition interiors. These rooms gave minimal context to the art on display and helped address the interrelationship between exhibition interiors and the displayed works. During the 20th century a shift in art occurred with art becoming abstract. Art was no longer place-specific. This new approach to art caused a schism between these artworks and traditional exhibition interiors. Exhibition interiors evolved to accommodate contemporary art by incorporating and applying the principles of modernism into spatial environments, leading to the complete removal of historical elements in traditional interiors to make way for exhibition spaces that were geometric in form, minimalistic in design, void of decoration or ornamentation and created using modern materials. In these spaces the amount of art on display was reduced and arranged on a single tier to hang at eye level in small and intimate settings that were neutral in colour. In the following chapter, the evolution of the neutral interior will be investigated with particular reference to the white box.

CHAPTER FOUR

THE EVOLUTION AND CONTESTATION OF THE WHITE BOX

4.1 INTRODUCTION

In the preceding chapter it was found that abstract art initiated a pivotal change in exhibition interiors. This gave rise to the development of neutral exhibition spaces, where historical interior decoration and ornamentation were removed or obscured and walls and ceiling planes painted predominantly white. In this chapter the focus will be on how these aesthetic changes of neutrality evolved to culminate in what is typically referred to as the white box. To gain this understanding, noteworthy contributions made by Alfred H. Barr Jr. of the Museum of Modern Art in New York will be considered, along with significant influences of past exhibition interiors from which he drew inspiration in his curatorial practices. The implementation of these principles and various display methods into exhibition environments will be discussed, together with the effects they have on existing interiors.

Next, the spatial characteristics of the white box will be discussed with reference to South African examples. How these spatial characteristics influence perception and spatial experience once implemented into exhibition spaces will be examined in order to argue, ultimately, that spatial experiences of neutral spaces are universal. Through this investigation, the effect these neutral interiors have on the significance of historical interiors will be explored.

4.2 THE DEVELOPMENT OF THE NEUTRAL SPACE

The curator and founding director of MoMA, Alfred H. Barr Jr. (1902 – 1981), was instrumental in the evolution of the contemporary exhibition space. During his time at the MoMA, he transformed the idea of the traditional art museum that only exhibited paintings and sculptures into a multidisciplinary exhibition environment (Blumberg, 2014: Online). This change was sparked by his visits to the Bauhaus School of Design and Kronprinzenpalais during a trip to Europe in 1927. These visits served as key inspirational experiences and played a significant role in laying the foundation of what would later become the official 'neutral exhibition interior'.

Barr's travels provided him with first-hand information on the newly developed exhibition techniques used abroad in the display of modern art which he incorporated into the MoMA in 1929 (Marquis, 1989: 49). These techniques included, firstly, the dedicating of rooms to specific artists for allocated periods such as he saw in the Kronprinzenpalais (Gustorf & Morais, 2004: 3, Klonk, 2009: 136); secondly, the way Russian museums labelled their artworks in order to provide a brief explanation about

the work displayed (Kantor, 2002: 64); thirdly, the moveable walls of the Sprengel Museum in Hannover which allowed for the creation of smaller, more intimate temporary spaces (Kantor, 2002: 64); fourthly, the use of colours to establish a dialogue between art and space as in the Landesmuseum (Fitzpatrick, 2004: 31) and, lastly, the use of neutral palettes for walls, with all decoration and interior detailing that affected the arrangement of art being removed, reminiscent of the Folkwang Museum in Essen (Kantor, 2002: 64; Staniszewski, 1998: 64). From these visits to exhibition venues abroad, Barr developed his own approach to contemporary exhibition design by adopting these various exhibition display techniques and incorporating them with the aesthetic principles of the Bauhaus School of Design. Barr's approach was further inspired by Gilman's display methods and exhibition principles, and the knowledge obtained from his own studies at Princeton and Harvard (Birkett, 2012: 23, 24; Gustorf & Morais, 2004: 3; Staniszewski, 1998: 75).

In 1929, Barr was appointed the curator and founding director of the MoMA. Initially, the museum was situated in the Heckscher Building on the corner of 5th Avenue and 57th Street (Birkett, 2012: 24). Drawing on the knowledge obtained from his travels and studies, Barr's first temporary installation comprised beige monk's cloth to colour and neutralise the existing walls of the exhibition interiors; this was later replaced by pristine and minimalist white walls reminiscent of Bauhaus interiors which Barr believed would help distinguish and emphasise artworks from the interior (Birkett, 2012: 24 - 25; Kantor, 2002: 64; Marquis, 1989: 68 – 69).

During adaptation, Barr also introduced proper exhibition lighting and new floor finishes into the existing interior along with moveable walls that allowed for the partitioning of spaces (Birkett, 2012: 24; Marquis, 1989: 68 – 69). To increase the visual connection between the viewer and the art, Barr positioned artworks so that their centrelines aligned with standard eye level and arranged them to form symmetrical compositions (Staniszewski, 1998: 62; Klont, 2009: 138). These changes paved the way for the development of contemporary neutral exhibition interiors. These interiors have since become known as 'white cubes', a term developed by O'Doherty (1986), or 'white boxes' as referred to by Devin Marie Fitzpatrick (2004: 34).

4.3 THE WHITE BOX

White boxes, as they are known today, were finally achieved by Barr in 1936 in the exhibition entitled *Cubism and Abstract Art*. This exhibition took place after the relocation of the MoMA to the Rockefeller townhouse on 11 West 53rd Street (Birkett, 2012: 25). For this exhibition, Barr was influenced by his own education in the methodologies of art, the writings of Bernard Berenson (who devised methodologies on connoisseurship) and the teachings of Charles Rufus Morey and Frank Jewett Mather, and incorporated their viewpoints and methods into his own understanding of art and its display (Platt, 1988: 285 - 286). Their writings, along with Barr's own training in the

methodologies of art history, inspired his formalist approach to the display of abstract art (ibid.).

Teachings by Paul J. Sachs also played a significant role in Barr's curatorial education, with students being taught that art should be displayed in a single, chronologically arranged tier as opposed to Europe's traditional 'skying' display method, where the whole wall was covered with artworks (Kantor, 2002: 73). This arrangement of art made it possible for artworks to be analysed independently of one another. Furthermore, Sachs taught his students that art should be studied and evaluated separately from what was written on them, taking a scientific, rational and subjective approach to evaluating art (Platt, 1988: 286). His studies moreover informed a strong underpinning in his approach to the display and communication of art to the general public: students were taught that art should be analysed according to their physical characteristics and qualities by referring to their form, colours and their composition (Kantor, 2002: 47). Berenson, on the other hand, argued that art and its history should be studied using both quantitative and qualitative analysis, using an abstract and independent lens, whilst Morey impressed on Barr that all forms of art were valid, and that the development of art and its history was independent of external pressures and events (Platt, 1988: 286).

Following these principles, Barr approached the act of exhibiting art using organisational charts, but started to move away from symmetrical displays where art was arranged according to its size and not according to content or date of completion. Instead, he arranged his displays in dynamic, multi-tiered, asymmetrical display compositions that were chronologically and systematically arranged (Kantor, 2002: 358, Klonk, 2009: 138 & 141-142). These changes, according to Newman and Sandler (1986: 78), reflected Barr's rational and scientific approach to curating.

His approach to the new MoMA's interior was also more drastic in comparison to the first MoMA of 1929. During the adaptation of the Rockefeller townhouse into the new MoMA, Barr instructed that all the existing decorative finishes that once formed part of the interior had to be completely removed to expose the original surfaces beneath (Birkett, 2012: 25). After all the architectural ornamentation was stripped from the interior, the remaining bare walls and ceilings were painted white or pale grey to further neutralise these spaces (Staniszewski, 1998: 62). Additional interventions included the chamfering of the corners of rooms to increase the display area inside the repurposed house, and the removal of pilasters that obstructed art from being viewed clearly (ibid.: 66).

All remaining decorative elements were simplified whilst details that reflected the original functions of rooms, such as chair rails, cornices, dado rails and skirting boards were also painted white (Birkett, 2012: 25). Through this intervention, existing

architectural elements were forced to merge with one another. This was done in an effort to ensure that the artworks could be viewed within a neutral environment, free from any preconceived ideas or external influences to retain and convey their own meaning to the viewer (Van Lil, 2009, 32; Staniszewski, 1998: 62). These interventions provided Barr with complete control over the exhibition interior, leaving nothing to interfere with his displays, and a blank 'canvas' that he could utilise as he saw fit (Fig. 4.1). Barr's approach to the arrangement of artworks furthermore resonated with the display methods seen abroad.



Figure 4.1 Bleaching out of walls and architectural details in 1939

A description of Barr's approach to exhibition design was given by Beaumont Newhall, one of the employees of MoMA at the time of Barr's directorship. He described the Van Gogh exhibition as being arranged in a logical succession with artworks organised according to their style and era (Fig. 4.2) (Staniszewski (1998: 62). Between the artworks were large spaces to prevent each piece from affecting perception of those adjacent to it and explanatory labels were made for each piece on display. These labels offered the viewer an intellectual understanding of each respective object, giving a clear description of what was being viewed and how to interpret and understand the artwork, and providing each work with a historical and conceptual background (Staniszewski, 1998: 65).



Figure 4.2 Chamfered walls and single-tier display in the Van Gogh exhibition

In exhibitions where objects and in some cases furniture formed part of the content on display, they would often be treated as 'paintings'. This resulted in these elements being mounted against walls or placed on white or light grey pedestals in order to remove them from their normal contextual settings and alter the viewer's preconceived interpretation of them. Through this method, Barr wanted to establish a direct dialogue between the content and the viewer (Staniszewski, 1998: 78).

One example was Marcel Breuer's Wassily chair (Fig. 4.3), which Barr mounted onto the wall to ensure that it was read, understood and perceived as a work of art and not merely for its functionality. These changes towards the creation of the neutralised interior and the methods used to display art prevented the surrounding space from influencing the meaning of the pieces on display as well as the viewer's perception of them. According to both Birkett (2012: 27) and Staniszewski (1998: 82), this allowed art to be removed from all imposing forces such as politics, economics, history and social orders, as well as those dictated by the interior itself. As a result, these changes permitted art to take precedence over its interiors and gave it the independence to convey its own meaning and narrative above those of the spaces in which it was situated.



Figure 4.3 Decontextualisation of art inside the MoMA

Not only did this intervention of Barr impact the physical spatial environment, but it also affected the way in which the viewer experienced space. Staniszewski (1998: 66, 71) is of the opinion that display interventions and aesthetics such as those portrayed by the MoMA at the time reduced the individual viewer to a 'standardised one' as it catered for a specific type of visitor who was average in height and portrayed 'ahistorical' and 'atemporal' characteristics. Barr was therefore not concerned with the creation of unique and intimate spatial experiences, but rather on having all the visitors to the MoMA experience the exhibition space exactly as he wanted them to, in a dictated manner with focus only pertaining to the artworks on display.

Since its inception in 1936, the aesthetic white box has remained resilient to change and has been adopted in many exhibition venues across the world. The prototype

white box has also made its way to Cape Town, with many examples currently in existence there.

A primary example of the white box is the local contemporary exhibition venue, Blank Projects, situated in an old building in the culturally and historically rich suburb of Woodstock in Cape Town (Fig. 4.4). The walls and ceilings are painted white, whilst a smooth layer of polished screed covers the floor. No decorative, period-, or context-specific architectural details are visible inside this pure, cubical space. Light filters in through large windows coupled with bright fluorescent lights to illuminate the interior. These newly installed lighting arrangements stress the geometric shape of the space. Similar to the MoMA but on a much smaller scale, the gallery exhibits all kinds of artworks ranging from paintings and drawings to sculptures. A solo exhibition took place at the time of the researcher's visit with various types of artworks haphazardly arranged around the space, whilst paintings and drawings were spaced far apart and at eye level. No reference could be drawn from the interior to help contextualise the artwork. As a result, the spatial experience was one of austerity with the façade windows offering the only reference to context and the location of the gallery. With no additional information on the art, the researcher was left feeling intellectually challenged, making it difficult to grasp the ideas behind each piece. The meaning of the art was understood only after discovering a leaflet that provided an explanation about the individual pieces. The spatial experience was therefore perceived as one of detachment.

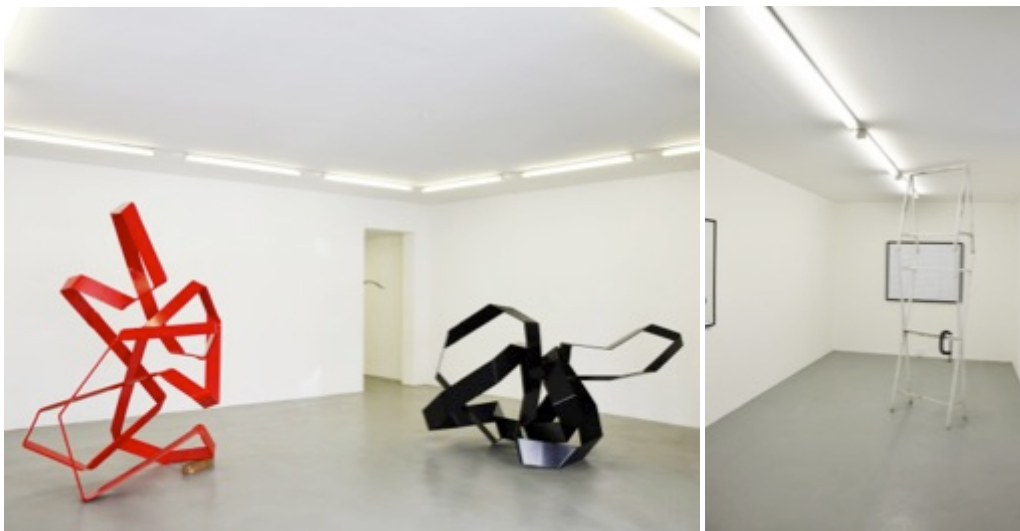


Figure 4.4 Decontextualisation of art in the local white cube Blank Projects in Woodstock

Another local example of the white box can be found in the historical interior of Casa Labia in Muizenberg, Cape Town. Casa Labia was built as the residence of Prince Natale Labia in 1929 (Meersman, 2012: Online). The original interior drew on the Italian Rococo along with decorative furniture, intricate ceilings, crystal chandeliers, silk-covered walls, marble fireplaces and rich tapestries, many of which are still in existence

and visible today (Fig. 4.5). The house was given to the South African government as a museum in 1987 and a new gallery was installed on the top floor (Fig. 4.6) (ibid.).



Figure 4.5 Historical interior of the Casa Labia downstairs

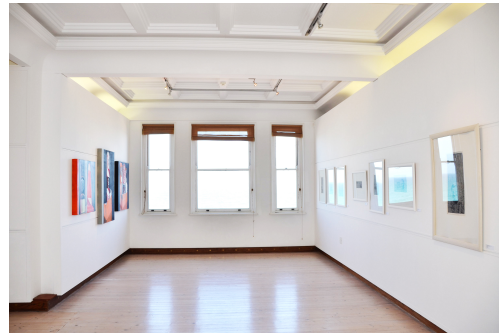


Figure 4.6 New gallery in the Casa Labia upstairs

However, due to high operational costs, the building closed shortly thereafter. During this time it fell into a derelict state whereupon Count Labia reclaimed it and reopened it in 2010 after restoration. Presently it serves as a restaurant, gallery and museum. On the top floor there is a clear juxtaposition between the white box intervention and the historical boudoir. In this particular example, the two areas dating from different periods can clearly be identified by the respective change in the aesthetics of each room (Fig. 4.7).

In the new gallery the profile of the original coffered ceiling is still visible, but after it was painted white, it lost a significant part of its historical integrity. Also, visitors could no longer engage with, nor perceive, the original walls of the interior, contributing further to a loss of aesthetic and evidential value of the historical space (Fig. 4.7). During the original conversion all the windows inside the new gallery area were boarded up, blocking the view of the ocean and surroundings. In a recent effort to return some of the original atmosphere to the room, the dry walling that covered the ocean-facing windows was removed. This allowed natural light to once again filter into the room and reassert the geographical location of the villa. However, the white interior still remains over-lit with few discernible shadows. This high level of illumination makes all the surfaces appear closer and, as a result, the ceiling of the room seems to be lower compared to the darker ceiling of the boudoir (Fig. 4.6 & 4.7).



Figure 4.7 Historical interior (left) versus contemporary intervention (right) – Casa Labia

It was felt that this example also clearly portrays Justi's sought-after effect of visual spatial reduction in the Kronprinzenpalais, and offers a clear reflection of the visual power of homogeneous lighting and how such lighting conditions impact perceptions of spatial depth.

4.4 SPATIAL CHARACTERISTICS OF THE WHITE BOX

The principles of the modern movement arguably played a significant role in establishing the white box interior. Dearstyne (1962: 14), a former student of the Bauhaus, describes these interiors as being minimalist: the interiors were made up of unadorned surfaces painted in white and bright colours as a result of fenestration, allowing ample amounts of natural light to enter. He goes on to say that these interiors were simplified in their architectural details and ornamentation, geometric in form, constructed from modern materials and sparsely furnished (*ibid.*).

When comparing the white box interior to modernist principles of the Bauhaus, certain similarities clearly exist between the two. The white box, similar to the interiors of the modern movement, often incorporates contemporary materials and mechanisms in its construction. These include the use of smooth dry walls, laminated flooring and ceiling panels. These smooth surfaces predominantly cover all existing walls, and are frequently found in examples where the interior had a different function prior to adaptation. These modern materials are used for their practicality as they facilitate the process of displaying or rearranging art. Furthermore, the characteristics of these materials make it easier to construct or change the exhibition space. In addition, these materials are easier to repair, with holes and dents straightforwardly filled and repainted whenever the exhibition is altered.

This continuous repair and refurbishment of the internal surfaces of white box environments provides them with a sense of 'immortality', a particular characteristic Pallasmaa (2005: 21) associates with modern interiors. This sense of immortality allows white boxes to detach themselves from the effects of time through the endless repair of their interiors and leaves them permanently in ever-pristine conditions (O'Doherty 1999: 15). Also, the ceiling plane – generally covered with ceiling panels, or sometimes left exposed revealing the existing roof and inserted mechanised services – are normally treated to either mimic the colour of the walls, or blacken them out. This approach allows the ceiling plane to merge with the rest of the interior, or to join its various separate components with one another, preventing any distractions when viewing the content on display. Staniszewski (1990: 82) therefore notes that Barr's method of display submits art to a general, impersonal, flawless environment, presenting it and even the viewer as entities that are unaffected by time once inside the space.

Floors, on the other hand, are generally treated using carpets, timber (natural or synthetic), or screed. According to O'Doherty (1999: 15), these materials are selected

specifically for their ability to control sound levels inside the white box, and impart a silent and impersonal atmosphere. This clinical atmosphere is reinforced by the way junctions between surface planes are often treated with little or no decorative architectonic elements visible, with designers often opting rather for the use of a shadow line, or else painted to match the rest of the interior, thus diminishing their visual qualities. The spatial experience of modernist interiors, Pallasmaa (2000: 79) feels, is therefore one of abstraction which disconnects viewers from any sense of reality and simultaneously provides the interiors with 'phantasmal qualities'. O'Doherty (1999: 15) explains that this spatial experience of white box environments is largely due to the fact that these interiors are often sealed off from all external influences – social, political, natural, physical or spiritual influences – and are, instead, often kept in isolation. White boxes, he suggests, thereby offer a fabricated spatial experience (O'Doherty, 1999: 15). In addition to this, many have reasoned that the spatial qualities of white boxes permit art to be viewed free from any contextual references, allowing it to be foregrounded and classified as art solely for the sake of being art (O'Doherty, 1999: 14; Kantor, 2002: 62 & 66; Staniszewski, 1998: 66 - 67). However, as O'Doherty (1999: 7) warns, this free existence of art and disconnection from the interior to the outside world often permits the visual inflation of the actual significance of the works, leading to an ultimate disconnection from reality.

With no connection to time or context and neutral surfaces covering white box interiors, with lighting conditions controlled, and sound conditions cold and formal, with art permitted to foreground interiors and all artworks being treated equally and the atmosphere of these spaces being artificial, eternal and abstract, the spatial experience of white boxes is the same for all. These universal spatial experiences, O'Doherty (1999: 15) notes, offer only visual and intellectual levels of engagement with these spaces and their displayed content. Pallasmaa (2000: 79) concurs, writing that the surfaces of spaces derived from modernism engage on an abstracted rather than a sensory level, and are concerned with the shape and form of space instead of providing the visitor with perceptual stimuli. This neglect of all senses other than the visual provides for generalised spatial experiences. As a result, white boxes exhibit ahistorical, impersonal and disembodied spatial qualities, in accordance with the fact that they have been formulated on the principles of modernism.

Taking all the spatial qualities relating to white boxes into consideration and comparing them with those relating to historical interiors, a clear disjunction prevails between the conceptual spatial experiences in white boxes and the sensory-rich experiences in historical spaces. White boxes thereby pose a threat to the significance of historical interiors, their heritage-related integrity, as well as their historical, evidential, aesthetic, communal and cultural values. As a result, white boxes require further investigation with regard to the extent to which they can retain the significance of historical interiors during adaptation.

4.5 THE CONTESTATION OF THE WHITE BOX

In 1986, the spatial characteristics of the white box received notable criticism from the artist and critic Brian O'Doherty in his seminal writings entitled '*Inside the White Cube – The Ideology of the Gallery Space*'. His critique was aimed predominantly at the effect white box interiors have on the reading, perception and experience of space and art (O'Doherty, 1999: 7 – 15). Since then, various other arguments have been raised by Newhouse (1998), McBride (1997) and most recently Birkett (2012), amongst others. Newhouse (1998: 51 & 72) wrote in '*Towards a New Museum*' that neutral spaces are anonymous and that interiors such as these isolate and de-emphasise art. McBride (1997: 34) cautions that white boxes engage selectively, inviting only those knowledgeable on the field to take part in exhibitions. Birkett (2012: 35 – 43) concurs with the above and states further that white box environments separate the viewer psychologically from the exhibition and displayed content, with their elitist approach conditioning the viewer into passive, observational roles. In adapted interiors, this conditioning of the active viewer to one of passivity serves to hamper full spatial awareness and perception of historical interiors which, in fact, requires all senses to be engaged for full spatial perception to occur as space is existential and not only physical (Pallasmaa, 2005: 40; Shirazi, 2009: 38).

O'Doherty (1999) and Fitzpatrick (2004) made additional observations regarding the interiors of white boxes and their relationship with the contents on display. According to O'Doherty (1999: 14), the starkness of white box interiors prioritises space during the act of perception, drawing attention first to the white box and then to the art on display. This prioritisation of focus in exhibition spaces above that of the artworks on display is thus at odds with and contradicts the intentions for which white boxes were initially created. Fitzpatrick (2004: 60) agrees with this statement, writing that neutral galleries do not contribute to the relationship between the displayed content and exhibition interiors. This is, ironically, in line with Philip Johnson, the curator of the architectural department at MoMA from 1932 to 1934. According to him, white walls should never be used for the display of art – and paintings in particular – as the walls are too bright and tend to dominate (Staniszewski, 1998: 65). This spatial characteristic, as Pallasmaa (2000: 85) also notes, is the problem with contemporary interiors: they are designed as spaces of sovereignty and therefore disregard their primary purpose, which is to act as supportive backgrounds for everyday life.

The observations and arguments noted here thus raise concern regarding the implementation of white boxes during adaptation, for if they can triumph over the elements for which they were designed to support, how much more will they not suppress their host interiors, which they are meant to hide? With the focus of this study being on the responsive adaptation of historical interiors into contemporary exhibition environments, the white box should be analysed through this lens specifically – namely, in terms of its responsiveness to historicity.

During adaptation, two methods are predominantly adopted in the installation of white boxes into historical interiors. The first method is to clad and conceal existing walls using new materials that are painted white, whilst in the second, existing architectural details and decoration are removed and the remaining architectonic elements are painted white. In both these scenarios the white box asserts its own authority and importance above those of the historical interior, and in so doing affirm its ahistorical attitude. Both these methods therefore go against conservation principles as laid out in heritage legislation which explicitly requires all layers, both tangible and intangible, to be retained and the 'new' to be discernible from the 'old' (ICOMOS, 2010: 2 & 9; English Heritage, 2008: 7). Therefore, both these methods place the significant heritage values of historical interiors at risk for they either erase or conceal all traces of history and identity.

Pallasmaa (2000: 79) states that the surfaces of modern interiors are used purely to create spaces and not to offer sensory and meaningful experiences as historical interiors are inclined to do. Shirazi (2009: 143) concurs, writing that the spatial experience of spaces comprising hard materials and acoustic panels may become monotonous. This is in line with Bloomer and Moore (1977: 105), who write that there is no connection between the viewer's body, their imagination and their surrounds in modern spaces. According to them, only spaces that affect viewers in a physical, emotional and sensory way can impart meaning and make for the recollection of memories (*ibid.*: 107). Furthermore, according to Milligan and O'Connor (2013: 153), this shift in focus away from the spatial experiences as is evident in white boxes results in detached spatial experiences. For historical interiors that are reliant on the recollection of memories and the active participation of the body's sensory organs in order for them to be experienced as significant and meaningful spaces, such a disconnect with the body compromises this personal and meaningful relationship shared with the spaces.

Moreover, the perception of time and place is not limited to architectonic elements of historical interiors alone, but also extends to the natural lighting conditions that link interiors to their surrounding context. Such a connection is important as it provides a sense of direction, orientation and location (McCarter & Pallasmaa, 2012: 151). Additionally, this connection reinforces the cultural identity of places. However, according to O'Doherty (1999: 15), white box environments are often made to screen themselves and their content off from the outside world in order to form spatial environments in stasis. Conversely, Klonk (2009: 156 & 218) contests O'Doherty's view of the 'white box'. She maintains that white boxes were developed to allow for more flexibility in exhibition spaces and not to alienate or isolate art from the world (Klonk, 2009: 218).

Upon the exploration and investigation of white box examples, it was, however, found that white boxes often do form a barrier between their surroundings and their interiors, thus isolating their content. Screening off of interiors from the outside leads to a loss of the viewer's sense of direction, orientation and location once inside these spaces. For modern exhibition venues, this isolation of interior spaces may be acceptable if this reflects the experience envisaged by the author of the space. However, during the adaptation of historical interiors, this exclusionary nature of white boxes will lead to a loss in the experience of the interiors' cultural identity. Furthermore, a loss of orientation and location will 'uproot' historical interiors from their contextual surroundings and thus cause their connection to a specific site and culture to disappear.

In addition, the lighting conditions of spaces play an integral part in spatial atmospheres and the experience and perception of them, affecting the relationship the viewer has with space. In addition, Pallasmaa (2005: 47) argues that the interplay of light and shadows makes historical interiors visually active and plays an essential part in perception, which allows the viewer to truly perceive the characteristics of materials and surfaces. However, white boxes are often excessively bright spaces due to the amount of lighting deployed inside them, as well as their white-painted surfaces that reflect and distribute light equally, resulting in homogeneously lit environments. According to Pallasmaa (2005: 47), spaces subjected to homogeneous lighting conditions facilitate detachment and stifle imagination. To clarify, imagination is the process of forming new images through rational thought by drawing on past experiences experienced through the body (Schater, et al., 2012: 678).

In exhibition environments, imagination is important as it makes it possible for the viewer to form an internalised connection with the content on display, envisage artworks in different settings, or imagine the process taken to construct these pieces, and facilitates a direct and personal connection between the viewer and artworks. Imagination in historical interiors is especially important as it enables the viewer to conceptualise and experience the past through an amalgamation of recollected memories – to experience significant events that occurred in the past. The process of imagination therefore contributes to meaningful spatial experiences and affects the viewer's body in a sensory and emotional manner, making this experience personal.

During adaptation, the deployment of excessive amounts of lighting inside historical interiors will negatively affect the experience of these spaces, as these lighting conditions will compromise existing atmospheres and aesthetic and historical values. Furthermore, homogeneously lighting significant interiors will diminish the intimate relationship shared with these spaces and the viewer's connection to the past, negatively impacting the significance and authenticity of these spaces.

Lastly, the removal of details during the implementation of white boxes raises concern as details form the essence of architecture and their interiors (Aalto, 1956: 3). It is through details and assembly methods used in historical interiors that viewers are able to determine the age, location and cultural influences which helped construct these spaces. Details therefore bind spaces to a specific period and place and carry within them significant heritage information. During adaptation, the removal of such detail will result in a loss of heritage information.

Therefore the starkness and minimalist nature of the white box are at odds with what Shirazi (2009: 137 – 138) describes to be the essence of architecture (and interiors), comprising an amalgamation of form, space, light, materials, colours and shadows which together enrich the spatial experience and contribute to the meaning of space.

4.6 SUMMARY

In this chapter, the extent to which the white box sanitises historical interiors was investigated. Firstly, the events that played a role in the evolution of the neutral interior were examined. It was argued that the modern movement and the exhibition display methods originally introduced in Kronprinzenpalais served as the two main models and spatial precedents for the white box. The various stages in which the white box evolved were discussed, together with the ways in which it changed the physical appearance of the exhibition interior. Similarly, the manner in which display methods and arrangements were approached was reviewed and illustrated. It was shown that a clean break was made from traditional exhibition methods, which included the reduction of artworks on display, minimising architectural details, covering the interior in white paint and arranging exhibitions chronologically. Furthermore, artworks were arranged to be at eye level with bigger spaces in between them; clear labels were also introduced alongside each work to provide specific information about each piece.

The spatial characteristics of the white box were found to be overly-lit, minimalist and universal interiors detached from time and context, simultaneously ahistorical and disembodied. The display methods that were adopted, particularly in terms of the introduction of the artwork label, turned the white box into an exhibition venue that was aimed primarily at the intellectual understanding of art.

At the start of this study it was argued that the materiality of historical buildings and their interiors provide spatial experiences that are unique, tangible and real as the experience of these spaces and their materials are subject to a specific location in time. It was found that during adaptation, white boxes take on authoritative roles, which overpower historical interiors completely. The new materials used to cover the existing ones break the direct, personal and sensory connection viewers have with historical materials and, as a result, disconnect viewers from existing interiors and their

significance. The implementation of white boxes during adaptation was found predominantly to prevent any existence of a connection between the interior and exterior. Consequently, over-lit interiors reduce intimate and sensory connections and interfere with the viewer's ability to imagine the past, thereby affecting perception of interiors and their significance. Also, the removal of details inside white boxes upon installation was argued to discard the significance of historical spaces, affecting the way in which these are perceived. Such affectations of white boxes were found to ultimately lead to universal spatial experiences.

To summarise, it was established that the cultural, historical, aesthetic, communal and evidential values of historical interiors are compromised when white boxes are installed during adaptation in the form of a 'second skin', as it forms a barrier between the historical interior and the viewer. White boxes such as these therefore do not conform to the conservation guidelines as set out by heritage legislation (ICOMOS, 2010: 6; SANHRA, 2015: 2; Burra Charter, 1999: 7; English Heritage, 2008: 58, CADW, 2011: 9). To address this issue, in the following chapter alternative methods are examined to create contemporary interventions that meet conservation guidelines during adaptation in order to retain the integrity of historical interiors.

CHAPTER FIVE

DIACHRONIC AND SENSORY EXHIBITION SPACES

5.1 INTRODUCTION

In this chapter, different responses to the white box approach during the adaptation of historical interiors to contemporary exhibition spaces will be explored. Heritage legislation provides an understanding of how to approach adaptation, but fails to stipulate specific application methods which may be adopted when repurposing historical interiors into contemporary exhibition spaces. As a result, guidelines as set out by heritage legislation will be used as the foundation from which responsive approaches may be built. From these guidelines, the concepts of fragmentation and layering will be developed and explored.

This will be done by referring to Thiis-Evenson's *Archetypes in Architecture* (1989). In this book, he thematically organises architectural elements and the effect they have on the viewer's spatial perception and experience. Reference will be made to these themes, which will be elaborated on and then applied. Only those applicable to the adaptation of historical interiors will be explored. These themes will be grouped under, firstly, design themes (the physical appearance of new interventions) and secondly, implementation themes (methods in which new interventions are inserted into adapted interiors). Reference will also be made to various other authors throughout this section. How these interior interventions influence the perception and experience of spaces will be discussed and, lastly, different approaches to detailing between past and present elements will be explored.

5.2 CONNECTIONS TO TIME AND PLACE: RETAINING HISTORICAL INTEGRITY DURING ADAPTATION

Heritage legislation proposes guidelines and offers recommendations to help protect the significance and authenticity of historical interiors. These guidelines suggest ways in which the design of contemporary interventions can be approached. The recommendations state that new interventions should be sensitive to historical interiors and reversible in future (ICOMOS, 2010: 8; Burra Charter, 1999: 6-7; English Heritage, 2008: 43; Venice Charter, 1931; SANHRA, 2015: 2). However, although the reversibility of interventions is favoured, English Heritage (2008: 46 – 47) cautions that this should not be to the detriment of the aesthetic value of existing interiors, as many of these temporary interventions often become permanent. Therefore, to ensure that both the historical value and aesthetics of historical interiors are retained, the Burra Charter (1999: 4) proposes that a balanced and harmonious dialogue be created between new interventions and those elements already present.

Heritage legislation describes ways in which such a dialogue may be realised. It asserts that vital aesthetic information already exists in host interiors, comprising existing colours, materials, textures, composition of architectural elements and the space itself (English Heritage, 2008: 58 - 59; CADW, 2011: 9 & 29; ICOMOS, 2010: 6; SANHRA, 2015: 2; Burra Charter, 1999: 7). This information may be referred to when determining the colour, material, size, composition, shape, construction and scale of new interventions to help form harmonious interventions during adaptation. The new interventions should, however, be distinguishable from the existing interior in order to retain the authentic value of the space.

In addition, heritage legislation recommends that all existing significant layers inside historical interiors be retained and kept perceptible, as these form an integral part of the authenticity and integrity of historical interiors (ICOMOS, 2010: 3; SANHRA, 2015: 2). Consequently, new interventions should be nuanced to adhere to these guidelines. These nuanced interventions can be designed by fragmenting new contemporary elements.

Furthermore, both CADW (2011: 30) and English Heritage (2008: 60) advise that the identification and reversibility of new interventions are easier when they are not integrated into existing interiors, existing instead as individual elements. Through this approach, all existing layers made throughout the life cycles of these interiors are revealed, thus making their diachronic nature clearly visible. To qualify, diachronic means any phenomena that occur or change over time (Miriam-Webster, 2015: Online). Through fragmentation, new interventions can be layered inside historical interiors. Fragmentation and layering therefore go hand-in-hand.

5.3 THE CONCEPT OF FRAGMENTATION

Fragmentation is defined as the breaking up of a component into smaller elements (COED, 2005: 398). In the context of this study, fragmented adaptation results in nuanced, less imposing contemporary interventions that are inserted into historical interiors. This offers an alternative approach to the implementation of autonomous interventions, which conceal and disregard historical interiors. Such fragments are designed to exist separately from their host interiors, making it possible to remove them at a later stage and allow historical interiors to be perceived after their adaptation. To ensure that these fragments can be distinguished from existing elements, different colours, shapes, materials, or construction methods can be used.

Ways in which the design of fragmented elements may be approached can be found in Scott's *On Altering Architecture* (1989). According to Scott (2008a: 169), geometric interventions designed according to the principles of neoplasticism, the abstract art movement developed by the Dutch artist Piet Mondrian, help construct harmonious

relationships between past and present elements, as such shapes do not conform to specific periods. These interventions establish harmonious relationships and thus take on the roles of mediators.

These characteristics of neoplasticism, three primary colours, three non-primary colours, and strong vertical and horizontal lines have been interpreted by Seuphor (1955: 166) as an 'architectural language' in '*Piet Mondrian: Life and Work*'. In this interpretation, primary colours are replaced by modern materials, and non-colours by variations of light intensity and spatial density (Seuphor, 1955: 166). This interpretation provides additional ways in which the design of fragmented elements can be approached during adaptation. Therefore, interventions designed according to Seuphor's interpretation may also help create clearly distinguished contemporary interventions in historical interiors. Scott (2008a: 174) agrees, writing that new life can be given to historical buildings and interiors by incorporating new materials and construction techniques. As a result, the principles of neoplasticism and its architectural interpretation may be used to construct harmonious relationships between past and present elements.

Fragmentation also addresses the imbalance that often exists between art and interiors when incorporated in the design of display platforms. Here the fragmented platform takes on the role as mediator between the two. Through this controlled mediation, the tension between artworks and historical interiors is reduced: mediation allows for equal recognition of existing interiors, new interventions and displayed objects by permitting viewers to selectively engage with each, or with all three as an ensemble.

An example where fragmented elements were used during adaptation can be found in the Musée d'Orsay, Paris. Designed by the architect and designer Gae Aulenti, the new interior is clearly juxtaposed with architectural elements of the past (Wainwright, 2012: Online). In the adaptation of the Musée d'Orsay into a contemporary exhibition venue, the new additions are minimalist in composition, geometric in form, smooth in texture and asymmetrical in relation to the existing interior, constructed using modern, neutral materials. These physical characteristics make it possible to easily distinguish them from the existing interior. Furthermore, various geometric platforms and elements are used to break the existing interior up into multiple levels and areas. These platforms increase display surfaces inside the existing interior, and help construct various intimate rooms. Fragmented components are used as backdrops behind or below objects, making a viewer's perception and engagement with the displayed works direct and personal. These fragmented backdrops give each art piece its own place inside the interior, an important relationship stressed by Heidegger (Shirazi, 2009: 29). These nuanced interventions also extend awareness to the historical interior as they allow a direct connection to persist with existing surfaces, which is emphasised through the contrast in shape and materials between new and old (Fig. 5.1).



Figure 5.1 Fragmented space

5.4 THE CONCEPT OF LAYERING

The white box is often criticised for blurring the line between 'art space' and 'actual space', a direct result of its neutral interior that was created solely for the viewing of art (Hetherington, 2010: 112). Consequently, everything inside this space becomes 'art' due to this lack of boundaries (O'Doherty, 1999: 14). Viewers are furthermore left feeling disconnected from the space due to a lack of physical stimulation (O'Doherty, 1999: 15). Additional feelings of detachment arise from a lack of shadows required to make the perception of spatial depth, distance and texture possible (Pallasmaa, 2005: 46 – 49; Smith & Verghese, 2013: 516). This reduces the white box to a flat 'two-dimensional environment'. To counter and address this concern of blurred boundaries, sensory-deprived spatial experiences and flat interiors, new fragmented interventions can be layered from and inside the existing space.

Rowe and Slutzky (1989: 48) reveal the conceptual complexity of layering and use it for the analysis of paintings. Applying it to Le Corbusier's 'Villa in Garches', layering as they see it may be used as a 'tool of contemplation' that reveals the spatial interrelations in architecture (Rowe & Slutzky, 1968: 48). For Schultz (2010: 7), layering permits information from different periods to co-exist harmoniously and makes for their individual or collective reading and understanding. This method makes the latest interventions distinguishable from existing ones, and allows the various layers that have been added to interiors over the years to be perceived. If designed carefully and in accordance with the guidelines as set out by the charters, layered interventions should also be easily reversed at a later stage, along with any traces of their existence. In

addition, the layering of new fragmented interventions in large space interiors makes it possible for viewers to visually measure themselves against vast spaces, contributing to a more personal and meaningful spatial experience (Bloomer & Moore, 1977: 38, 45; Pallasmaa, 2005: 11). Shirazi (2009: 24) concurs, writing that through our bodies we are able to measure and understand distance and proximity, and we have coordinates of what is above, below, left, right, front and back. Layered inserts therefore offer a visual measuring point for the body and contribute to the three-dimensionality of space.

Three types of layering can be identified in exhibition interiors: material layering (against existing surfaces), spatial layering (in front/from existing surfaces) and object layering (separation between the content and its surrounds).

MATERIAL LAYERING

Material layering is the layered configuration and composition of various materials (Schultz, 2010: 10). The reading and perception of each individual material layer depends on their physical characteristics. A contrast between layers allows each layer's period of construction to be determined, as well as the method used, as is visible in Sforza Castle where decorative architectural elements are constructed on red brick against existing walls (Fig. 5.2).



Figure 5.2 Material layering

In the adapted interior, material layering is used predominantly in the construction of display platforms, and sometimes for the creation of architectural elements. These platforms make it possible to minimise the damage often caused to historical interiors when displays are continuously altered, fixing objects to the platform and not the interior itself. This also allows for a certain amount of flexibility in exhibitions and displays as they can be easily removed, moved and altered should the exhibition change.

Furthermore, these platforms provide supportive backgrounds for artworks by separating them from existing interiors, thus creating a harmonious relationship: these platforms help reduce the tension between objects and their surrounds, as well as the tension between multiple objects on display. This enables the individual or collective

reading of elements, comprising historical interiors, new interventions and displayed content.

SPATIAL LAYERING

Spatial layering, on the other hand, is the breaking up of space using fragmented architectural planes that are layered from or against existing walls, floors or ceiling planes, as well as one another (Schultz, 2010: 10). According to Sirefman (1999: 19), spatial layering provides for a clear articulation of both the 'old' and 'new' and contributes to the reading of existing spatial significance. In addition, many have pointed out that spatial layering allows existing spaces to be divided into smaller and more intimate environments, which in turn promotes a more personal connection with exhibition interiors and artworks (Gilman, 1918: 397 – 409; Sirefman, 1999: 303; Schultz, 2010: 19).

In adapted interiors, spatial layering may help compartmentalise existing large rooms into smaller exhibition areas or pockets. This makes it possible to reconfigure large rooms and increase display surfaces without any adverse effects on historical interiors. Furthermore, adding additional rooms to existing interiors prolongs engagement with these spaces. Through this process a specific, sequential spatial experience is constructed which can be used to convey particular spatial narratives. The narratives can be used to communicate meaningful information about historical interiors and their adaptation, subsequently increasing spatial awareness. Furthermore, spatial layering may help construct marginal context for artworks, allowing these to break from potentially dominating existing interiors and, in so doing, reducing the tension often prevalent between the two.

An example of spatial layering is visible in Carlo Scarpa's top gallery in Castelveccchio. New walls (indicated by red lines) and moveable panels (indicated by dark blue lines) are used to break the large hallway into smaller, intimate pockets, providing more surface area to exhibit content (Fig. 5.3). The original central axis is replaced by two axis routes. The top axis forms a direct passage past the gallery and makes the spatial experience brief as viewers are directed past the galleries. The bottom axis is open to the multiple spatial pockets that prolong the spatial experience as viewers are invited into each individual pocket. The bottom passage therefore grants viewers more time to engage with the existing interior, consequently increasing their physical interaction with the space.

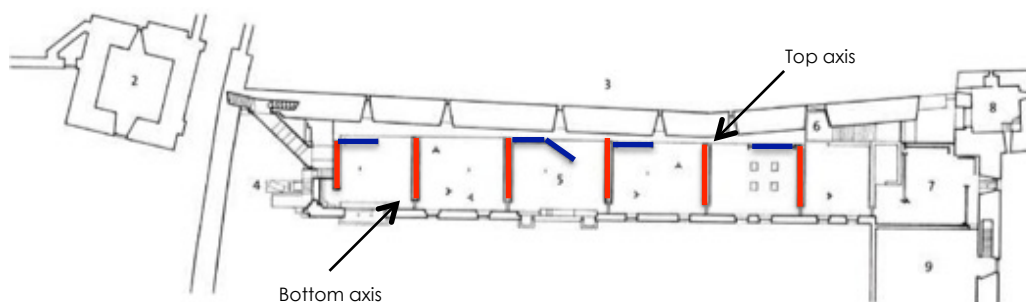


Figure 5.3 Spatial layering

OBJECT LAYERING

Object layering makes it possible for artworks to break from their surrounds without requiring additional fragmented walls or surfaces as backgrounds. The architect Frederick Kiesler challenged the direct relationship between framed artworks and gallery walls. He maintained that such a method of display diminishes the art and impacts on its meaning (Kiesler, 1996: 42). In an effort to separate art from becoming mere decoration, Kiesler stripped artworks from their ornate frames and developed various methods of display to help art establish its own 'place' in exhibition interiors. These methods included the layering of artworks from display walls (Fig. 5.4) and placing artworks in the middle of rooms (Fig. 5.5). Layering artworks from walls allows these to cast shadows which help separate artworks from their surrounds, further contributing to their individual reading. Layered objects therefore make it possible to engage with and perceive artworks and exhibition interiors either as separate entities or together as a unit.



Figure 5.4 Layered objects from walls



Figure 5.5 Layered objects in the space

5.5 UNDERSTANDING AND CONSTRUCTING SPATIAL EXPERIENCE DURING ADAPTATION

French phenomenologist Merleau-Ponty suggests that true perception of space only occurs when all the senses are actively engaged (Pallasmaa, 2005: 40). French linguist Georges Matoré (in McCarter & Pallasmaa, 2012: 10) concurs and states that senses form an integral part of daily existence that affect a person emotionally and psychologically. This sensory and physical interaction creates awareness of changes in textures, colours, materials, light quality and shapes, which help identify elements and their period of construction. Many therefore purport that through physical engagement with historical interiors, narratives about their past construction methods, previous functions and cultural identity are obtained (Pallasmaa, 2005: 6; Austin, 2012: 109; McAuliffe & Weadick, 2012: 279).

In addition, Thiis-Evensen (1989: 23 & 25) explains that spaces are experienced privately, socially, or universally. Private experiences are individual, social experiences are culturally based, and universal experiences are shared regardless of who a person

is, or where they are from (ibid.). All three of these spatial experiences occur in adapted historical interiors and can be described as follows: Historical interiors offer personal and unique spatial experiences, as the physical encounter with materials and the meaning these provide differ from person to person. This results in individual, meaningful and memorable spatial experiences. Furthermore, these spaces offer social experiences, holding more value for certain social and cultural groups than others, which adds to their significance. Universal experiences are realised through three architectural qualities, namely weight, motion and substance, and the way in which these are configured to make up the spatial environment (Thiis-Evensen, 1989: 21 – 23).

Furthermore the narratives of historical interiors are embedded in their architectural elements and cannot be altered unless these are demolished or completely concealed. On the other hand, the narratives of contemporary exhibitions are constructed, controlled, conveyed and enforced through their newly introduced architectural interventions. During adaptation these new interventions therefore have the ability to impact and change existing narratives of historical interiors, and affect the spatial experience. To help retain existing narratives of historical interiors during adaptation into contemporary exhibition spaces, fragmentation and layering can be employed.

To help with the construction of new narratives that complement existing elements and are universally understood, reference is made to Thiis-Evensen. He categorises architectural components according to floor, wall and roof planes, and writes about the expressive nature of architectural forms, the influence they have on spatial experience and the universal meanings they convey to people (Thiis-Evensen, 1989: 17). He breaks up the floor, wall and roof planes into various themes, identifying various thematic approaches to the design of these architectural elements. These are constructed according to the size and shape of architectural elements, the use and application of materials, and their existential expression, the latter referring to the meaning that is imparted on the viewer during perception (ibid.: 22).

Themes that were identified from his book to be relevant to adaptation are the *delimiting, attached, detached, colour, glass wall, the massive system and main forms of walls themes*. These themes were investigated, pulled apart, regrouped, built on and applied inside the exhibition environment. This process resulted in new groups, classified according to the following headings: design themes, which refer to the physical appearance of new fragmented interventions, and implementation themes, which refer to the method in which new interventions are layered into the adapted interior. Each theme focuses specifically on how intervention contributes to the reading and perception of significant interiors, extending awareness to these spaces when designed or grouped according to the themes identified.

DESIGN THEMES

The physical appearance of architectural elements forms an integral part of interior spaces and our reaction to them. The way in which the designs of interventions are approached during adaptation determines the effect new interventions have on the perception of historical interiors and artworks. Furthermore, the shape of newly inserted interventions can both highlight and strengthen perception of existing interior elements either by contrasting or complementing them. The themes of horizontality, verticality, contrasting and complementary forms and the impact they have on the perception of existing space will be explored. In addition, themes relating to colour, texture, patterns and transparency were identified to impact perception of space and will also be explored.

The horizontal theme

The shape of architectural elements subconsciously affects the way in which the viewer engages with and perceives space. These shapes may be used as a tool to help generate spatial awareness. According to Thiis-Evensen (1989: 143), horizontal walls draw the viewer's gaze left or right to their horizontal perimeters. When used within interior settings, this form of perception makes the viewer aware of the length and depth of interiors. In adapted interiors, the insertion of these horizontal elements helps increase awareness of these historical, spatial envelopes and their existing surfaces by drawing the viewer's gaze to the perimeters of rooms in a rectilinear direction. At the end of these panels the viewer's gaze is met with the historical interior as is visible in the Mason-Scharfenstein Museum of Art in Demorest, Georgia, USA (Fig. 5.6). In this specific example, the vertical breaks between the newly inserted panels create a spatial rhythm in the interior during perception. In addition, these breaks allow for 'visual pauses' to occur between the panels and grouped artworks.



Figure 5.6 Horizontal theme

The visual pauses reduce museum fatigue by breaking up the viewer's continuous interaction with exhibited content through this form of segregation (Gilman, 1918: 399). The separation of panels, in turn, helps create more intimate, direct connections with artworks.

The vertical theme

Vertical themes in architecture are perceived as light and open elements which draw focus and highlight key areas within buildings (Thiis-Evensen, 1989: 145). In contrast to the horizontal theme (which draws awareness to horizontal perimeters of rooms), vertical elements draw attention to vertical perimeters of rooms. In adapted interiors, the vertical elements can help draw attention to a ceiling that holds significant value. Upon encountering vertical walls, the viewer's focus is drawn first to the centre of these walls, after which it gradually moves upwards. Once at the top, the viewer's gaze moves from the vertical wall onto the ceiling where it explores this element and returns down another part of the interior. This visual progression along the vertical perimeters of space thereby serves to encourage spatial perception.

An example of a vertical insert can be found in the Musée d'Orsay. The wall is positioned in the centre of an existing archway and painted a colour that harmonises with and accentuates the painting displayed upon it (Fig. 5.7). The viewer's gaze is first drawn to the painting and then extends upwards towards the detailed historical arch above, before moving on to the ornate ceiling higher up. Furthermore, the vertical wall



Figure 5.7 Vertical theme

helps form a direct relationship between the viewer and the artwork it hosts. Such a relationship is due to the colour of the wall attracting attention, and the artwork being the only piece mounted on the wall. The physical separation of the artwork from the rest of the interior and other surrounding art moreover reduces tension prevalent between the artwork and interior. This form of separation, where art pieces are singled out from collections, also visually increases the value of the artwork. When used in this manner, the vertical theme becomes beneficial for both historical interiors and artworks alike, as it promotes awareness of both these elements simultaneously.

The complementary theme

The term *complement* is defined as something that is added to an existing element, which contributes additional value and enhances its meaning. This is achieved by designing new interventions that follow the form of existing interiors during adaptation. This complement in form boosts awareness of existing elements, helping to articulate the shape and materiality of the spaces. Furthermore, when complementary interventions form a contrast in colour or texture to existing elements, the viewer is made more attentive to their surroundings during perception (English Heritage, 2008: 58 - 59; CADW, 2011: 9 & 29).



Figure 5.8 Complementary theme

One such example is in *The Gathering* exhibition (2014) by Jody Little, which was held in The Crypt, a contemporary art gallery located below the historical St. Pancras Church in London (Fig. 5.8). In this example a removable black panel was used to construct a temporary background for the art on display. This panel was made to fit into an existing nook of the crypt, following the existing shape of the recess and thus complementing it. Furthermore, the contrast in colour and texture between the inserted black background and the historical walls aids the viewer's perception of the existing architecture in both

a physical and sensory manner. Using complementary themes during the adaptation of historical interiors may therefore contribute to and enhance the relationship between the viewer and historical interior.

The contrasting theme

The contrasting theme refers to new interventions that are inserted into existing interiors that contrast with their historical surroundings. This contrast is visible in the relationships of colour, texture and shape between new interventions and existing elements. Through this difference in appearance, focus is drawn to the historical interiors, with the new interventions indirectly complementing them. Therefore, in this approach both existing architectural elements and new inserts are individually pronounced, making it possible to clearly distinguish new interventions from existing elements. Through this

method, historical interiors can retain their historical integrity during adaptation. Furthermore, contrasting elements offer displayed artworks a clean break from their often overpowering surrounds. In scenarios such as these, the surroundings might be very ornate and, as a result, visually busy. Introducing a neutral, minimalist and contrasting backdrop for the displayed content can help project them forward, serving to increase their visibility.

In a sculpture exhibition at the Musée du Louvre in Paris, a light grey backdrop is centred between a series of colonnades and vaulted ceilings, with black sculptures symmetrically displayed in front of it. The existing architecture 'frames' the geometric display panel and forms a rhythmic progression towards it. The contrast in shape between the geometric panel and ornate interior clearly defines the panel as the new intervention (Fig. 5.9). Furthermore, the minimalist appearance of the panel highlights the sculptures from their busy surrounds, whilst the contrast in colour between the grey panel and the light-coloured interior sparks visual awareness from the viewer. Contrasting interventions may therefore be used to help construct balanced relationships between content and existing interiors, and reduce the tensions that often exist between them.



Figure 5.9 Contrasting theme

The colour theme

Colour plays a substantial role in how interiors are perceived. In exhibition environments in particular, colour can distinctly alter perception of artworks. In this section only the basic effect of colour on perception and human response is discussed, as extensive research has already been conducted on this topic (Meerwein & Rodeck, 2007; Mahnke, 1996; Malnar & Vodvarka, 1991).

According to Thiis-Evensen (1989: 240), colours make surroundings visible as each colour provides an emotional reaction. In a similar vein, Michel (1996: 88) explains that colours have cultural and individual associations. Thiis-Evensen (1989: 241) also notes that colours have the power to visually alter the size of architectural elements. For him, dark and earthy colours focus vision on the objects, serve to ground them and ultimately bring them closer during perception, whilst visually decreasing the size of the element (ibid.: 244). Light colours allow the viewer's gaze to wander and are therefore classified as open colours, visually expanding the elements that they cover (ibid.).

In the exhibition interior, the introduction of light-coloured elements onto or in front of dark walls causes the lighter elements to expand in size and be projected forward. The introduction of dark-coloured elements against light walls focuses attention on the darker new additions and visually severs the two from each other. Colours may also help to distinguish new additions from historical interiors by highlighting these in bright or contrasting colours. Also, the colours used on new interventions will affect the viewer's perception of the space and the artworks displayed within them, as colours have a direct influence on how far the viewer locates themselves from elements during perception. According to Thiis-Evensen (1989: 248), warm colours invite the viewer to engage, whilst cool colours push the viewer away. Therefore, colours may be used to influence the relationship and distance between the viewer and displayed artworks.

In the Musée d'Orsay, fragmented display platforms were introduced on top of new architectural interventions, restoring balance to the exhibition interior. These platforms, arguably informed by the principles of neoplasticism, are painted bright colours. These bright-coloured backdrops frame the object, whilst their scale restores balance to the display composition and marginalises the tension between content and the space (Fig. 5.10). In this specific example, a warm and dark colour was used on the display platform, with many consequences for visual perception. Firstly, this colour helps to project the light sculptures forward and enhances the respective items on display. Secondly, the dark-coloured wall focuses the viewer's attention on the object, providing an invitation to come closer and engage with the artwork. Thirdly, the dark colour visually contains the size of the intervention, and clearly highlights its scale in comparison to the historical interior. Lastly, the colour of the panel allows it to distinguish

itself as a new intervention or later addition to the space, retaining the authenticity of the historical interior.



Figure 5.10 Colour theme

Changes in colour not only engage with the visual sense, but also impact the tactile sense, as colour is often associated with temperature (Thiis-Evensen, 1989: 241). As a result, warm colours such as red, orange and yellow will have a different effect on the viewer than cool colours such as blue, grey and purple, ultimately affecting the perception of space. As a result, colours either encourage or discourage the progression speed through exhibitions, with warmer-coloured walls or rooms having a stronger drawing force (right doorway) than those painted (or lit) in cooler shades (left doorway) (Fig. 5.11). Changing colours of spaces and new interventions will thus affect the pace at which the visitor moves through the exhibition and the time spent observing each object and the space.



Figure 5.11 Drawing force of colour

The texture theme

Textures in interiors are experienced and perceived through the tactile sense and offer a unique and sensory experience (Thiis-Evensen, 1989: 171). According to Thiis-Evensen (1989: 173), smooth surfaces are perceived as being hard, cold, distant and detached, fine-textured surfaces are perceived as being inviting and help ground elements, whilst rough surfaces are perceived as being uninviting due to their harsh tactile qualities. Texture may therefore be used in exhibitions to influence and control the relationship between the viewer, content, and space.

The influence of texture on the experience of the exhibition interior, the perception of the art and the interaction between these two aspects are most notable in two exhibitions done by Catherine Dormor (Fig. 5.12). In the first image, the smooth and white-coloured walls push the viewer away from the artworks and subsequently reduce their texture. In the second image, an invitation is extended to the viewer to come and investigate the artwork up close due to the fine-textured walls and their warmer colour tone. The sensory experience is further amplified in the second example by the rich contrast in texture between the brick walls and thin fabric.



Figure 5.12 Influence of texture on perception

In Sforza Castle, various new textured panels were introduced during adaptation and resonate with the 'architectural language' of neoplasticism (Fig. 5.13). Natural and modern materials of timber, stucco and steel are used in a juxtaposed relationship with the existing interior and content. Strong geometric shapes predominate in these interventions that are assembled in a contemporary fashion. The varying degrees in texture contribute to the sensory experience of the space and increase visibility of the content from the existing interior. There is also a contrast in colour between the smooth, light-coloured walls, darker, fine-textured backdrops and light-coloured stone sculptures. The fine texture and warm-coloured timber of the panels in the first image invite the viewer to engage with the content, drawing the viewer closer to view each piece individually. In the second image, the cooler, smooth backdrop focuses attention on the sculptures alone, and makes the viewer perceive them from a distance. This helps group them together which serves to strengthen their significance.



Figure 5.13 Texture theme

The implementation of coloured, textured exhibition wall panels in the adapted interior has a direct effect on the relationship between the existing space and content, as well as the viewer's relationship with the aforementioned. Furthermore, textured interventions enrich the exhibition experience, making it more personal, and may be used to invite the viewer to actively engage with the content on display.

The pattern theme

The introduction of patterns onto newly inserted interior surfaces and architectural elements can also help enrich the spatial experience, as pattern arrangement has a direct effect on perception: horizontal patterns make elements appear heavy and tie them to adjacent wall planes, whilst vertical patterns express the independence of architectural elements from floors and adjacent walls (Thiis-Evensen, 1989: 175 – 176). Abstract patterns free their elements from structures and figurative patterns add depth to surfaces, whilst patterns formed by materials express the construction methods of architectural components (ibid.: 177 – 183).

During adaptation, an understanding of patterns and their implementation in terms of new interventions and display walls will influence the viewer's perception of historical interiors and their displayed content. Decorative surfaces can be created through the use of wallpaper, textiles, engravings, or textured wall finishes, and contribute to a sensory-rich display. In existing interiors that are finished in plain walls, the introduction of patterned interventions will highlight these new additions and visually sever new from existing. In interiors that are already patterned, whether this comprises materials or wall finishes, minimalist and geometric patterns may be introduced to provide contrast.

In the Victoria and Albert (V&A) Museum, fragmented, coloured and patterned walls are positioned in front of windows (Fig. 5.14). This display configuration consists of large yellow flat panels at the back, with smaller, abstract, purple patterned panels in the front. This use of patterns and fragmented walls has various implications for the display

interior. Firstly, the use of the colours yellow and purple adds depth to the spatial composition (Oliver, 2007: 63). This highlights the independence of these panels and is enforced through the way in which they have been arranged, with irregular spaces between them. Secondly, the vertical breaks between these panels draw individual attention to each display, with the dark walls focusing attention and the light walls allowing the gaze to wander to the rest of the interior. Thirdly, the patterned purple backdrop resonates with traditional decorative interior settings of the period in which this content would be found. In so doing, the patterned backdrops provide peripheral context to the displayed content, with their decorative motifs strengthened by the plain yellow panels.



Figure 5.14 Pattern theme

The transparent theme

Transparency is the property which allows light to shine through materials to allow visibility of objects positioned behind them (COED, 2005: 1102). Thiis-Evensen (1989: 189 - 190) maintains that glass walls are 'non-existent' in architecture, and when elements are viewed through these walls, a sense of depth is obtained due to the layering effect; elements appear to jut forward as seemingly part of the glass. Translucent and transparent glass panels often also have highly reflective properties, though this reflection is dependent on the light quality inside or around the space.

In the adapted interior, the use of transparent and translucent materials has a considerable influence on spatial perception and experience. Firstly, the viewer's perception of these newly inserted interventions is always subject to the light and colours visible behind it. As the viewer moves past these walls, the background constantly changes, adding life to the wall. Secondly, the use of these walls helps create awareness of the surroundings, either by allowing the viewer to perceive existing elements behind these new inserts, or by reflecting interiors, making the viewer

become aware of elements that might have been missed. Thirdly, walls such as these allow connection with the historical interior and its materials to be retained during adaptation. Various examples exist where this approach has been adopted.

The Rotonda di via Besana is a historical cemetery in Milan where various types of contemporary exhibitions are often held inside its chapel due to its volume and open layout. In the exhibition entitled *Timeless Masterpieces* by Safet Zec, white walls and panels of expanded metal and iron ore are used to break the interior into smaller pockets (Fig. 5.15) (Negri, 2012: Online).



Figure 5.15 Transparent theme in an art exhibition

The metal screens are semi-translucent, and are suspended from rods between the pillars to 'float' in space. The use of iron ore places emphasis on the temporality of the intervention in relation to the permanent structure. Furthermore, contact with the full interior persists when viewing the artworks, keeping the relationship between viewer and interior active.

The screens also make it possible to read art pieces either separately or collectively with the interior due to their semi-translucent characteristics. However, the success of the semi-translucent screens in this specific exhibition lies largely with the artworks that reflect certain characteristics, resonating with the period architecture. In addition, the use of thin, white fabric to screen off sunlight instead of block out material permits natural light to enter. The semi-transparent screens enable the perception of this light throughout the exhibition, which continuously fluctuates as the viewer moves through the space. This interplay between light and shade, solid and void, transparent and opaque surfaces (artworks) creates a visual and animate display. Translucent walls

therefore enable the visitor to retain a connection to time, place and context when used as materials for the constructing of interventions during adaptation.

The transparent theme was also adopted in two local exhibitions in Cape Town. In both scenarios the permanent exhibition is site-specific, with the information displayed on suspended glass walls. The first example is located at the historical Groot Constantia wine farm, dating back to 1685. Located in one of the outbuildings, the panels convey the history of the Cape and specifically the development of the farm and the various activities and events that occurred there (Fig. 5.16). Various colours have been used on the panels to allow for easy reading of this information against the existing white walls. The contrast in colour draws attention to the panels and their content and allows for easy reading, at the same time contributing to the three-dimensionality of the display. Furthermore, the use of glass panels inside this exhibition takes on a functional role, for should the information on the panels need to be changed in the future the content can be easily replaced without altering the actual structure of the exhibition.

The second example is located at Solms Delta, a historical wine farm close to Franschhoek. The panels convey the story of slavery in the Cape in a chronological manner. Due to the transparency of the panels, the viewer retains their direct connection with the historical interior and materials (Fig. 5.17). The contrast between the high gloss and smooth panels with the textured interior walls adds to a sensory-rich and tactile experience. In addition, the panels are presented along with cabinets of curiosities. This composition of visual panels and tactile artefacts helps to enrich the narrative of the exhibition even more. The bright lights inside the cabinets and those shining on existing walls make it possible for the rest of the interior to reflect on the translucent panels, highlighting the surroundings and encouraging the viewer to turn around and explore the rest of the space.



Figure 5.16 The coloured transparent theme makes reading of content easier in existing white interiors.



Figure 5.17 The translucent theme reflects existing surroundings.

IMPLEMENTATION THEMES

Implementation themes are classified according to the way in which new interventions are composed inside existing interiors to perform specific functions. These interventions draw attention to existing spatial envelopes, new interventions and displayed content. Implementation themes that allow for the responsive adaptation of historical interiors into contemporary exhibition venues include the delimiting, detached and attached theme, and are used to separate, group, reduce, increase, highlight, or blend new elements with significant objects or areas. These themes are discussed according to the floor, wall and ceiling and, where applicable, display platforms.

The delimiting theme

To delimit something is to clearly highlight its boundaries (COED, 2006: 261). To delimit in architecture is to keep the visitor separate from their surroundings or confine elements within predetermined boundaries (Thiis-Evensen, 1989: 47). This approach to spatial configuration may be employed during adaptation by designing new interventions to highlight or demarcate certain spaces or areas inside adapted exhibition interiors. During adaptation, material and spatial layering are employed using new walls, floors, ceilings and display platforms to delimit spaces.

The delimiting wall

The delimiting wall refers to the approach where new walls are introduced into existing interiors and configured in such a way that they enclose a section of the space. Through this intervention, it is possible to change the spatial configuration of existing interiors without negatively impacting their aesthetic values. During this implementation, a smaller and often more private area is constructed, as is visible in the *Chambre d'Amis* in the Academy of Fine Arts, Vienna (Fig. 5.18). Here the enclosed space makes the visitor focus on the historical pillar and in doing so emphasises its structural significance.



Figure 5.18 Creating private space through delimiting walls

Another example where new walls were used to delimit a more intimate space inside the existing interior can also be seen in the Sforza Castle. Here, temporary walls formed a dedicated and intimate space for Michelangelo's Pietà Rondanini sculpture in the Scarlioni hall in 1956, prior to moving the sculpture to its new location in the restored Ospedale Spagnolo (Spanish Hospital) on 2 May 2015 (Fig. 5.19).

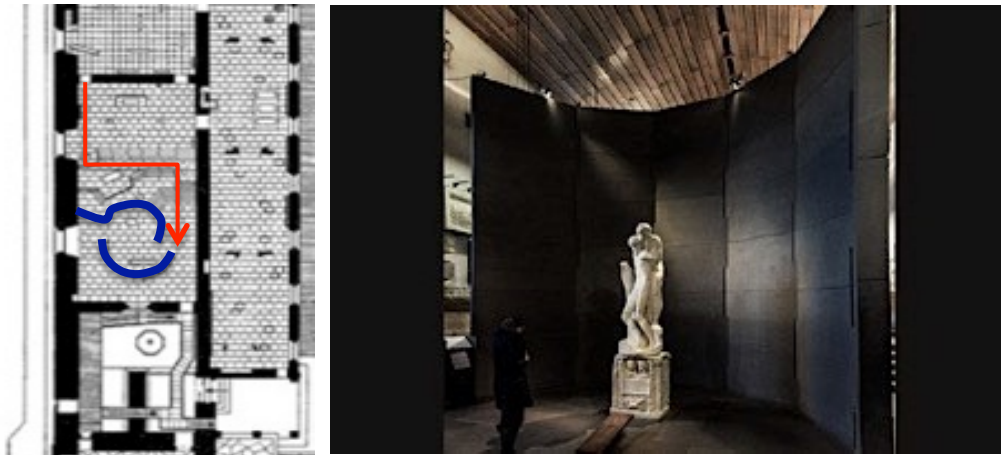


Figure 5.19 Delimiting walls to retain significance of art

When the statue was at the Scarlioni hall, the new walls helped reduce the tension between the significant interior of the Sforza Castle and the significant statue. The materials selected to construct this partition were neutral and dark in colour with discreet joints so as not to detract attention from either the statue or interior.

The delimiting floor

The delimiting floor refers to the method where the new inserted floor is made to differ from the flooring surrounding it, often by using a clear and distinguishing border to highlight a section of the existing floor.



Figure 5.20 Delimiting floor

In Castelveccchio, the delimiting floor is used to define and delimit new areas from the existing interior through the process of material layering. In this specific example, the Sacello, a room which was added to the sculpture gallery during adaptation, is clearly defined by changing its floor finish from the floor of the sculpture gallery and bordering it with a solid black edge (Fig. 5.20). This change in floor finish allows the historical element to retain its own identity and helps emphasise the relationship between the 'new' versus the 'old' (Scarpa, 1956: 158). By clearly bordering the floor and finishing it with contrasting floor finishes, the

transition from the historical interior into the new addition is clearly announced from inside the interior, placing emphasis on the new addition and different periods of construction of the old versus the new, and in doing so retain the authenticity of the space.

The delimiting ceiling

The delimiting ceiling, realised through spatial layering, is used to keep relevant elements together or highlight specific areas within a space by using dropped ceilings or bulkheads to define specific areas inside the existing interior.

An example is visible in the Robert H. Smith Gallery inside the V&A Museum. A periodic ceiling is inserted into the existing interior, bordered by a contemporary, black steel frame. This frame highlights its perimeters from the rest of the interior, confining its meaning to only the area and content below it (Fig. 5.21). In this particular example the inserted ceiling adds meaning and context to the contents on display, placing emphasis on their significance and thus increasing their value during perception.



Figure 5.21 Delimiting ceiling

The delimiting platform

Display platforms can also be designed to function as delimiting elements. This is achieved by introducing platforms that group specific objects together, separating them from the other objects on display as well as the existing interior.

An example of delimiting display platforms is visible in the photo exhibition by Sarah Joanne French. Here the artworks are secured onto panels that are mounted onto simple neutral strips that are fixed to the historical walls of The Crypt Gallery. This allows artworks to be easily rearranged during the exhibition, and reduces the damage upon their later removal. The small geometric panels provide marginal background for the contents on display and group related pieces together, whilst their colour complements both the art and surrounding existing materials. Through this approach, grouped artworks are delimited from one another and their surroundings, which helps to increase their reading from the busy, textured background. In addition, this layering of elements facilitates the formulation of various shadow intensities, contributing to the three-dimensionality of the display which further serves to enhance one's perception of the objects on display (Fig. 5.22).



Figure 5.22 Delimiting display platform

The delimiting interior

In some instances new interiors are created inside existing ones to form a delimiting interior. In such cases, the new intervention completely separates the constructed space and its content from the existing ones, and exists independently of its

surroundings. The delimiting interior also makes it possible to create new atmospheric conditions without negatively affecting pre-existing elements.

The Pod Gallery is a prime example of the delimiting interior, and comprises a private art gallery that was constructed in a 17th century old barn in Cotswold by Stonewood Design in 2015 (Dezeen, 2015: Online). The intervention is made to sit inside the Grade II listed historical building with only the floor and back wall touching the existing space (ibid.). The shape of the new interior mimics that of the existing shape and, in so doing, complements the historical interior. This method, where the new intervention is designed to lightly touch the existing interior, helps to retain the aesthetic, historical and evidential values of the significant space. Furthermore, this method of installation makes it possible to remove the intervention in future without any complications or leaving any traces of its existence behind (Fig. 5.23).

The pod was constructed using modern materials and construction techniques: planed pale oak and glass contrast with the existing materials of the barn. This contrast in materials clearly distinguishes new from old, whilst the natural materials are in harmonious dialogue with one another. Lighting conditions also add to the contrast between new and old; the interior of the barn is predominantly dependent on natural light whilst artificial lighting is employed in the gallery. This retention of the original atmosphere of the barn facilitates the reading of spatial depth and its materials, and allows its previous function to be visualised by the viewer. This evokes Pallasmaa's writings on shadows, and the ways they ignite imagination (Pallasmaa, 2005: 46).

Once inside the gallery, attention is drawn to the historical envelope by using oversized windows that frame the existing ones. Through these considerations, recognition is given to the historical interior whilst the gallery conveys its own context and helps reduce tension between the artworks and textured existing interior (Fig. 5.24).



Figure 5.23 Delimiting interior



Figure 5.24 Contrast between new and old

The detached theme

The term detached is defined as the state of being independent or objective (COED, 2006: 270). In architecture, Thiis-Evensen (1989: 57) refers to the detached floor plane and describes the floor as being severed from the earth or natural floor. The detachment of architectural elements in adapted interiors, however, is not confined to the floor plane alone, but is also made possible through other architectural elements such as walls, ceilings and display platforms. These elements can help break preconceived assumptions or associations about existing interiors and objects on display, resulting in the construction of contextual settings that are independent and neutral from both existing interiors and objects. Through this spatial and display composition, the historical elements and displayed content convey their own significance to the viewer.

The detached floor

In adapted interiors, there are two approaches to the design of detached floors. In the first approach, the newly inserted floor is temporary and exists completely independently of the existing floor. In the second approach, the newly inserted floor is more permanent and, as a result, is designed to visually appear detached from existing structures by the way it is made to connect to the existing space.

The first approach was used in China's China Arts and Entertainment Group (CAEG) exhibition at the 14th Architecture Biennale in Venice. The exhibition was constructed at the historical Arsenale inside the *Magazzino delle Cisterne* (Lusiardi, 2014: Online). A temporary floor comprising multiple smaller platforms was inserted on top of the existing floor, on top of which the temporary structure was constructed (Fig. 5.25). During perception and movement throughout the exhibition, the viewer was made aware of their physical separation from the existing floor plane as they climbed the stairs to the temporary raised floor.



Figure 5.25 Raised detached floor

The second example of a detached floor is visible in Castelveccchio. During adaptation, new floors were inserted in layered compositions inside the existing interior. These floors were designed with a gap that separates them from the historical walls (Fig. 5.26). This detail renders the new attached floor detached from the existing architectural elements. In terms of adaptation, this allows the reading of authentic elements from those inauthentic and, in so doing, retain the historical value of the interior after adaptation.



Figure 5.26 Detached inserted floor

The detached wall

In some instances, new display walls are introduced into existing interiors and are designed to sit separate from existing interiors. This break between panels and interiors renders them detached. Four main approaches to achieve detachment in walls are possible. In the first approach, new walls are suspended inside their historical envelopes and float above the existing floors, as was visible in the examples discussed in the *transparent theme* (Fig. 5.15). In the second approach, new walls are raised from floors by placing these on legs. In the third form of detachment, new walls connect to one surface plane only, whilst in the fourth method new walls are made to stand between two existing elements without connecting to them. Designing exhibition walls in these manners helps to clearly separate the walls and their content from their surrounds, ensuring that content is perceived objectively without any interference from adjacent spatial elements or artworks. Furthermore, through this method the temporary nature of these walls is highlighted and their later addition to the space is clearly articulated to the viewer.

An example of the second method of detached exhibition walls is evident in the temporary exhibition by Italian photographer Gabriele Basilico in the 17th century Palazzo Litta in Milan (2007). In this exhibition, freestanding neutral display walls were used to break the space up which consequently influenced spatial circulation. These platforms exist completely independently of the historical interior by being fixed to bases that lift them from the floor. Further independence is expressed to the viewer by equipping each panel with its own light source instead of relying on those already in the interior (Fig. 5.27). These light sources cast clear shadows behind these panels, an effect which further reinforces their independence from the historical space.



Figure 5.27 Raised detached wall

The third method of detached walls is visible in the *Le Avanguardie Russe* exhibition that took place at the Villa Olmo, Como, in 2009. As can be seen in figure 5.28, the new walls are positioned throughout the historical interior and only make contact with the existing floor plane. As with the example above, these walls also have their own light sources, which help to articulate their independence from their historical surroundings.

The fourth method of detached walls is visible in the same exhibition, titled '*Timeless Masterpieces*' where Safet Zec used the suspended translucent walls. Here new solid walls were positioned between existing pillars as well as between the pillars and existing walls. Here, as seen in figure 5.29, the new walls do not connect tightly with the pillars, a feature which serves to highlight their detachment from the space. This, according to Thiis-Evensen (1989: 215), is due to the shape of these pillars as he asserts that round (and faceted) columns retain their freedom when connected to walls. The same result can be achieved by stopping new walls short of existing walls and columns. To communicate independence of the 'new' from the 'old' and in so doing retain authenticity during adaptation.



Figure 5.28 Standing detached wall



Figure 5.29 Disconnected detached wall

The detached ceiling

The detached ceiling is achieved by suspending panels horizontally inside existing interiors, which temporarily break up large volumes to decrease immense volumes often prevalent in historical spaces. This method helps prevent displayed objects from losing their significance in vast spaces, and visually separates content from the space and the subsequent influence it might have on them. In addition, the reduction in volume decreases the tension and competition between existing interiors and objects on display by forcing the viewer to focus on each element individually.



Figure 5.30 Detached ceiling

The Jameel Gallery in the V&A Museum contains one such example where the new lowered ceiling vertically reconfigures the interior. This helps to focus attention on the significant carpet on display in the voluminous space (Fig. 5.30). In addition, the material and thickness of the new ceiling stress its later addition to the space. The minimalist, geometric panel emphasises the scale of the historical

space and arches in the background, with this contrast in shape distinguishing new from old. Also, the new ceiling provides a more accurate apprehension of the true scale of the interior and objects, as it reduces spatial height to a size with which the viewer can more easily relate, providing a yardstick to visually measure themselves and the object. Through this intervention the suspended ceiling re-establishes balance to the display and reduces tension in the exhibition.

The detached platform

The detached platform raises objects from the ground to break the direct relationship between said objects and existing interiors and makes them retain their independence from their surrounds, and brings them into direct dialogue with the viewer. In this approach, the tension between these two elements, namely the object and historical context, is reduced. This approach therefore resonates with the objective achieved in Barr's approach, where the suspension of everyday objects and furniture from walls is used to break a viewer's preconceived perceptions of these elements.

Detached platforms are used quite extensively throughout Castelvecchio to help raise sculptures, artworks and artefacts from their surroundings. In the particular example in figure 5.31, the platform was designed to appear to float above the ground. This visual detachment is achieved by introducing a gap between the base of the platform and



Figure 5.31 Detached platform

the floor, thus forming a shadow line. A second shadow line is created between the base of the sculpture and the top of the platform and allows the art piece to claim its own independence from both the interior and the platform. Using a plain, geometric platform makes the individual reading of each element, namely the object, intervention and interior, possible, with each conveying its own separate narrative to the viewer. Furthermore, this detachment brings the content into a direct relationship with the viewer during perception by raising the sculpture slightly above eye level, which also increases the significance of the sculpture.

The attached theme

The term *attach* refers to the joining of elements to one another (COED, 2006: 54). For Thiis-Evensen (1989: 51), attachment in architecture refers to heavy elements that appear to be grounded in their surroundings. In adaptation, the attached theme may be understood as the method where new interventions are inserted inside existing interiors and appear fixed to the space. In some instances, these interventions may be

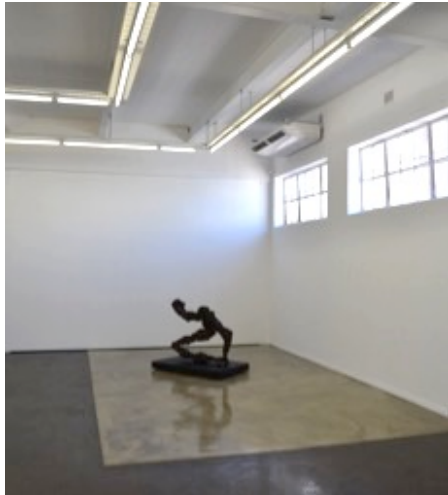


Figure 5.32 Attached floor

permanent and cannot be removed without scarring the interior, as is visible in the SMAC Gallery in Woodstock, Cape Town, where the existing floor required partial replacement (Fig. 5.32). Another form of attachment is when new interventions appear to be integrated with historical spaces and, when removed, completely alter the interior setting, which is realised through the wall plane. In the attached theme, the reading of interventions is therefore reliant on a contrast in materials, colours, or textures to help articulate these from existing ones in order to retain spatial significance and authenticity.

The attached floor

In the exhibition environment, the attached floor is most often adopted in historical interiors when existing floor surfaces are no longer adequate and are in need of replacement. In most cases, this results in existing floors being resurfaced from wall to wall using various floor finishes that range from tiles, screed and timber to carpets. In such cases the existing floor is no longer perceptible to the viewer. In other (less extreme) scenarios, only a portion of the floor might need to be resurfaced. In these scenarios, it is imperative that new surfaces be made to clearly contrast from existing surfaces in order to retain the authenticity of the space, as was the case with the SMAC Gallery.

Another case where the attached floor is used is in the adaptation of an old, local historical warehouse in Woodstock, Cape Town, into the Goodman Gallery. The existing floor required resurfacing to help level the floor once more. All existing floor coverings were removed, after which a new layer of lightly polished screed was introduced (Fig. 5.33).



Figure 5.33 Original floor (left) and new smooth attached floor (right)

The newly introduced floor spans the whole interior and reflects light throughout the space, which helps to light the room. Such a reflection of light was necessary due to the high existing dark timber ceiling which was left untreated, consequently absorbing much of the light inside the exhibition. However, this method of resurfacing does erase parts of historical narratives during adaptation which cannot be reversed and therefore regained in future. Furthermore, the type of material selected to resurface existing floors may cause a great deal of sensory stimuli to disappear, as is visible in this example, where by resurfacing the existing textured floors with smooth finishes may result in a clinical experience, both in texture and sound, a fact which O'Doherty maintains is often prevalent in white box galleries (O'Doherty, 1999: 15).

To combat this reduction in sensory stimuli when resurfacing floors, inspiration can be obtained from Scarpa's intervention in Castelvechio. Instead of using smooth, polished concrete or screed, new floors were constructed using stone from the surrounding area. The way in which the new floor was assembled contributes to a rich, palpable and unique sensory spatial experience within the exhibition. The new floor comprises dark concrete slabs that are irregularly spaced with contrasting insets and borders of white prun stone (Murphy, 1990: 48) (Fig. 5.34).



Figure 5.34 Textured attached floor

The lighter lines run perpendicular to the direction of travel and draw attention away from the path towards the rest of the interior. This subsequently encourages spatial awareness. The light border emphasises the shape of the room and highlights the new

insertion from those elements predating it (Frampton, 1988: 8). In addition, Murphy (2013: 00:28:28) suggests that the irregular spacing of these lines produces a syncopated rhythm that enhances the spatial experience and reduces the pace of spatial progression. The combination of all these materials inside one interior, Frampton (1995: 323) points out, presents a *"tactile syntax that is grounded in difference, turning, that is, on evident transitions from rough to smooth, from polished to matte, from worked to unworked"*.

The attached wall

During adaptation, the attached wall is achieved by designing new interventions to appear completely integrated or part of existing interiors. The walls either run from one architectural element to another, seamlessly joining these two existing elements, or connect the floor to the ceiling. Due to these walls appearing to be part of the existing interior, it is important for there to be a clear contrast between new interventions and the existing elements in order to retain the original spatial authenticity.

An example of the creation of attached walls is visible in the new galleries for sculpture inside the V&A Museum. Here, light boxes are installed between the existing pillars, connecting these with one another (Fig. 5.35). In this method, the new display walls become integrated with the existing elements. This integration makes visitors aware of



Figure 5.35 Attached wall between square columns

existing spatial architectural elements. According to Thiis-Evensen (1989: 215), the square shape of the column will always appear to attach to walls due to its flat sides. In historical interiors that comprise square columns, precautions should be taken to ensure that a clear contrast is maintained between existing elements and new interventions. Again, this contrast is to ensure that spatial authenticity is retained.

In the examples discussed, interventions that were made were small in comparison with their historical host interiors and other existing architectural elements. Smaller interventions make it possible to retain the connection with significant spaces during adaptation. In addition, these interventions allowed past and present to co-exist harmoniously, with the 'new' clearly defined from the 'old'. The concepts of

fragmentation and layering and the respective themes discussed can therefore help retain the significance and authenticity of the historical interior.

5.6 DETAILS

Very often, copious details are found in historical interiors. These details contribute to both the construction and aesthetics of space by the way in which they connect spaces, elements and material matter (Schultz, 2010: 9). Labatut states that "*the detail tells the tale*" within architecture (Frasconi, 1996: 501). Many have also stated that details facilitate identity, memory and hierarchy within a spatial environment, in that they draw attention to specific elements, enhancing the spatial significance and experience (Malnar & Vodvarka, 2004: 174; Gregotti, 1996: 494).

According to Malnar and Vodvarka (2004: 172), details also intrigue human beings due to their complex nature and our inability to vividly remember such intricacies (Murphy, 1990: 1). Holl (1994: 91) writes: "When the materiality of the details forming an architectural space become evident, the haptic realm is opened up. Sensory experience is intensified; psychological dimensions engaged." As a result, details may be used during adaptation as they prolong a viewer's engagement with adapted spaces, increasing exposure to historical interiors, and contribute to the spatial experience in a meaningful way. Details are furthermore used to articulate and complete architectonic elements. Therefore, adopting details during adaptation may help define existing components from new inserts, ensuring the preservation of the significance and authenticity of historical interiors.

Various approaches to details help bring past and present into harmonious dialogues. These can be grouped according to the way in which they connect two periods with one another, and how they give rise to the expressed, recessed and invisible detail.

The expressed detail

Expressed details are connection points that stand out proudly from the surfaces that they connect. These details contribute to sensory spatial experiences as the viewer engages with them directly through the tactile sense. In adaptation, this detail clearly defines the junction between past and present elements and, through this protrusion, clearly expresses this merger point. Careful attention needs to be paid to the selection of materials that will be used to construct this detail, because the detail is clearly visible and will have an effect on the relationship between new and existing elements. To ensure that the constructed relationship is harmonious, reference can be made to both existing and new materials when constructing this detail.

An example of the expressed detail is visible between the existing walls and the new floors inside Castelveccchio. Various versions of the detail are used around the



Figure 5.36 Expressed detail

perimeters of rooms inside the exhibition to highlight the connection point between past and present elements. In this particular example, the side of the joint is made up of white prun stone and resonates with the rest of the newly inserted floor details throughout the exhibition. The top of the skirting is finished in a reflective material which reflects the verticality of the existing wall and visually severs the new floor from the existing walls, retaining the authentic value of the interior (Fig. 5.36).

The recessed detail

An alternative to the expressed joint is the recessed joint. Here, the connection point between past and present elements is recessed, causing the joint to be hidden from the viewer. This recess forms a shadow line which helps to articulate and visually separate new from old. Through this approach, historical elements appear to be unaffected by the new interventions. Furthermore, this detail ensures that the viewer experiences no confusion between what is new and old, as there is a clear split between the two periods. In this manner, the recessed detail keeps the narratives of past and present elements separate from one another, to be experienced individually.



Figure 5.37 Recessed detail

An example where the recessed detail was used is in the adaptation of a historical outbuilding at Brunick Castel in Brunick, Italy (Fig. 5.37). A new floor was inserted into the interior during its conversion into a contemporary exhibition

venue. To highlight the later addition of the new floor to the rest of the interior, the floor was stopped short of the existing walls. The junction between past and present is partially hidden and modest. The detail is especially effective in this example due to the rough walls, and enables the neat connection of the floor to these walls.

The invisible detail

The third type of detail that may be adopted during adaptation of an existing interior is the invisible detail. In this approach the detail is either recessed so far back that it cannot be seen without a concerted effort, or new elements are designed in such a way that a void is left between them and the existing space. As with the recessed detail, new and old elements are distinctly kept apart, clearly articulating past from present. This detail brings new and old elements into a harmonious relationship as each element can be perceived individually, breaking the tension between new and old.

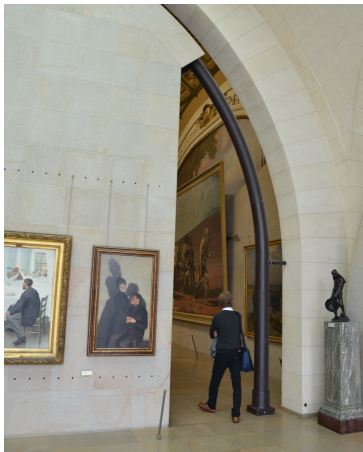


Figure 5.38 Invisible detail

An example of the invisible detail can be found in the Musée d'Orsay. During adaptation, clear gaps were left between new additions and the existing large archways (Fig. 5.38). These gaps emphasise the later addition of these exhibition walls to the historical interior. This detail retains the existing identity of the space and allows the new intervention to convey its own. Furthermore, the addition of the strong vertical bar visually emphasises the temporary nature of the intervention, as it appears to be the only element holding the wall in its current position.

The type of detail used during adaptation to connect past and present elements clearly affects a viewer's reading of the relationship between new and existing elements. These details should provide a universal understanding of what is authentic and inauthentic inside the adapted interior. Therefore, the type of detail that is used during adaptation should be carefully considered to ensure that existing interiors retain their historical integrity after adaptation.

5.7 SUMMARY

In this chapter, different responses to the white box was investigated and highlighted in terms of adapting historical interiors to contemporary exhibition spaces. Reference was made to heritage guidelines and conservation principles as set forth by various charters and heritage legislative documents. These guidelines stipulate that interventions should be designed according to the existing aesthetics of the space. New interventions should be capable of keeping and revealing all existing and meaningful layers that form part of the interior, and should be joined to the interior in a modest and discreet manner. New interventions should also permit and retain connections to the past after adaptation, thus keeping the history of these interiors alive.

From these heritage guidelines and conservation principles, the concepts of fragmentation and layering were identified and discussed, and both were shown to

help with the responsive adaptation of historical interiors. Fragmentation offers ways in which new interventions can be designed to be distinct from their existing surroundings, whilst layering offers ways in which new fragmented elements may be inserted into existing spaces.

With fragmented elements, the horizontal theme extends awareness to the horizontal perimeters of rooms, whilst the vertical theme extends awareness to the vertical perimeters of rooms. Both the complementary and contrasting themes draw attention to the shape of their surroundings and strengthen awareness of them, but require clear contrast either in colour or shape for such awareness to form.

It was found that colours affect the perceived size of architectural elements, create visual depth and influence the speed of progression. The use of various textures in the texture theme influences the level of sensory and personal engagement between the viewer and the textured surface. Patterns help to visually break or tie elements to one another, and can add depth to spaces or reveal the construction techniques used to create the new intervention. Each of these themes furthermore contribute to an existential and individual spatial experience and directly influences the relationship between new interventions, historical interiors, artworks and the viewer. Transparent materials such as glass can also increase spatial awareness by the way in which they allow visibility of existing interiors through them, or reflect these in them.

Implementation themes consist of delimiting, detached and attached themes. The delimiting theme clearly articulates new interventions from existing interiors through the use of clearly defined perimeters. The detached theme, too, allows past and present elements to exist independently of one another and offers neutral platforms to reduce tension between objects and historical interiors. The attached theme, on the other hand, makes past and present elements merge with one another and, as a result, requires clear contrast to ensure that the historical integrity of adapted interiors is retained during conversion.

Thereafter, various types of details were explored that allow new and old elements to co-exist harmoniously, namely the expressed, recessed and invisible detail. The expressed detail clearly articulates the connection point between new and existing elements, whereas the recessed detail provides for a clear split between these two periods. The invisible detail separates past and present elements completely, making the individual reading of these possible, as well as breaking the tension between them.

Next, ways in which movement through adapted historical interiors can be manipulated and its experiential effects will be explored.

CHAPTER SIX

SPATIAL MOVEMENT AND CIRCULATION: CONTRIBUTORS TO SPATIAL EXPERIENCE

6.1 INTRODUCTION

A key determinant in the experience of exhibition environments is that of the bodily movement and physical interaction one has with the space and the content on display. How participation and sequential encounters of space contribute to the spatial experience will be investigated. Various methods and approaches to the arrangement and display of content inside exhibitions, as well as the manipulation of movement through space will be explored. These methods will be organised into the following categories: visual manipulation of movement, physical manipulation of movement through the exhibition model and the use of pathways, and the manipulation of movement through display compositions. It will be argued that these approaches contribute to existential and meaningful spatial experiences.

6.2 IMPORTANCE OF CONSIDERING MOVEMENT IN SPACES

Dernie (2013: 249) writes that movement is vital in exhibition design as it is required to help communicate a specific story to the visitor about the exhibition. Exhibition spaces are therefore not static environments, as they are experienced by moving through them in order to observe the content on display. How the space is laid out affects spatial progression, sequential spatial experiences and the interaction the viewer has with space. In the adapted interior, active movement has the ability to contribute to existing narratives, history and cultural identity. Dernie (2013: 248) puts it as follows: "*movement animates our imaginations, and only through movement do we understand our world*". Spatial movement therefore enables viewers to physically perceive the whole adapted interior, providing them with an in-depth understanding of its past and present state and making the perception of this relationship possible.

Pallasmaa (2005: 63) indicates that significant architecture creates spaces that actively engage with people and automatically direct participants through them. Fragmentation and layering are able to retain the active participation of viewers in adaptive interiors and, in doing so, keep their connection with historical spaces and existing narratives alive. In addition, the pace of progression through interiors is directly connected to the physical characteristics of interior surfaces and their effect on the senses, with rough surfaces reducing speed, whilst smooth surfaces increase speed (Bloomer & Moore, 1977: 71). Further to this, James J. Gibson (1966: 32) argues that the sensory organs are always active and in search of external stimuli with which they can

interact. Therefore, the longer a viewer is exposed to historical interiors, the richer their spatial experience will be.

Dernie (2013: 243) maintains that the way in which a viewer physically experiences the exhibition influences their memory of the space. To increase interaction with adapted interiors and their existing materials, new interventions can be employed and arranged to help draw the visitor into active engagement, enriching their spatial experience by obstructing, shaping, or distorting their movement through the space. When the viewer is guided through the interior, their role and spatial experience shift from passive observer in the white box to active participant. Various methods can be employed that encourage engagement with adapted interiors, consisting of visual stimulants, architectural elements and display compositions.

6.3 ENCOURAGING AND MANIPULATING MOVEMENT USING VISUAL CUES

Exhibition spaces are primarily visually oriented environments (Belcher, 1991: 125). In these spaces, as in everyday life, the visual sense is always active, always engaging and responds to various types of stimuli (Berger, 1972: 9). Michel (1996: 62) and Lam (1992: 36) define these stimuli as the congregation of people, movement, light, contrasting elements, vivid colours and patterns. These stimuli detract the attention from the rest of the surroundings and can be used to lure viewers into exhibitions, making them active participants in these spaces.

In the same vein, Michel (1996: 159 - 161) identifies focal points, partial views and the use of perspective as additional tools available to the designer to entice movement (Fig. 6.1). Colour, texture and the use of contrasting forms help establish focal points and emphasise the surroundings and the objects inside exhibition interiors, contributing to spatial progression. However, focal points should be used sparingly to function effectively and capture the viewer's attention, whereas partial views into adjacent rooms will entice and lure the viewer into these spaces. Perspectives are formed by arranging elements in a line that draws the viewer into the interior (Fig. 6.2). All three of these techniques can be adopted inside the adapted exhibition interior by the way interventions are arranged. Through these techniques, the viewer's progression through the space is encouraged and awareness is extended to the existing interior.



Figure 6.1 The use of colour, perspective and partial views to lure viewers



Figure 6.2 Linear-arranged plinths forming perspective that encourages progression

Perception of the above is both enabled by and dependent on the presence of light (Michel, 1996: 49, 88). Light and the way it is used in the exhibition interior therefore helps encourage progression through the space and is explored also as a navigation tool.

LIGHT AS A GUIDING MECHANISM ENCOURAGING MOVEMENT

According to Pallasmaa (2005: 47), the co-existence of light and shadows bring life to architectural spaces. He compares the co-existence of light and shadow in significant architectural spaces with the artistic technique of chiaroscuro. This co-existence makes it possible for the painter to communicate form, depth and essentially life through paintings, also enabling the viewer to perceive them. The roles of light and shadows in interiors are similar: light reveals materials, colours and elements, whilst shadows show texture, form and depth. Instead of illuminating the whole interior, light can be used to highlight specific and significant key points inside the exhibition, as well as define the existing spatial envelope. Through this process, the viewer's attention is drawn to the lit elements, a phenomenon known as positive phototropism (Michel, 1996: 163).

The principle of chiaroscuro may therefore be employed as a guiding mechanism to help direct the viewer through the interior. For light to be effective as a guiding mechanism in the exhibition environment, it is important that the space not be overly lit and that different types of light intensities be identifiable. The viewer's attention will be drawn to the most brightly lit areas, regardless of the direction from which the light emanates (Michel, 1996: 62; Lam, 1992: 36). Furthermore, light may be used to highlight artworks and the historical interior, alternating the viewer's attention between them. Through this selective employment of light, mutual awareness of both the interior and artworks is established.

Lighting floors

Using lights to indicate pathways on floors is an effective and unobtrusive way in which direction can be indicated to the viewer. This is especially functional on floors of historical interiors where a route needs to be visually mapped out to the viewer to help them progress through the exhibition.

In the '*Momentum*' light exhibition by United Visual Artists (UVA) held at the Barbican in London in 2009, lights were distributed throughout the interior (Fig. 6.3). This specific example is used purely to illustrate how light can be used to light pathways through the exhibition interior, aiding in directing the viewer along a specific route. This specific technique is also used in the V&A Museum in London in the Brittain Gallery (Fig. 6.4). Light spots are visible on the floor, paving the way from one exhibition room to the next. This lighting technique can help convey and direct viewers along a specific route and communicate significant parts of the interior along the way.



Figure 6.3 Light as pathways



Figure 6.4 Light pathways in the V&A

Lighting walls

Lighting walls using different intensities of light creates visual depth in interiors. The lit walls become focal points to which the viewer is drawn. The way in which light is deployed inside the exhibition, lighting certain key areas around the space, can help draw the viewer into the room past strategically placed elements/objects. This encourages visitors to further engage with their surroundings whilst moving to the lit surface. Lighting historical exhibition walls may further help increase visibility of their detailed construction to the viewer and, in so doing, contribute to the historical narrative of the space.

The Museum van den Caab, located in an old historical wine cellar (Fig. 6.5), is an example in Cape Town where light is used to articulate the narrative of the historical shell as well as draw attention to the content on display. During adaptation, the plastered walls were stripped to expose the original brickwork beneath it, and new, planed timber beams were inserted, contrasting with existing ones in the ceiling. Glass panels conveying the history of slavery in South Africa are suspended between the ceiling and floor and form a chronological narrative.



Figure 6.5 Lighting used to articulate the construction of the historical building

As discussed in the preceding chapter, the exhibition panels are semi-translucent, making it possible to perceive the brickwork behind them. To draw attention to the construction of the historical building, the walls are lit behind the panels; compensating for this lit background, the brightly lit cabinets of curiosities highlight the panels from the front, as well as the artefacts inside them. The result is that the viewer is drawn into the exhibition during perception through these cabinets and lit walls, allowing active engagement with the exhibition and content on display.

The Spandau Citadel in Berlin, currently being used for events and exhibitions, is another example where lighting on walls helps guide the viewer through the historical



Figure 6.6 Lighting on walls used to draw viewers into the space

monument. In this example, the principle of chiaroscuro is clearly observed. Visible in this picture is the way the wall behind the archway is brightly lit, as if beckoning the viewer to come and explore that part of the building (Fig. 6.5). In so doing, the viewer is led from one area to another through the careful deployment of light, and the original layout and narrative of the space revealed.

Lighting ceilings

Light may further be used to highlight ceilings and in so doing encourage horizontal and vertical spatial progression. In instances such as these, the historical ceiling is lit to highlight its significance and draw attention to it. The viewer is either drawn to the centre point of the room from where the ceiling is observed, or along the length of it,



Figure 6.7 Lighting ceiling to encourage progression to this area

depending on the size of the room and the manner in which it is lit. Lit ceilings can be used to draw the viewer from the bottom floor of the exhibition to the next floor, leading them not only horizontally through the space, but also vertically. An example of this is visible in the *Kunsthistorisches Museum* in Vienna (Fig. 6.7).

In the example in figure 6.8, horizontal and circular spatial progression is encouraged by the way in which the decorated ceiling is well lit in one of the exhibition rooms in Sforza Castle. Visible in this room is a giant tapestry that hangs in the centre of the space, preventing the viewer from gravitating to this point in order to view the whole ceiling, as the viewer would often do. To view the ceiling, the viewer is forced to move around the object in this case. The lit ceiling and strategically placed object work in

conjunction with one another to help draw the viewer through the interior and contribute to their spatial experience.

In the exhibition '*Portable Classics*' held in Fondazione Prada in Venice in 2015, lighting and the linear display of platforms help create a perspective inside the historical interior (Fig. 6.9). Through this method, the viewer's gaze is drawn upwards to the back of the room and downwards to the exhibition and vice versa. Through this process, interest is sparked in the viewer to explore the length of the exhibition, consequently leading to their circulation through the interior. This increases their exposure to both historical surfaces and context and contributes to the unique spatial experience.



Figure 6.8 Lit ceiling and object jointly encourage spatial progression.



Figure 6.9 Lit ceiling draws viewer in.

Lighting content

The individual lighting of objects also often provides for a rhythmic progression of the viewer's gaze into the interior, with their body following as each object is observed. Through this technique, visual boundaries are established between objects, accomplished through the shadows present between them.

In an exhibition held by the Californian light artist James Turrell at the Houghton Hall in Norfolk, the drawing power of light is also visible. Pictured here is part of the exhibition with the display entitled '*First Light - Etchings in Aquatint 1989-90*' (Fig. 6.10). The periodically placed light sources form a rhythmic progression that captures the viewer's attention at the first object and gradually draws them into the exhibition as they move from picture to picture; this technique can be adopted in most art exhibition environments as a way to encourage spatial progression.

In an exhibition of old manuscripts and relics in the Musée d'Orsay, lighting inside the room is employed predominantly through lit display boxes due to the fragile nature of

the content on display. There is a contrast between the dark room and lit display cases (Fig. 6.11). The viewer is lured into the space and towards the lit cases due to their positive phototropic nature, which forces them to make a concerted effort to perceive the objects housed inside.



Figure 6.10 Periodically displayed and lit objects encourage spatial progression.



Figure 6.11 Highlighting only the content encourages spatial progression.

Light and the presence of shadows therefore play an important role in evoking a sense of exploration and discovery in the viewer and encourage spatial investigation. Light may thus be adopted as a 'guiding tool' to direct a viewer through the exhibition, both directly and indirectly increasing exposure to the historical material of the interior and surfaces.

Architecture as frames that encourage movement

Another way to encourage spatial movement through the visual sense is to highlight adjacent rooms and activities using barred existing architectural elements. The visual link to the other room sparks interest in the viewer and encourages them to continue their journey through the exhibition in order to reach this room so that they can fulfil their raised interest.



Figure 6.12 Barred existing architecture becomes frame that encourages movement.

An example of this can be seen in the Sforza Castle (Fig. 6.12). Here, existing wall openings are obscured by a display platform, forming a barrier between the two rooms. This barrier contributes to the construction of the exhibition's spatial layout by physically blocking routes, forcing the viewer down a specific path. However, by retaining the opening and visual connection to the adjacent room, the viewer is filled with a sense of exploration and desire to continue their trip in order to reach this space. The visual sense is further triggered and interest heightened by the juxtaposition of static objects and architectural frames, versus the

movement of visitors in the adjacent room where perspective is enforced through the row of lights. Through this method awareness is extended to the historical interior as the perception of the interior takes place in unison with the activities it frames.

From the above it can be understood that contrasts in light intensity play a significant role as visual triggers that ignite interest in the viewer, encourage movement and create active participation in the exhibition. Furthermore, the barring of existing architectural openings through glass displays or barriers prevents progression through them, yet retains a visual link to the space beyond. In so doing, perception of the original layout and circulation of the historical interior is retained, whilst a new pathway is constructed. The visual link that is retained with the neighbouring room inspires the viewer to move to this specific destination point. Additionally, the visual triggers that encourage spatial progression can help convey a particular spatial narrative which encourages spatial awareness of the interior.

Architecture as a visual guide

New architectural interventions can be used to direct the viewer's gaze to specific areas throughout the interior and, in this way, encourage spatial progression. This is achieved when new interventions are designed to partially reveal neighbouring spaces, with visual awareness heightened through varying light intensities.



Figure 6.13 New architectural elements expanding towards focal points

In the Musée d'Orsay new walls are layered inside the interior that offer a narrow passage into adjacent rooms. These walls block the viewer's gaze from seeing into the neighbouring space, but widen the gaze towards the existing decorative ceiling and skylight above (Fig. 6.13). A feeling of wonder and suspense is experienced due to the partial yet obstructed view of the unknown and the prospect of the rest of the space being revealed at any point in time. This heightened sensation and the use of light encourages the viewer to proceed to the adjacent space.

Similarly, in Castelveccchio, visual guides are used throughout the exhibition. An example is at the staircase leading towards the Cangrande statue. As the viewer descends from the top, the newly inserted walls and concrete lintel serve to tunnel the viewer's gaze, blocking all visibility of the statue with only the light at the end of the staircase drawing the viewer's attention. As the viewer descends the stairs, the walls start dropping down to allow partial visibility of the statue and the courtyard below (Fig.

6.14). The solid walls and narrow passage thus help to build expectation in the viewer, which increases the significance of the statue.



Figure 6.14 New architectural elements directing one's gaze through passage

6.4 ENCOURAGING AND MANIPULATING MOVEMENT THROUGH SPATIAL COMPOSITION

It is argued by many that we as human beings do not exist separately from space, nor is the engagement with space separate from the actual environment itself. Instead, many find an interconnection between the architectural space and the way in which it directs and enfolds us (Pallasmaa, 2009: 7; Bloomer & Moore, 1977: 107). From Merleau-Ponty's writings it is also clear that the body acts as the 'zero point' through which we determine direction, orientation and scale during spatial encounters (Moran, 2000: 424). As a result, the spatial composition has a direct effect on the spatial experience, both physically and psychologically. Sirefman (1999: 297) notes that:

The very notion of museums [i.e. exhibition venues] embodies physicality. The word itself implies a built structure, where the activities on offer revolve around human motion through articulated space. ... Architecture ... constructs the framework of the visitors' experience.

Two ways in which visitors' movement may be physically manipulated and directed are through the exhibition layout (model), which determines the spatial arrangement of the space, and the use of architectonic elements to direct them in, through and out of the exhibition.

The exhibition model

The way in which the exhibition is laid out has a direct effect on spatial movement and progression through the interior. This movement is determined and accomplished through the type of exhibition model adopted, comprising either a short or long model exhibition. Tzortzi (2007: 072-10 - 12) describes the long model exhibition as a space where what is conveyed to the viewer is controlled. Hughes (2010: 75 - 76) refers to such an organised and structured exhibition as a single pathway. He writes that such exhibitions convey a uniform narrative, and as a result, often give rise to uniform spatial experiences (*ibid.*). In these exhibitions the spatial experience is destination driven, clearly guided and short. The focus of the exhibition is aimed at conveying a specific narrative rather than experiencing the spatial environment itself, engaging at an intellectual level as opposed to a sensory level.

An example of a long model exhibition, as defined by Tzortzi (2007: 072-10), is the Tate Modern in London, England (Fig. 6.15). The display of artwork is presented in a structured and formal manner. The interior of the gallery is predominantly white and lined with chronologically arranged artworks and lengthy descriptions about each piece. As a result, little room is left to formulate an individual opinion about each artwork as individual interpretations are suppressed by the information cards present. Exhibition rooms are strictly geometric and similar in proportion, whilst the layout of the whole exhibition space is virtually symmetrical (indicated with red arrows). The spatial experience of the gallery is therefore one of intellectual engagement where focus is directed towards the creation of a functional layout and not necessarily towards the creation of a spatial experience (Tzortzi, (2007: 072-12).

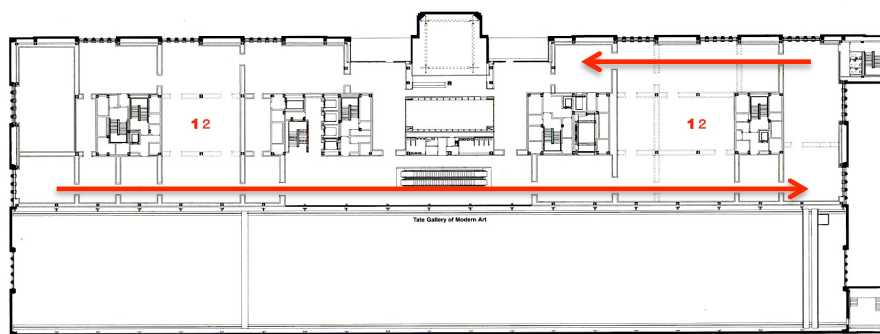


Figure 6.15 Increased awareness of the content and not the space through a long model exhibition

In comparison to the long model exhibition, Tzortzi (2007: 072-10 – 072-12) explains, the short model exhibition is a space where the viewer is allowed to venture freely through the exhibition interior, constructing a unique spatial narrative. According to Hughes (2010: 76), this freedom of navigation presents multiple pathways in which to experience the exhibition interior and its content. The viewer is granted the opportunity to move at their own pace whilst making individual choices, formulating their own opinions about the artworks along the way (*ibid.*: 072-13). As a result, the time it takes to progress through the exhibition interior tends to be longer as the viewer is left to wander

and meander around the space with no specific end-point to rush to: exhibition spaces are slowly revealed instead of spatial perception occurring all at once (ibid.: 072-12 – 072-13). This forces the viewer to engage with and experience the interior physically, placing emphasis on the spatial experience, whose meaning is different for every viewer (ibid.: 072-12).

An example of a short model exhibition is that of Castelveccchio. Prior to Scarpa's interventions, the exhibition was arranged along a central axis on both the ground and top galleries with a single pathway (Murphy, 1990: 9). Through his interventions, the museum changed to a short model exhibition, presenting the viewer with some choices on how to progress through the space, in turn altering the initial spatial experience (Fig. 6.16). In addition, his interventions helped to reorganise the museum and direct the visitor both physically and visually through the space, returning focus to the significance of the building and its internal spaces. This is achieved by means of strategically arranged walls, display platforms and objects, and a play on visual perspectives through repetition and directed viewpoints throughout the museum.

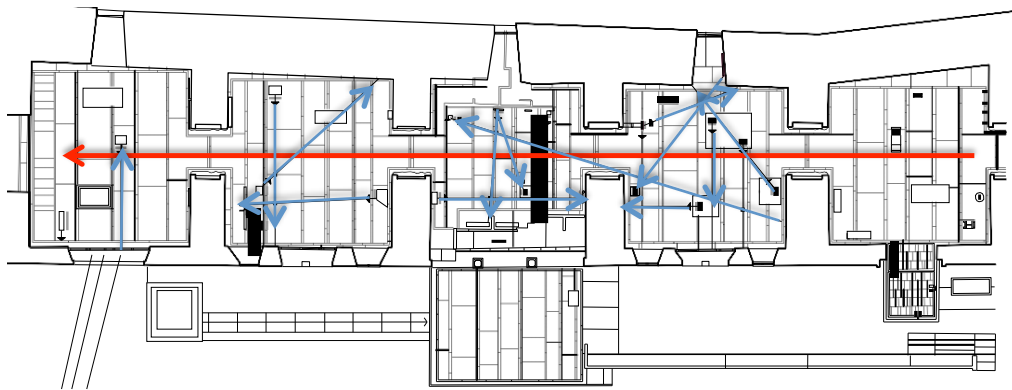


Figure 6.16 Increased spatial awareness through a short model exhibition

In the sculpture gallery, the statues are haphazardly arranged alongside the main axis (indicated with red arrow) with each sculpture facing one another within the gallery, or made to cross viewpoints with another sculpture (indicated with blue arrows) (Hillier & Tzortzi, 2006: 294). Viewers need to walk through the space in order to view certain sculptures from the front due to this arrangement. This movement through the space and changes in viewpoint consequently make viewers become more aware of the existing spatial envelope, with each viewer's experience remaining unique and their perceptions of the exhibition different.

In the upper gallery, Scarpa segmented the large hall into smaller spatial environments, as discussed in the preceding chapter. The original central axis was replaced by two axis lines, with neither of these allowing an overall view of the hallway due to this method of layering. An element of surprise persists throughout this gallery. This is due to the top axis (red) sporadically opening up into the display rooms, whilst the bottom axis (blue) rhythmically reveals these spaces. Hillier and Tzortzi (2006: 294) are of the opinion

that this method of display arrangement contributes to an embodied experience of the exhibition, again strengthening spatial experience and awareness. In addition, Tzortzi (2007: 072-13) writes that this type of spatial arrangement within exhibitions also helps construct and enhance spatial meaning, leaving this open to interpretation and for the viewer to formulate their own opinion (Fig. 6.17).

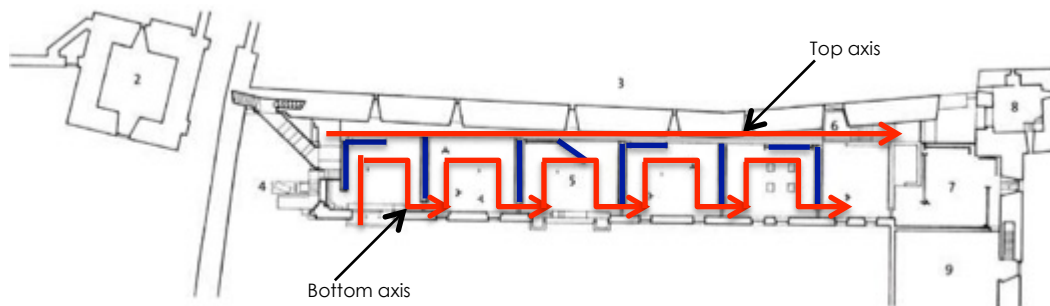


Figure 6.17 Increased spatial awareness through a short model exhibition

Directional architectonic elements

Directional architectonic elements are the insertion of new interventions into the adapted interior to serve as guiding mechanisms, directing the viewer through the exhibition interior. Thiis-Evensen (1989: 87) identifies three directional forms in the floor, namely the path, bridge and stairs. The latter form was briefly discussed in the section on the detached floor. According to him, the path leads whilst the bridge carries the viewer to a specific goal (Thiis-Evensen, 1989: 87). Stairs, on the other hand, provide for a vertical connection from the ground to the top floor and are met with feelings of anxiety and expectation (ibid.: 89). In the adapted interior, direction may further be enforced through the insertion of new walls to help direct the viewer through the interior space and along a specific route if desired.

The pathway



Figure 6.18 Subtle pathway

In some examples, when an existing floor finish might require replacement, new floor finishes can be designed to help enforce direction through the exhibition space. In such instances the concept of material layering is adopted. A path is laid out using materials that deviate either slightly or considerably from the rest of the floor finish. Through this deviation in colour or texture, the pathway is identified and takes the viewer to specific destination points. An example of such an intervention is in the V&A Museum in The Robert H. N. Ho Family Foundation Gallery (Fig. 6.18). The subtle change in floor colour, yet consistent pattern,

jointly form a subliminal pathway which prevents focus from shifting away from the interior and artworks, and can be used to direct viewers past specific significant points inside the space.

In the Information Center of the Memorial to the Murdered Jews of Europe, Berlin, clear pathways are marked out (Fig. 6.19). The stark contrast between the two materials directs the viewer's gaze towards the end of the passage, whilst highlighting the pathway from the rest of the interior and the direction in which to travel. Distinct pathways have a visually stronger drawing force than subtle pathways, encouraging the viewer to move quickly from one destination to the next.

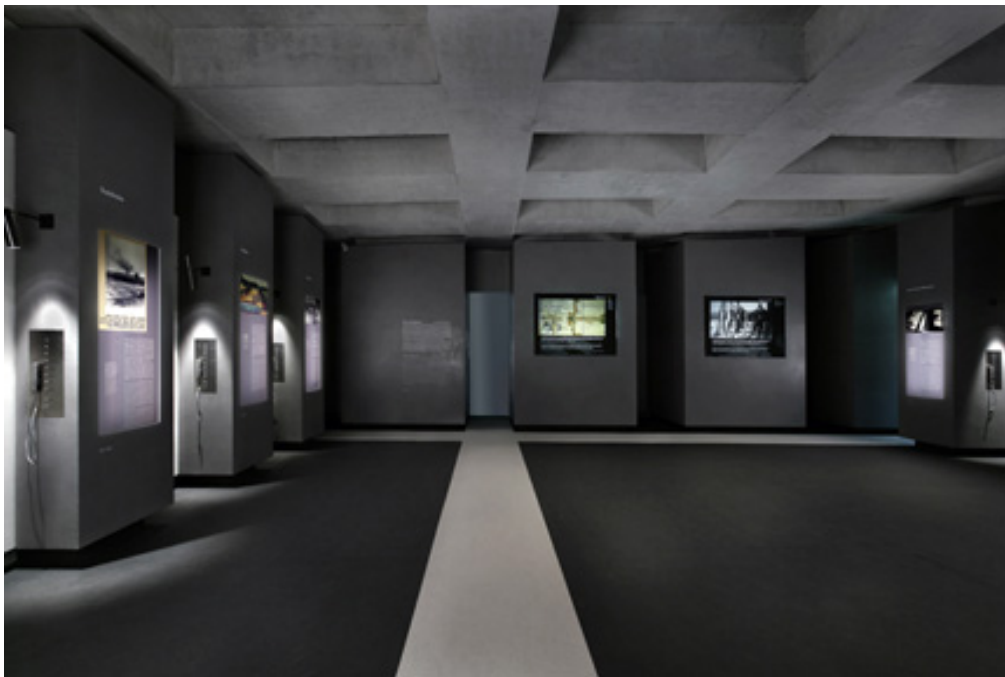


Figure 6.19 Distinct pathway

The bridge

The bridge is another architectonic element that is often adopted in significant interiors where the existing interior floor holds extreme significant value, or can no longer serve as a walking plane. In these interiors, the new inserted floor carries the viewer over the existing floor, thus retaining the significance and perception of the original floor. Furthermore, when there are large, voluminous spaces, the new inserted bridge may be used to provide an overview perspective of the layout of exhibition interiors.

An example of the inserted bridge in an adapted interior where the existing floor forms a big part of the building's significance is visible in Sverre Fehn's Hedmarksmuseet Museum. The museum is situated in Hamar, Norway, on the remnants of an old medieval Bishop's Palace which was converted into a barn during the 18th and 19th centuries, and then into a museum in 1973 (Anno Museum, 2015: Online). Various interventions were made for the site to function as a contemporary exhibition venue.

One such intervention is the insertion of a concrete walkway. This walkway helps to guide visitors over the ruins and through the museum. Furthermore, the viewer's spatial experience is unique by the way they are left to observe the interior from their



Figure 6.20 Directional bridge

individual chosen position. In this particular example, the raised pathway allows for further archaeological excavation in future to occur without interrupting the exhibition itself, and prevents the potential destruction of important historical evidence by the viewer (Fig. 6.20). Through this method the building retains its authenticity, and its cultural and historical integrity is preserved.

The staircase

The staircase plays an important role in the navigation of people through interior spaces. In the case of adapted exhibition spaces, many of these significant buildings often comprise two floors or more and therefore already contain a staircase; due to their volume, they may also allow for the insertion of an additional floor. In some scenarios the existing stair needs replacement, whilst in spaces where floor areas are added, a new one needs to be designed. It is important to understand the meaning behind the staircase and how it encourages spatial circulation. There are various types of staircase designs, namely wide, narrow, steep, shallow, freestanding, firmly fixed, divided, fan and overlapping stairs. Each of these has a different effect on the viewer and their movement through the interior.

Thiis-Evensen (1989: 91) writes about the alluring characteristics of stairs and how they invite a viewer to ascend, with the degree of inclination directly affecting the ascending experience. According to him, narrow stairs impart a sense of privacy and caution in the viewer with the pace of ascent accelerated (ibid.: 93). Wider staircases, on the other hand, are experienced as being more public and inviting with the pace of ascent reduced (ibid.: 93 – 97). Furthermore, Thiis-Evensen argues that steep staircases with an inclination exceeding 45 degrees are more forceful in drawing the viewer upwards than those with inclinations less than 45 degrees (ibid.: 97 - 101). Firmly fixed staircases are characterised as imparting feelings of groundedness, with progression up them being slow, whilst freestanding staircases impart a sense of lightness with progression up them being swift (ibid.: 103). Various other types of stairs are identified, such as the fan stair that embraces the viewer and the divided stair whose landing serves as a destination point, along with front, side and overlapping stairs (ibid.: 109 –

103). However, stairs are seldom designed during adaptation, with many of these more likely to already exist inside the interior, or form part of the exterior.

An example of a wide staircase is visible in Alte Pinakothek. Hans Dollgast reconstructed the museum, which was bombed during the Second World War, in 1957. This staircase was added during the renovation at the place where the façade was damaged. The broad stairs appear to want the viewer to pause at this particular point and acknowledge it in terms of the history of the building (Fig. 6.21). Wide stairs may therefore be used to reduce the pace of the viewer through the exhibition, allowing them time to absorb their surroundings, where in this case, the viewer is forced to acknowledge and contemplate the events that occurred at this specific part of the building during the Second World War.



Figure 6.21 Wide staircase



Figure 6.22 The light and narrow staircase (left) versus the heavy and narrow staircase (right)

The steel staircase in the southwest tower in Castelveccchio is an archetype of a narrow, light staircase. Scarpa introduced this staircase in order to connect the third floor with the second (Fig. 6.22 (left)). The steel tread connects to the wall and wraps to the ceiling. This enclosure adds to the sense of privacy normally associated with narrow staircases. Furthermore, the enclosed staircase screens clear visibility of the second and third floor once on it, and results in a feeling of haste on the viewer's behalf as they are uncertain what is to be expected at these points. Also, because of the narrowness of the staircase, only one person at a time can move up and down it, forcing quick progression from the viewer.

Near the Cangrande statue exhibition, another example of a narrow, but firmly fixed, staircase is found (Fig. 6.22 (right)). The staircase not only ushers the viewer up and down, but also dictates how the stairs must be ascended. This is achieved by the way the treads have been cut, forcing the viewer to adopt a specific rhythm of progression. By designing the treads to deviate from the norm, the experience of this particular staircase becomes memorable. In exhibition spaces, narrow stairs may therefore be used to increase the progression rate of the viewer through the exhibition, fast tracking

spatial circulation past insignificant points. The way in which staircases are designed may further impact on the viewer's personal experience of the journey, making it more memorable.

An example of a steep staircase can be seen in Castelvechio, and a shallow staircase in the Musée d'Orsay (Fig. 6.23). From these two examples it is evident that the wider and shorter stairs, with an inclination of less than 45 degrees, are gentler in pulling the viewer to the next level, as opposed to the steep and partly freestanding staircase found in Castelvechio. The result is a slower progression of the viewer from the top to the bottom through shallow stairs, compared to the urgency awakened inside the viewer to reach the top of the steep stairs. The degree of inclination is another tool at the designer's disposal that can be used to manage the progression rate of the viewer through the exhibition, fast tracking or slowing down circulation speed.



Figure 6.23 Steep staircase (left) versus shallow staircase (right)

The directional wall

Two ways of using new inserted walls to help indicate direction can be adopted during adaptation. The first method is to construct and position walls in such a way that they guide the viewer's gaze along the direction that needs to be travelled. The second is to use new interventions to help indicate entrance and exit points, facilitating the navigation process.

There are many examples of walls that help navigate the viewer through the interior in Castelvechio. One particular example refers to the walls close to the Cangrande statue (Fig. 6.24). Here new off-shuttered concrete walls were inserted into the existing

walls along with new staircases. The walls were constructed in such a way that the



Figure 6.24 Directional wall

viewer's gaze is completely controlled by restricting views up to the last step. Furthermore, the route up the second set of stairs receives greater emphasis than the routes leading from the landing between them, stressing the route to the viewer. In addition, the narrow passageway is perceived as a thin 'restricted opening' due to the strong verticality and structured nature of the new walls, which creates emphasis and 'drama' during the spatial experience and affects spatial perception and progression speed (Murphy, 1990: 99). As a result, the viewer is pushed towards the platform below before being ushered up the next flight of stairs to continue their journey through the museum.

Wall as a 'destination' point



Figure 6.25 Wall as a 'destination' point

The entrance wall at Castelvecchio is an example of using an architectural intervention to celebrate the arrival at and departure to an exhibition, highlighting this destination. Prior to Scarpa's interventions, the museum's entrance was situated in the centre of the façade (Murphy, 1990: 3 & 20). The entrance was later moved and allows for a more logical progression through the museum. The new wall insert celebrates the existing architecture by emphasising its scale and form and helps guide the viewer to the entrance and exit (Fig. 6.25). Guiding mechanisms are therefore used to clearly define certain key areas within exhibitions, making navigation through them easier and quicker.

Movement through exhibitions can be physically manipulated using new architectural interventions and different exhibition layout models. During this process, awareness of the historical interior is generated and its significant values retained. The exhibition model plays an important part in this process of navigation and spatial experience, with long model exhibitions offering a universal experience, and short models a more intimate experience. In the adapted interior, the short model proves to be a more suitable model to adopt, due to the fact that more focus is given to the spatial envelope than in the long model approach. The viewer may further be guided through the exhibition by pathways, bridges, staircases and walls, with each experienced differently. Drawing on these methods when designing new exhibitions can help individualise the spatial experience and monitor both spatial circulation and progression speed, exposing the viewer to as much of the historical interior as possible en route.

6.5 MANIPULATION OF MOVEMENT THROUGH DISPLAY

Exhibition environments, as argued before, are visually centred spaces. In the adapted interior, visual engagement and awareness entail both the content and significant architecture. In these exhibitions, there is interdependency between the displayed items and interior, with each directly influencing the perception of the other. Tzortzi (2007: 072-08) explains that the way exhibition displays are arranged affects the pace at which the viewer moves through the interior. Consequently, this prolongs the exposure time to readapted exhibition interiors and promotes further exploration of the space. Traue (2000: 69) defines specific display methods that lend themselves to act as guiding mechanisms. These methods have a physical and/or psychological effect on the viewer, which help enrich the spatial experience. He classifies these as the creation of focal points, non-focal points, *blocage* and the technique of *renversement* (ibid.). In addition, this thesis suggests another display method to be added to the list, namely architectonic display.

Focal point

In the *focal point* method, content is used as the drawing force to lure the viewer into the room or through the space (Traue, 2000: 65). The object is strategically positioned to form a focal point that invites the viewer to come closer in order to examine it. To strengthen perception of the object, architectural elements or lighting may be employed and add additional emphasis. Existing doors or archways may therefore be used as frames around displayed objects, which, when painted dark, allow the viewer's gaze to move past them to the object behind the frame. Furthermore, using existing architectural elements as frames may extend awareness to historical spaces as the viewer is forced to give recognition to these interiors before acknowledging the content on display. The use of focal points also speeds up the progression pace of the

viewer through the exhibition by providing clear destination points throughout the space.

In the Neues Museum in Berlin, a sculpture forms the focal point down a long corridor (Fig. 6.26). It is framed first by a series of archways, which constructs a strong perspective line. The architectural elements are the first elements to 'frame' the sculpture at the back, and form a rhythmic progression towards it. Following these archways is a doorway with a light architrave and dark doorframe. The light architrave highlights the shape and size of the doorway and captures attention immediately.

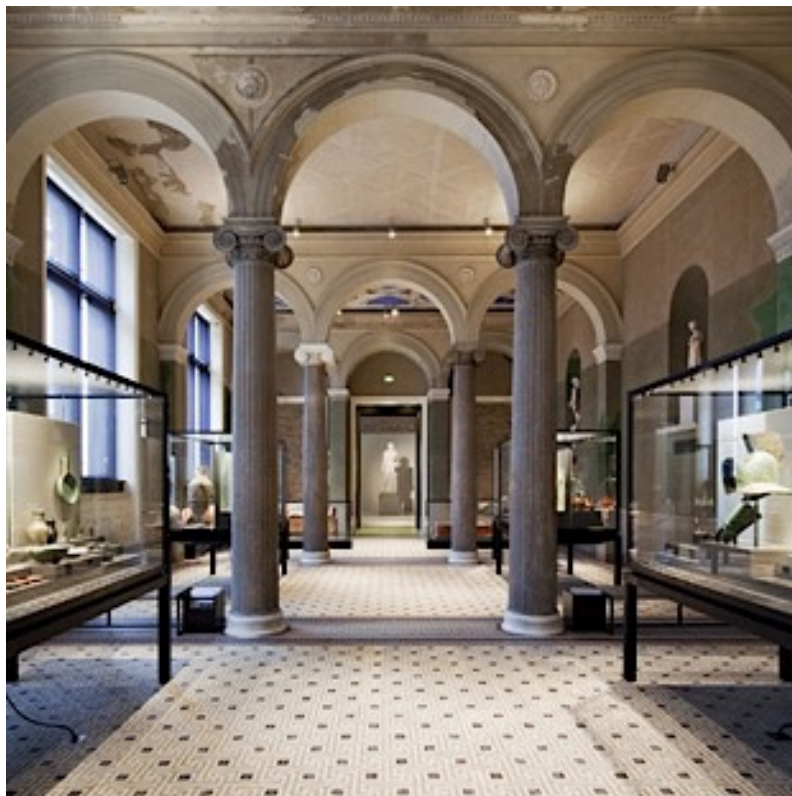


Figure 6.26 Focal points encourage the viewer to move through the space.

The dark doorframe acts as a mediator between the light architrave and light walls of the adjacent room. In addition, the dark doorframe contrasts with the statue, which is positioned central to it and is brightly lit. The contrast between the strong geometrics of the doorway and the flowing lines of the sculpture along with the variation in colour and light intensity generate immense visual interest. The object forms the focal point through its proportion, location and relation to the surrounding architectural elements, generating imperative spatial awareness during perception and encouraging movement.

In the Smithsonian Art Gallery, display platforms have been incorporated down the centre of some exhibition halls. These reflect some of the aesthetics and details of the

existing perimeter walls (Fig. 6.27). Through this intervention, the gallery is divided into smaller segments with views partially obscured from the rest of the interior. The central display platform forms a focal point in the gallery through the way in which it contrasts in shape and height from the surrounding walls. The cornice detail, designed to break between the two horizontal points, allows the viewer's gaze to extend towards the ceiling. In addition, using the wall to partially obstruct views of the rest of the exhibition sparks interest and encourages investigation of the rest of the interior.



Figure 6.27 Focal point used to obscure views and generate interest

In the adapted interior, focal points may be used to navigate the viewer through the space, drawing them to key areas that may hold particular significance. The way in which focal points are designed may complement or contrast with the rest of the interior surroundings, extending awareness to them. Using focal points throughout the exhibition may further help to increase or decrease the pace at which the viewer moves through the interior, depending on the placement of focal points and the distance between them.

Non-focal point

Non-focal points encourage a slower progression through a space due to a lack of clearly defined destination points (Tzortzi, 2007: 072-08). In such scenarios, the exhibition is arranged so that focus is confined to blank walls or on nothing particular inside exhibition rooms. The former leaves the viewer without a set goal, whilst in the latter there is no hierarchy amongst the objects on display. In both scenarios the viewer is left to linger much longer in each room, meandering at a leisurely pace through the interior, which consequently extends their physical exposure to the materials and existing architecture.

Castelvecchio is a primary example where non-focal points are used. Throughout the exhibition, the content is arranged to sit alongside main axes instead of forming focal points (Fig. 6.28). The result is long passageways with empty walls at their ends. In rooms, there is no hierarchy between objects; instead, many have been positioned to face their own direction, forcing the viewer to move around the room in order to perceive the various pieces. The time spent in each room is also prolonged through this method of display, as a viewer cannot perceive multiple objects at once – time must be taken moving from one object to the next.



Figure 6.28 Non-focal points decrease the viewer's progression speed through the interior.

Blocage

Blocage is a display method where the content is partially screened by architectural elements (Traue, 2000: 67). As previously argued by Michel (1996: 159), this method lures the viewer into interior spaces. Furthermore, the *blocage* method can be achieved by using objects to partially obscure others. In the first scenario, attention is extended to

the host interior whilst perception of the displayed object occurs, forcing the viewer to acknowledge the space prior to perceiving the content. In the second scenario, the viewer is forced to acknowledge the artwork in the foreground first, prior to perceiving the artwork being obstructed. Consequently, this leads to an awareness of the interior and movement through it, having to move past the first object before being able to perceive the obscured artwork. In addition to this, Traue (2000: 67) argues that this method of display sparks a visual interest in the viewer, imparting feelings of excitement upon each new discovery through this method of display. These psychological effects leave a lasting and memorable impression, which contribute to a meaningful spatial experience.

In the Headley Trust Gallery in the V&A Museum in London, the *blocage* method was used (Fig. 6.29). In this particular example the new intervention was used to form a pod-like room with openings on the corners which allow partial views into the space. Furthermore, the geometric shape of the pod and the thick walls make it possible for objects to be displayed both inside and outside of it. This particular method of display forces the viewer to move around and into the pod in order for full perception of the content to occur. In addition, the box acts as a framework to keep all the relevant objects together and emphasises the meaning and significance of the pieces on display (AJ, 2015: 84).



Figure 6.29 *Blocage* forces the viewer into participation.

Renversement

Renversement is the method of arranging displays in such a way that the content faces away from the point of entry into the room (Traue, 2000: 68). This method of display hampers the perception of the objects on display, and is used to encourage spatial awareness of the adapted interior. The viewer is 'forced' to walk around the interior in order to fully engage with the displayed items. Full perception of both space and content occurs only once viewers have positioned themselves in front of the exhibited piece.

There are many examples of *renversement* in Castelveccchio, with the most prominent being the displays in the sculpture and painting galleries. In both these areas the content is turned away from the viewer's point of entry (Fig. 6.30). Through this process, Traue (2000: 68) indicates that the viewer obtains a sense of being in complete control of their own movements and of which objects they choose to engage with. This is due to the fact that the visitor is neither directly guided into a specific pathway, nor forced to engage with a specific object. Traue writes that, similar to the *blocage* display method, the viewer is left with a sense of having 'discovered' the object by chance, making the experience more personal and meaningful (ibid.).



Figure 6.30 *Renversement* forces the viewer to move into the space to perceive the object.

Architectonic display

Architectonic display straddles the line between physical manipulation of movement and manipulation of movement through display. The method of display is designed to assist the content in taking on the role of an architectural element. Contents may be hung from the walls to physically obstruct pathways, constructing their own intimate environment from which they may be perceived. The displayed object is made to latch

onto the existing interior and provides the interior with equal recognition: it forces the viewer to acknowledge the connection point. This display method prolongs spatial movement, for instead of the viewer moving in a direct line through the room, they need to move around objects in a zigzag pattern through the space. Furthermore, during perception of the artwork, attention is extended to the artwork's perimeters and subsequently the interior space that surrounds it.

This particular method of display is also visible in Castelveccchio, with some platforms designed to allow content to form a 'wall-like' structure. In this case, the object secures itself within an intimate dialogue with the viewer, separating itself from the content surrounding it. The way in which the content is positioned in the interior forces the viewer to navigate around the display in order to progress through the space. Consequently, their attention is drawn to various parts of the interior which normally may have gone unnoticed had the progression through the exhibition been direct. This method reduces the tension between various objects on display, as perception is reduced to a single object at a time (Fig. 6.31).



Figure 6.31 Architectonic display physically changes movement through exhibitions.

In another example in an exhibition by Margaret Moore entitled '*Still Sounds*' (2012) in the Crypt Gallery, Moore drapes prints of her own history throughout the interior (Fig. 6.32). The artwork becomes 'part of' the existing walls, navigating the viewer past openings along a specific route. Furthermore, texture varies between the solid masonry walls and the light and flowing fabric on which the art is presented, whilst attention is drawn to the various suspension points, generating awareness of the historical interior. Movement through exhibitions can be prolonged by the way the display of content is

approached. During this process, the viewer is led around the exhibition, moving from one object to another, indirectly becoming aware of the historical interior.



Figure 6.32 Art as a wall

Focal points increase spatial progression, whereas non-focal points prolong it. *Blocage* lures the viewer into spaces, whereas *renversement* forces the viewer to become a participant. Architectonic display obstructs general pathways and demands that the viewer engage with the content directly and individually. Drawing on these methods when planning displays can result in the creation of spatial encounters that affect the viewer psychologically and physically, and serve to make the spatial experience memorable.

6.6 SUMMARY

Historical interiors provide engaging and unique spatial encounters. It was found that engagement with their materials offers meaningful and memorable spatial experiences. To increase exposure to the interior and its materials, various methods were highlighted that promote kinetic spatial participation. It was shown that movement can be directed to prolong the time spent in exhibition spaces and that this can be achieved by using visual cues, physical elements and the way in which the content is displayed.

Visual cues through light, colour, texture and existing architectural elements were highlighted. Light and architectural frames can be used to draw attention, subsequently encouraging spatial progression. Physical ways that promote spatial progression can be classified by the way the exhibition is laid out, and by the way in

which new architectural elements are inserted into the existing interior. A short model approach prolongs the viewer's spatial experience and generates more spatial awareness and physical exposure to existing interiors. It was also argued that this model is more concerned with spatial experience than the perception of the content on display, making it more suitable for significant spaces that are adapted into exhibition venues. In addition pathways, bridges, stairs and walls can act as guiding tools and destination points. These methods can be designed to contribute to a unique and memorable spatial experience, directing the viewer along a specific route and, in so doing, constructing a specific spatial narrative. Through this process, awareness could be directed to the historical space. In addition, the methods of focal points, non-focal points, *blocage*, *renversement* and architectonic display were highlighted as methods in which displayed content may be arranged to increase spatial progression and spatial awareness.

CHAPTER SEVEN

CONCLUSION

7.1 INTRODUCTION

This study explored the adaptation of historical interiors into contemporary exhibition venues. Methods that are more responsive to significant spaces were investigated as alternatives to the prevalent white box exhibition interior. This investigation was presented in a series of themes that were arranged as they emerged throughout the study. The narrative of this study comprised a series of theoretical investigations and arguments that were illustrated through examples of existing architectural precedents. The purpose of this study will firstly be reflected on in this chapter. How the themes emerged through the three sub-questions posed will then be discussed. To conclude this dissertation, contributions to interior design discourse will be highlighted and opportunities and recommendations will be suggested for further research.

7.2 PURPOSE OF THE STUDY

The departure point of this study stemmed from a passion for historical spaces, and a personal interest in the effect adaptation has on these interiors when converted into contemporary exhibition venues. Concern for these interiors was raised about the implementation of white boxes during adaptation. This study therefore focused on the exploration of adaptation methods that counter the implementation of white boxes in significant spaces. This study is also important and relevant for Cape Town where many new galleries are established inside existing historical interiors, with many of these adopting the white box approach resulting in a loss of place, significance and authenticity of these spaces.

7.3 FINDINGS

The adaptation of historical interiors to new contemporary functions as in the case with exhibition venues is not only prevalent in major international cities, but also in South African cities like Cape Town. Heritage guidelines, policies and legislation along with empirical examples show that a change of function keeps these significant spaces relevant and prolongs their lifespan. However, the protection offered by the SANHRA to historical interiors in South Africa is limited as it only covers certain buildings and their interiors.

It was found that white box interiors disregard historical interiors. These interiors neutralise the spaces in which they are inserted, resulting in spaces of universality which are experienced as detached environments that alienate the exhibition visitor. White boxes threaten retention of the significance of historical interiors during their adaptation and are, as a result, at odds with heritage guidelines and legislation.

This study showed how alternative approaches to white box interiors in the form of responsive adaptation, as recommended by heritage guidelines and legislation, can be clarified, categorised and practically applied by interior designers. These approaches were developed and their application illustrated by addressing the research concerns set out below.

Sub-question 1 was concerned with explaining the importance of historical interiors and the need to retain their significance and authenticity. Literature consulted consisted of guidelines and legislation from the Burra Charter (2013), Venice Charter (1964) and Athens Charter (1931), along with texts by ICOMOS (2010), SANHRA (1999), English Heritage (2008), CADW (2011), and architectural theoretical contributions by Pallasmaa (2005), Shirazi (2009) and Scott (2013). Statutory heritage regulations and policies confirm that these spaces are important for their cultural identity and heritage values. Texts by architectural authors further confirm that these spaces offer meaningful and sensory-rich spatial encounters to their visitors that are unique and memorable and provide psychological and visceral connections to the past. Adaptation of these spaces are often necessary to keep these buildings economically viable, and to prolong their lifespan and keep them relevant.

Sub-question 2 was concerned with exploring the development of contemporary exhibition spaces and prompted a discussion of the significant events that contributed to them. This was done in two parts. The first part dealt with the development of contemporary exhibition spaces. The literature consulted consisted of contributions by interdisciplinary authors Gilman (1918), Alexander (1979) and Klonk (2009), along with existing architectural examples, and shed light on the progression of private collections to public exhibitions as well as the shift from traditional exhibitions to spaces of neutrality. In chapter three it was found that private collection rooms comprised *mouseions* (Hellenistic period), *studiolos* (Renaissance), *wunderkammers* and *kunstkammers* (16th and 17th centuries) and *cabinets des curiosités* (Enlightenment). Whereas *mouseions* were restricted compounds with various functions to develop knowledge, *studiolos* comprised decorative rooms (elitist) or labs (scholars). The former were used to admire and study objects and the latter to study and experiment on objects. Alternatively, *wunderkammers* and *kunstkammers* were semi-private collection rooms dominated by their content. Here, perception of the content foregrounded perception of interiors. *Cabinets des curiosités*, on the other hand, would either allow collections to take over whole interiors (elitist) or form decorative ensembles with their interiors (artists). The former restricted perception of the interior whilst the latter allowed for balanced perception between interiors and content.

The first pivotal shift in exhibition interiors occurred during the mid-18th century: many exclusionary collections evolved into inclusive exhibitions, simultaneously welcoming

the development of an interest in the preservation of historical interiors. Spaces, such as those in the Louvre in Paris, were repurposed to function as public exhibition venues. These public exhibition spaces comprised multi-tiered, disordered and densely populated displays in large halls. Their decorative finishes and atmospheric conditions created solemn spatial experiences. The advent of aesthetic displays by the 19th century resulted in the creation of intimate contextual rooms, with artworks generously spaced on single tiers at eye level and in chronological order.

The second part of sub-question 2 was addressed in chapter four, and explored the prototypical white box and its prevalence as an interior design approach for exhibition spaces. Literature by Staniszewski (1998), O'Doherty (1999), Kantor (2002) and Birkett (2012) was referred to in this investigation, ultimately establishing that a pivotal shift in exhibition interiors occurred with the advent of abstract art and modernism. This sparked a change in exhibition interiors as the design principles of these movements were incorporated into exhibition venue designs. In the white box approach, historical interiors are neutralised either through concealment or with white paint, architectural details are removed and excessive lighting is employed. The white box interior appears to separate itself from external influences and is kept in a pristine condition. It was found that all of the above characteristics result in interiors that lack sensory stimuli and intimacy, and lead to alienating spatial experiences, feelings of detachment and universality. In these situations, artworks are prioritised at the expense of the interiors. It was therefore concluded that white box interiors often compromise the significance of historical interiors and, to a large extent, disregard heritage guidelines and policies as recommended by the charters. This is not to say that white box exhibition interiors cannot be used within historical spaces, but instead of implementing it as a second skin, a more fragmented approach should be adopted as is visible on pages 63, 73, 77 and 80.

In response to the above problem, sub-question 3 was concerned with investigating alternatives to the white box approach. This issue was addressed in two parts, each broken up into a set of themes. Reference was made to the Burra Charter (2013), ICOMOS (2010), English Heritage (2008) and literature by Thiis-Evensen (1989), Pallasmaa (2005), Scott (1989), Schultz (2010), Michel (1996), Tzortzi (2007) and Traue (2000) to help bring clarity to ways in which responsive adaptation can be approached. Furthermore, reference to this literature shows how the articulation of architectural elements can influence perception and spatial experience.

The first part of sub-question 3 was addressed in chapter five. Here, the experience and perception of new interventions were investigated. From this investigation, themes of fragmentation and layering emerged as approaches that allow for responsive adaptation. It was found that fragmented interventions take on supportive roles rather than authoritative positions when implemented during adaptation. To help with the

design of these interventions, it was found that the principles of neoplasticism allow for clear contrast in shape, colour, texture, or materials between new interventions and significant elements. Themes of horizontality and verticality and complementary and contrasting elements extend awareness to historical interiors by directing the viewer's gaze to these significant spaces, contrasting and complementing existing architectural forms and promoting reading of the content on display. In addition, it was found that themes of colour, texture, patterns and transparent materials influence the physical and psychological relationship between both the visitor and historical interiors and the contemporary intervention and the content.

It was also established that layering can help with the implementation of fragmented interventions, as it allows two periods to co-exist harmoniously and each element to retain its own unique identity. Layering in exhibition interiors can be categorised by the way in which new interventions are inserted into existing spaces, and grouped as material layering, spatial layering and object layering. Each of these methods enable the simultaneous perception of past and present, and thus influences the experience of these diachronic spaces. Layering also promotes sensory engagement and spatial awareness, either through movement or through perception. Three themes were identified through which layering can be implemented and were discussed under the delimiting, detached and attached themes. Through these themes it is possible to distinguish the old from the new and in so doing retain the significance of the space during adaptation. Layering is therefore a useful mediating tool that reduces the tension between historical spaces and the content on display.

Details play a significant role during adaptation, as they articulate layered, fragmented interventions and form a physical connection between the old and the new. Details are often responsible for the harmonious relationship between new interventions and existing spaces. Details were discussed under three categories, namely the expressed, the recessed and the invisible detail. It was shown how these forms of details enrich spatial experiences as they add complexity and can be used to focus attention. It was also found that the introduction of details adds to sensory stimuli in spaces and their experience by adding additional contrast, texture and depth to surfaces and prolonging the visitor's spatial engagement. Details are therefore the elements that link fragmentation and layering together and are imperative for responsive adaptation. In this section fragmentation, layering and details were discussed in terms of the effects they have on our senses, through isolated engagements and not in relation to bodily movement. For this reason, this section was called *static sensory perceptions*.

The second part of sub-question 3 was addressed in chapter six. Here movement was investigated and how this affects spatial perception and one's spatial experience. Literature by Michel (1996), Tzortzi (2007) and Traue (2000) indicated that movement increases a viewer's perception of the interior, prolongs their spatial engagement,

expands their awareness of existing spatial envelopes, facilitates spatial narratives and increases the viewer's sensory relationship with these spaces. Three methods were identified that encourage active spatial engagement in exhibition interiors: *visual cues*, *physical elements* and *content display*.

Visual cues spark visual interest in the viewer and subsequently entice the body to follow. Partial views, perspectives and focal points can be created using physical elements and encourage spatial progression. Light was also found to be an effective motivator for movement as human beings are positively phototropic. Light can be used to guide visitors through spaces unobtrusively, as well as draw attention to key elements. It was further found that existing architectural elements can be incorporated to spark visual interest in viewers, encourage spatial progression and direct awareness to significant elements.

It was found that by adopting the *short model approach* in the layout of exhibitions, emphasis is placed on spatial experiences rather than the content on display. This awareness increases a viewer's perception and reading of historical interiors. The short model approach increases the time spent by visitors in exhibition spaces and prolongs exposure to these spaces. *Architectural elements* that influence spatial progression speed are pathways, bridges, stairs and walls. Where pathways direct visitors consciously and subconsciously through a space, bridges transport visitors over significant floor planes and offer the viewer different viewpoints. Both pathways and bridges influence horizontal progression through spaces. Stairs on the other hand influence vertical progression through spaces and can be used to control the speed of spatial circulation, whereas walls can be used to physically direct visitors and highlight destination points, by also influencing circulation speed. The methods used to display content also play a significant role in the manipulation of spatial movement. *Focal points* and *non-focal points*, *blocage*, *renversement* and *architectonic display* prolong spatial engagement and influence circulation speed. These impact the visitor emotionally, psychologically and physically and make spatial encounters both meaningful and memorable.

The themes discussed in this chapter all encourage movement through exhibition interiors and influence spatial circulation speed and can thus be defined as, kinetic interventions.

Furthermore, although the design strategies discussed in the last two chapters have been argued to be suitable for the adaptation of historical interiors to contemporary exhibition environments, these design strategies are equally employable in more contemporary exhibition interiors such as white box galleries. However, the objective to the research was to define design strategies that would retain and enhance the significance and authenticity of historical interiors, which contemporary galleries lack.

By employing these design strategies within contemporary exhibition spaces may increase or contribute to a more interesting and sensory spatial experience.

Four themes have emerged through this study that shed light on this phenomenon of contemporary interventions in historical buildings, as they each constitute a different spatial conceptualisation developed from one another. These themes have been identified as shifts. These shifts provide insight into the evolution of contemporary exhibition spaces, their effects on historical buildings and, in turn, embodied perception of their interior spaces.

7.4 FOUR SPATIAL CONCEPTUALISATIONS: UNDERSTANDING ADAPTATION OF HISTORICAL INTERIORS INTO CONTEMPORARY EXHIBITION VENUES (FIG. 7.1)

Shift 1: Private collections to public display

Various types of private collections formed in Europe over a period stretching numerous decades, eventually changing to public exhibitions by the 18th century. The atmospheres of these spaces were initially solemn and the displays overcrowded. These spaces changed becoming less overcrowded and brighter with the advent of aesthetic display.

Shift 2: Spaces of alienation and detachment

The advent of modernism propagated by the Bauhaus and De Stijl, along with the rise of abstract art, influenced the design of exhibition interiors. These spaces were neutralised and universalised. This resulted in spatial experiences of alienation and detachment.

Shift 3: Static sensory perceptions

In opposition to the white box, interventions that are more nuanced and that make the diachronic nature of existing and new additions to historical interiors visible are explored using fragmentation, layering, and details, thereby allowing past and present to co-exist harmoniously. These interventions affect the visitor emotionally, physically and psychologically and can be used to extend awareness to historical interiors to help retain their significance and authenticity.

Shift 4: Kinetic spatial environments

Kinetic spatial interventions encourage and prolong spatial movement through exhibitions during adaptation to make the spatial experience more meaningful and memorable. Through such interventions, the visitor obtains more sensory stimuli and is made indirectly aware of historical interiors.

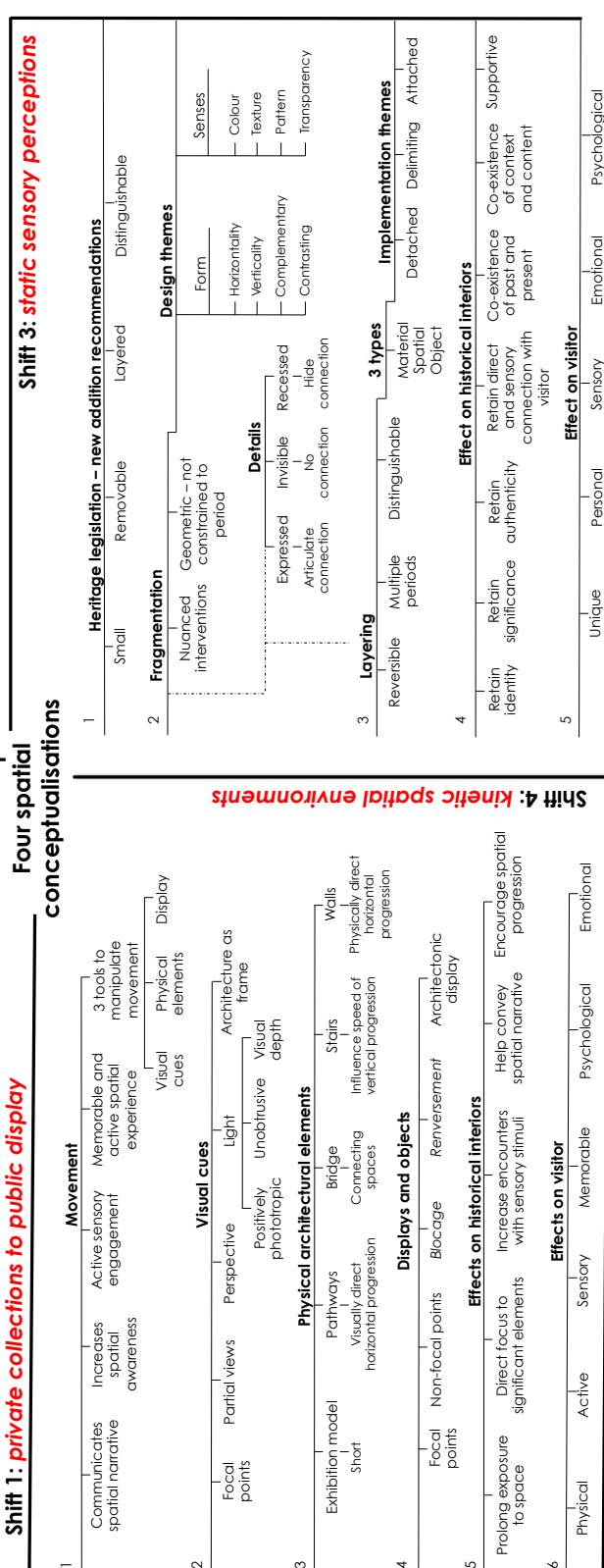
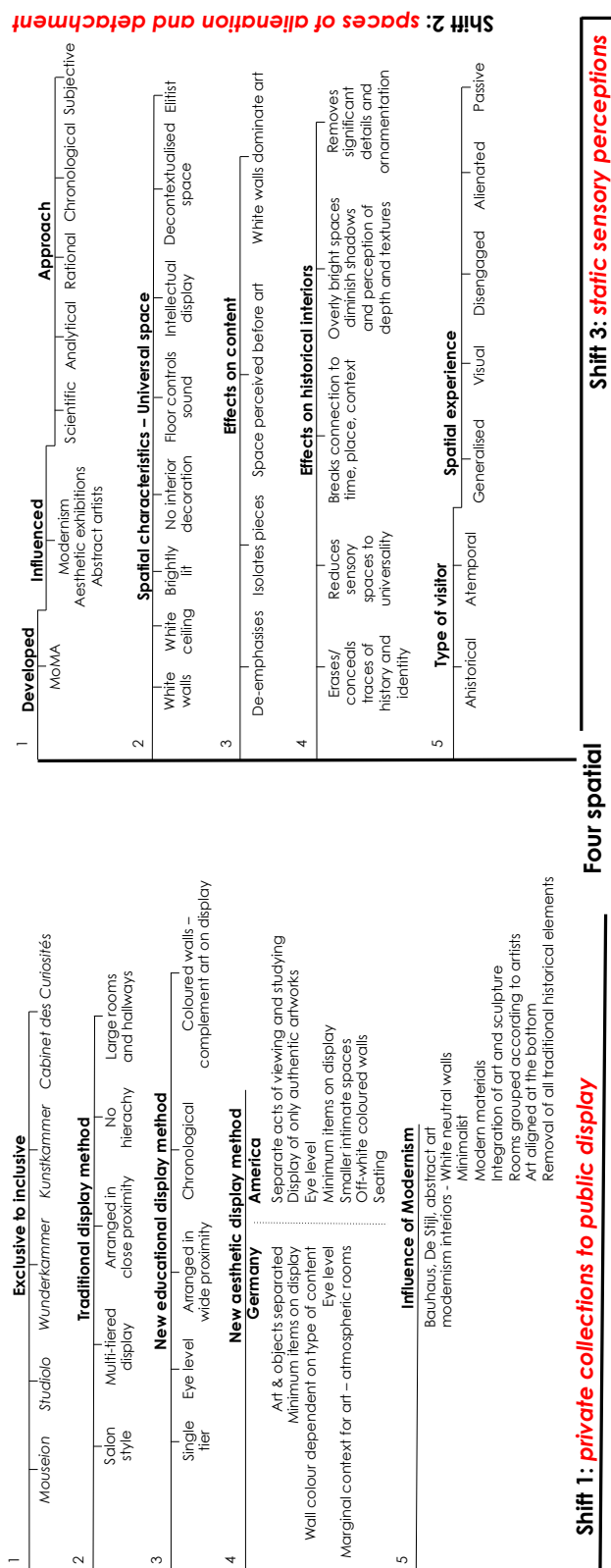


Figure 7.1 Four spatial conceptualisations: Understanding adaptation of historical interiors into contemporary exhibition venues

7.5 REFLECTION ON METHODOLOGY

Qualitative analysis was used as this study was concerned with the experiential qualities of adapted spaces. Data was investigated and set off against theory to test the applicability of responsive adaptation methods used when repurposing historical interiors to contemporary exhibition spaces. *Bricolage*, the method in which various modes of information are added together and analysed using multiple inquiry methods, was used to investigate the different types of data. This enabled the researcher to look at a wide variety of opposing information and constructs, and to synthesise these ideas into themes. In turn, by arranging the study in the form of a narrative as each theme emerged, made it possible to arrange all the gathered information in logical order to explain the effect of different contemporary interventions on historical interiors when altered to contemporary exhibition spaces, as well as the effect these changes have on spatial perception and experience.

7.6 RECOMMENDATIONS FOR POLICY AND PRACTICE

The repurposing of historical interiors is not a phenomenon new to Cape Town: the adaptation of many of these spaces into contemporary exhibition venues is on the rise due to the proliferation of social exhibition events and the establishment of a 'gallery-going' culture. It was shown that the legislative protection of historical interiors only extends to historical buildings under specific grading levels (Appendix A). This leaves many historical interiors vulnerable to destruction. The recommendation is that heritage legislation be re-examined and its protection extended over significant historical interiors that currently are not protected. Furthermore contemporary interventions need to be carefully monitored. It is recommended that interior designers take these findings on board and consider and incorporate them in the design of new contemporary interventions.

7.7 OPPORTUNITIES FOR FURTHER RESEARCH

Considering the discursive shortcomings of interior design as pointed out in chapter one, there is an opportunity to incorporate additional texts on the responsive adaptation of historical interiors to contemporary exhibition venues. This study attempted to address this defined gap in interior design discourse by illustrating ways in which this can be done. This study was specifically concerned with the repurposing of significant interiors to contemporary exhibition venues; there are opportunities for future research to be conducted on the adaptation of historical interiors for other contemporary uses, including corporate, retail, hospitality and residential interiors. Ways should be investigated in which the design of these historical interiors may be approached to allow their existing significance, authenticity and cultural heritage to be retained. This study broadly covered a wide range of adapted. There is an opportunity to test the relevance and application of this study's synthesised set of themes to a single case study in more depth. Lastly, in terms of education, coursework,

content, terminology and literature relating to the responsive adaptation of historical interiors to new uses in the interior design curricula could be developed.

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APPENDIX A: DRAFT CCT GUIDELINES TO GRADING 2015

Standard Operating Procedure for Grading: CCT Guidelines to Grading

- A. Authority to Grade
- B. Criteria for Grade III
- C. Heritage Protection Overlay Zone (HPOZ)
- D. Filling in the City Grading Form
- E. Digitizing on to ISIS

A: Authority to Grade

- As of 28 February 2013, The City of Cape Town is competent to and responsible for the identification and management of Grade III heritage resources. (NHRA Section 8; HWC Grading Policy: 1)
- In terms of the internal City delegations (Feb 2014), all professional heritage staff in ERMD are authorised to grade Grade III heritage resources.
- At least 2 professional staff should grade, one of which may be a consultant appointed by the City.
- The City consultants appointed to carry out audits make field rating recommendations.
- In consultation with an ERMD Heritage Professional (HP) or higher, the field rating is ratified as a grading.
- Once the field ratings have been ratified, it is captured as a standing grading on GIS for publication on ISIS.
- In cases where the grading is not clear or requires debate to finalise or come to a consensus regarding a grade, a Senior HP or Principal HP should be consulted.
- Once the grading has been entered into ISIS, it is deemed to have been accepted by the City.
- Amendments to a grading on ISIS may take place should:
 - new evidence comes to light which affects the grading
 - the grading be challenged by an outside person or body – in which case any changes would need to be made following consultation between at least three professional staff members – including at least one Senior HP or Principal HP or higher.
- In considering a grading, the grading officer should
 - Ensure CCT Guidelines for Grading are properly applied.
 - Ensure the basic information relating to significance is complete.

B. Criteria for Grade III

Grade III heritage resources are heritage resources that are conservation-worthy, but do not fulfil the criteria for Grade I or Grade II.

1. CCT Guidelines for Grading

The NHRA (Sections 7&8) makes provision for the division of heritage resources into Grade I, II and III heritage resources, based on the relative regional significance of the sites, and the appropriate management of these sites on national, provincial and local level.

A competent local authority is the responsible heritage authority to manage Grade III heritage resources. The City of Cape Town is the heritage authority responsible for the management and grading of Grade III heritage resources.

1.1. Legislation

Section 7.1.(c) of the NHRA describes Grade III heritage resources as:

Other heritage resources **worthy of conservation**, and which prescribes heritage resources assessment criteria, consistent with the criteria set out in section 3(3)...

Regulation 43 (Government Gazette No 6820 dated 30 May 2003, Notice No 694) further qualifies Grade III heritage resources:

- (a) fulfils one or more of the criteria set out in section 3(3) of the Act ; or
- (b) in the case of a site contributes to the environmental quality or cultural significance of a larger area which fulfils one of the above criteria, but that does not fulfill the criteria for Grade 2 status.

2. Grade III sub-categories

Grade III heritage resources are heritage resources that have local significance. They are crucial in the maintenance of character and scale of streets and historic neighbourhoods – even in areas which have not been formally protected as a heritage area.

Following the HWC Guide to and Policy Statement on Grading (2012), the CCT adheres to the practice of further subdividing Grade III heritage resources into further categories i.e. IIIA, IIIB and IIIC. To facilitate the representation of the graded heritage resources, a numerical value (4) has been given to indicate buildings that are not conservation worthy.

- Heritage resources (Grade III) are to be assessed **holistically**, considering the range of heritage criteria (not focusing exclusively on the architectural component) - See Table 1.
- Any site which has been designated a **Grade III** is considered to be **conservation worthy**.
- Each grading must be accompanied by a **statement of significance**. [Not negotiable]

The NHRA suggests a number of criteria for determining significance. Additional assessment criteria have been added in practice, based on parallel conservation and grading practices elsewhere in the world. There is however, a fair degree of overlap between the significance criteria and the additional assessment criteria, many of which in fact are qualifiers of significance. Table 1 combines these, reducing the significance categories to 11 basic categories.

Table 1: Criteria for assigning significance rationalising the number of criteria used in practise to indicate heritage significance.

Section 3 (NHRA) [suggested criteria, but not limited to]	Additional assessment criteria	Also encompasses:
its importance in the community, or pattern of South African's history;	Historical	Intangible
its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;	Rarity	Intrinsic value Integrity, Age Authenticity
its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;	Potential to yield information that will contribute to a better understanding ...	Archaeology, Physical fabric – historic layering/ Architecture Can include Scientific depending on context
its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural heritage;	Representativity	Architectural typology, Settlement pattern, Planting pattern
its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;	Aesthetic	Architecture
its importance in demonstrating a high degree of creative or technical achievement at a particular period;	Technological/ Excellence	Engineering
its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;	Socio-historical/ socio-cultural	Symbolic, Intangible
its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;	Associational	Architect, Religious groups/movements/polit ical groups/movements, People, Events, Symbolic/Intangible
sites of significance relating to the history of slavery in South Africa.	Slavery	Places, Spaces, Architecture, Objects, Intangible
	Environmental/ Contextual/ Landmark	Architectural groupings, Streetscapes, Avenues, Natural features, Planting patterns,
	Scientific	Archaeology, Palaeontology, Tradition of Scientific research (?)

In the process of determining heritage significance, staff undertaking grading will be asked to allocate a rating in each of the 11 significance categories, if relevant. The ratings are summarized as High/Medium/Low and are an indication of whether the heritage resource in question is an Outstanding/Good/Moderate example within the relevant category.

Something here about Grade III A, B, C and introduction of IIIC/4

3. Management implications for heritage gradings

Gradings and statements of significance are meaningless without a clear understanding of the management implications that those gradings will have on the heritage resource in question.

Table 2 summarizes the implications that specific gradings would have on proposed alterations to a heritage resource. As yet, all applications for heritage permission in terms of Section 34 must go to Heritage Western Cape. The City of Cape Town is in the process of applying for the delegation of the permitting function.

Table 2: Heritage management implications of gradings on proposed alterations to heritage resources.

Grading/Significance	Heritage management implications (Baumann and Winter 2004)
Grade IIIA: - Outstanding local architecture, aesthetic, social and historical value - Outstanding intrinsic value for social, historical, scenic, aesthetic values either individually or as part of a group - Local significance	- Conserve - Remedial action to enhance significance - Minimal intervention - Interpretation - Permit of approval required for any demolition, alteration or change in planning status
Grade IIIB: - Considerable local architecture, aesthetic, social and historical value - Considerable intrinsic value for social, historical, scenic, aesthetic values either individually or as part of a group - Local significance	- Conserve - Remedial action to enhance - Permit of approval required for any demolition, alteration or change in planning status - Retain historical fabric (predominantly building exterior)
Grade IIIC Local contextual value for social, historical, aesthetic value	- Conserve wherever possible - Retain historical fabric wherever possible (exterior only) - Conserve and enhance contribution to overall character and streetscape (predominantly public/private interface) - Permit of approval required for any demolition, alteration or change in planning status Demolition only to be considered if appropriate adaptive reuses cannot be established
Grade 3C/Not conservation worthy Some contextual value for social historical, aesthetic value	- Permit of approval required for any demolition, alteration or change in planning status - Demolition can be considered if rehabilitation of the resource cannot be undertaken
Not Conservation worthy	Demolition acceptable option

C. Heritage Protection Overlay Zone (HPOZ)

Something about the Cape Town Integrated Zoning Scheme and the HPOZ as a tool for managing heritage

1. City Heritage Protection Overlay Zone (HPOZ) exemptions

In terms of Section 3.1(c) of the Cape Town Zoning Scheme: Overlay Appendix, the following exemptions apply to places or areas protected in terms of the General Provisions of the HPOZ. These exemptions can be applied to Grade III A, B and/or C depending on site specific conditions.

Exemption				Activities exempted from having to obtain Council's approval
Exemption 3	Exemption 2	Exemption 1		The following Landscaping activities are exempt: - Day to day gardening and garden maintenance that <i>does not</i> involve the removal of mature trees or hedges, or change in topography of the landscape, or the erection, demolition or removal of walls, fences, structures or features. - Continuance of planting and farming activities which does not change the character or topography of a place. This <i>does not include</i> the erection of permanent or temporary structures.
				The following Minor Maintenance activities are exempt: - Re-painting or re-decorating (including changes in paint colour but not including painting of natural stone, unpainted metal, face-brick, ceramic, or unpainted wood, or similar such unpainted surface); - Replacement of roof covering using identical material, treatment and form; - Minor maintenance that does not involve: changes in material, form, or type of finish, removal of original joinery, features or fittings, or such which have been part of the structure for over 60 years.
				The following Internal Alterations activities are exempt: Internal construction, removal, alteration or demolition that is not visible from outside a structure. (This exemption does not include internal construction across window, door or other openings which may be seen from outside the structure, or alterations that compromise the structural integrity of a structure).
Exemption 4				The following activities are exempt: All activities authorised for a place, site or area in terms of and in accordance with a Heritage Management Plan approved by the City.

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