“It is easy enough to criticize museums for being what they are or for failing to be what one thinks they should be... It is more difficult to propose changes that are feasible, and to ground both criticism and reform in an understanding of the situation, economic foundations, and socio-political formations of the museums to be gauged... Useful criticism needs to combine assessment with the empirical examination of real situations, recognizing the complexity and intermingling of interests involved, as well as relations between the individual and the social, and the conditions within which they operate.”

(Krep, 2003:7)
1. Introduction
2. Defining a Contemporary Museum
3. Four Approaches to Museum Architecture

Museums do not have relevance in our daily lives.

A museum is an institution that lasts for a hundred years.

A museum visit is a tedious purpose visit.

A museum is a dead space that only deals with issues and objects of the past.

Preservation and conservation are the most important aspects of a museum.

FIGURE 2.1 Impressions of museums, Digital Collage
2.1. Introduction

The starting point of the dissertation is the theoretical component that consists of theory and literature studies that influenced the design of a satellite museum. This chapter is a reflection of the research that was done in order to better understand architectural thoughts and concepts behind the design of a museum.

The chapter can be divided into two halves. The first half investigates the definition of a contemporary museum and the second half is an analysis of the works of four architects.

The theoretical component influenced the design of a satellite museum. The application of research to the final design is represented throughout the chapter by means of orange italic text.

A comprehensive description of the design is provided in chapters 7 to 10. In order to understand how the research is applied, it is important to know that the final design consists of a downwards spiralling ramp that is positioned in the atrium space of an existing building. The ramp leads to a series of museum exhibition spaces. The design deals with the thresholds between existing commercial spaces and new museum spaces.

2.2. Defining a Contemporary Museum

2.2.1. Introduction

To be able to answer the question: ‘What is a contemporary museum?’ one first has to ask the question: ‘What is contemporary?’ According to Borris Groys (2010), being contemporary can be understood as being immediately present; as being here-and-now. He applies this statement specifically to art, saying that art is truly contemporary if it is authentic, if it captures and expresses the present in a way that is not influenced by past traditions or schemes aiming at future success (Groys, 2010). The same statement can be applied to museums. A contemporary museum should focus on the present in an uncompromising way.

The author aims to define a contemporary museum by stating the role of a museum in the context of Pretoria. This is done through an exploration of the nature of a museum as a medium of communication. A contemporary museum is seen as being story centred, rather than object centred.

Four existing museum impressions and the architectural translation thereof are considered. A contemporary museum is seen as a reaction to these museum impressions. Additionally an investigation was done into the non-western conception of a museum.

The definition of a contemporary museum is followed by a description of the author’s comprehension of a satellite museum.

“Striving to reconcile their historic commitments to collection, preservation, and scholarship with a reinvigorated and self-conscious conception of education and exhibition, contemporary museums are compelled to address questions of identity, objectivity, and privilege that were traditionally obscured.”

(HEIN, 2009:6)

“Museums are sites of spectacle, expository sites, where exhibitionary complexes are sited.”

(HOOPER-GREENHILL, 2000:14)
2.2.2. A Medium of Communication

A museum can be compared to media of visual communication, such as television and printed illustration (Brawne, 1965:10). A museum differs from cinema and television in that it communicates to one individual at a time, similar to a book or journal, even though it is a mass medium. The main difference between a museum and the other forms of visual communication is that printed illustrations, cinema screens and televisions are only able to transmit reproductions of an object. Museum collections distinguish museums from other cultural institutions and building types (Hein, 2009:14).

The main focus of a museum is the encounter between object and observer and this aspect should be exploited in the architectural design. The design of a museum must accommodate the communication between artifact and individual (Brawne, 1965:10). The viewer who engages with a museum object undergoes a conceptual and cultural metamorphosis (Hein, 2009:8). A museum is concerned with the interpretation, contextualization and critique of the objects that are placed on display (Williams, 2007:8).

2.2.3. The Museum in Transition

The museum’s historic mission has been the displaying of objects for visitors to inspect and contemplate (Hein, 2009:5). Museums have undergone a radical transformation, influenced by changes in physical resources and technology as well as by cultural sensibilities and ideology (Hein, 2009:2). The “advent of internet” has caused knowledge to become a public domain, enabling people across the world to communicate with each other and exchange ideas (Kilgour, 1999).

Electronic technology is redefining the context for objects that a museum supplies as an intellectual framework unconfined to a physical place (Newhouse, 1998:268).

In an increasingly virtual world a museum is a refuge of reality. A museum’s contents and their relation to architecture is now more important than ever (Newhouse, 1998:270). Contemporary museums are seen as story centred rather than object centred as was previously the case. This influences the architecture of museums and the design of exhibitions (Hein, 2009:7). Museums hold themselves accountable for delivering experiences created with the use of objects (Hein, 2009:5). The focus of a museum has shifted from the collection of objects to the production of a visitor experience (Hein, 2009:67).

In the 1970s, a ‘new museology’ movement emerged that reflected the dissatisfaction with conventional interpretations of museums and its related functions (Kreps, 2003:9). The so-called ‘new museum’ recognized the educational potential of museums as well as the potential for promoting social change (Kreps, 2003:9). In contrast with object-centered conventional museums, the new museum focused on being people-centered and action-oriented (Kreps, 2003:10). Similarly, contemporary museums promote themselves as public institutions, focussing on their responsibility to create an environment that stimulates and encourages enquiry, rather than on the preservation of objects (Hein, 2009:67). A museum should no longer function as a singular museum in the traditional sense (Jodidio, 2010:14). It should function as a cultural environment that responds to the needs of its context. A museum should facilitate different functions and activities that contribute to the cultural environment (Jodidio, 2010:17).
2.2.4. Existing Museum Impressions

Four existing museum impressions, to which the contemporary museum is a reaction, are identified. Two of these impressions are based on the writings of Victoria Newhouse (1998) who refers to the museum as sacred space and as entertainment. The other two impressions of the museum as a monument and as anonymous space are derived through research into recent and historical museum architecture.

1.a. The Museum as a Vehicle for Entertainment

One of the museum’s earliest embodiments, the Cabinet of Curiosities, or ‘Wunderkammer’, surfaced in Europe during the 16th century. It was an accessible version of the ‘schatzkammer’ (royal treasury) that housed bizarre collections of natural and art objects which were randomly cluttered together on vertical and horizontal surfaces in various rooms. The primary intention of these cabinets was to ‘entertain and amuse’: Visitors interacted with the art by finding special objects that attracted them and then making their own connections (Newhouse, 1998:15).

Victoria Newhouse (1998:190) states that a public museum is widely perceived as a vehicle for entertainment. Museums are competing with manufacturers of illusion such as movies and theme parks, for the public’s devotion (Hein, 2009:16). In trying to create an entertaining environment for the public, a museum can lose its meaning. The Experience Music project in Seattle designed by Frank Gehry in 1999 is an example of this. The building distracts one’s attention from the exhibitions and dominates its surroundings (Hackett, 2000).

1.b. A Contemporary Museum as a reaction to the Museum as a Vehicle for Entertainment

Instead of focusing on providing people with entertainment, a contemporary museum should provide one continuous message throughout. A museum with a clearly defined topic portrays a singular message without difficulty; the Hector Pieterson Museum in Soweto is a successful example where an unimposing building forms a backdrop for the objects on display.

Interactivity is related to the digital world and technological progress. Architects should be cautious when using the term ‘interactive’, as a museum can be classified as giving an interactive experience by placing computers in a bland, undesigned space.

Rather than having various spaces with different themes, a contemporary museum should be experienced as layers of meaning. Daniel Libeskind’s Jewish Museum in Berlin has a narrative that draws people deeper into the experience (Newhouse, 1998:235).
2.a. The Museum as Monument

Historically museums were aloof and superior. This impression translated into monumental architecture that was not located in the mainstream of urban life. By the 1950’s museum attendance was high and monumental museum architecture (with a focus on the exterior appearance of buildings) was established across Europe (Newhouse, 1998:47).

Museums as iconic buildings are associated with celebrated architects. These type of buildings are often requested by the client in order to ‘brand a city’. The museum building becomes a monument that affirms the identity of the architect and has taken centre stage over the contents of the museum (Jodidio, 2010:6). Zaha Hadid’s MAXXI Museum in Rome is such an example in which the identity of the architect overwhelms the museum experience (Jodidio, 2010:178).

To view a museum as a monument to a specific event or person is restrictive in the sense that a monument can just be a sculpture without any spatial qualities.

Because of the availability of information, the contents of museums are no longer private or elitist. Brawne (1965:9) states that “it is possible to imagine a situation in which the space of the museum and that of a shopping arcade mingled without more definition than that of a threshold.” Museums do not have to be sterilised in cultural centres or isolated in cultural parks. A museum should be located in the centre of cultural interest and have a position in the mainstream of community activity (Brawne, 1965:9).

2.b. A Contemporary Museum as a reaction to the Museum as Monument

A contemporary museum should have less focus on the facade and the lasting aspects of the building. The idea of static monumentality does not support the contemporary museum approach of fleeting evocations of private experience (Hein, 2009:8).

Cooperation and participation have become keywords in the vocabulary of the professional museum community, meaning that the museum should be public and accessible to all (Kreps, 2003:4). Museums are trying to expand their audience and to reach it in new ways (Hein, 2009:2). In order to achieve this, it entails the revision of the fundamental concept of a museum.
3.a. The Museum as an Anonymous Space

Debates about whether the architecture of a museum should be an active or passive container, a background or foreground to a museum’s contents, are not uncommon (Newhouse, 1998:220). In the mid-nineteen-nineties the trend was to have white surfaces and open interior spaces in art museums. The Museum of Modern Art (MOMA) in New York, designed by Philip Goodwin and Edward Durell Stone, represents a modernistic paradigm (Newhouse, 1998:220). The whitening of museum space creates anonymous, abstract interiors as is seen in the architectural firm SANAA’s design for the New Museum of Contemporary Art in New York (Grima & Wong, 2008).

In the 1900s museums were seen as ‘dead spaces’ by artists. With the de-contextualization of art, artists developed a negative attitude towards museums. The Italian poet Fillipo Marinetti reflected many of his fellow artists’ feelings in 1909 in his Futurist Manifesto when he called museums “cemeteries” that should be destroyed. By providing a white space for objects, museums are even less contextual than they were before (Newhouse, 1998:48). The analogy of a museum as the cathedral of the 20th century, created an association with death: a museum was seen as a mausoleum (Newhouse, 1998:49).

3.b. A Contemporary Museum as a reaction to the Museum as an Anonymous Space

Contemporary museum spaces should form a backdrop to the objects on display, but the spaces are given meaning through a narrative, that could motivate visitor circulation or the sequential order of the spaces.

An architect should not only design a shell for exhibitions, but should create an atmosphere that contextualises the museum’s objects.

4.a. The Museum as Sacred Space

Originally museums were not motivated to attract public patronage (Hein, 2009:44). Until the 15th century, the accumulation of collections was either for religious ends or personal enjoyment (Brawne, 1965:7).

The importance of the objects that are preserved in a museum bestows a spiritual connotation to museums. In a museum some people feel a sensation of awe similar to that of being in the presence of something sacred (Hein, 2009:21). In the 1950’s art became a secular religion – people built museums to worship art, instead of churches to worship God. Modern museums banned all architectural articulation for fear that the eye might stray from the art (Newhouse, 1998:47).
The Barcelona Contemporary Art Museum designed by Richard Meier in 1992, envisioned the museum as a ‘cathedral of light’. A museum as a cathedral suggests a spatial organisation where hierarchy is important, similar to the spatial arrangement in a church.

During the Victorian era and late 19th century museums were considered as elite cultural institutions, focussing on well educated, rich patrons. In the mid 20th century, museums became more accessible to the everyday population (Teichert, 2004:71). Philip Jodidio (2010:17) states that even though the relationship of today’s museums to historical churches has often been pointed out, the museum as a type of humanist temple is now a thing of the past. Museums should not be seen as places of social and intellectual privilege, as described by Hilde Hein (2009:41).

4.b. A Contemporary Museum as a reaction to the Museum as Sacred Space

A contemporary museum should move away from spiritual connotations and create an environment that fits into a person’s everyday routine.

Instead of creating a hierarchy of spaces, the museum should accommodate free movement.

2.2.5. The non-western idea of a museum

The collection and preservation of objects are falsely considered to be distinctly western preoccupations. All cultures keep objects of special value, and many have developed elaborate structures for their storage and preservation (Kreps, 2003:20). Western and non-western museums have the same mission: to transmit culture from one generation to the next (Kreps, 2003:45). Western museums and non-western museum have different approaches to the material world, since a western society is ‘object-centred’ (the accumulation of objects is of crucial importance in the transmission of cultural traditions), while a non-western society is ‘concept-centred’ where the object is of little significance (Kreps, 2003:47). It is interesting to find that contemporary western museums are leaning towards the non-western approach to become less object-centred.

A shrine or temple can be seen as an indigenous model for a museum in Africa where valued objects are stored and displayed while ceremonies are performed. The shrine is a vehicle that transmits people’s cultural heritage (Kreps, 2003:74). Cultural heritage is not limited to objects and is transmitted through folklore, music, dance and festivals. Communities are directly involved in the preservation of valued objects and sites where the objects are held (Kreps, 2003:77).
2.2.6. Conclusion: The role of a Contemporary Museum in Pretoria

The role of the museum should be redefined to address people’s specific needs within the context of the museum (Kreps, 2003:121). Keeping in mind that museums can contribute to the construction and expression of national, regional and local ethnic identity (Kreps, 2003:2), the author perceives the role of the new satellite museum in Pretoria as the following:

1. To address the apparent absence of museum-mindedness in Pretoria and integrate the museum in people’s daily lives. One way of doing this is to provide a place in which to hold discussions and create exhibitions about certain problems that the people are dealing with (Kreps, 2003:124).

2. The museum should transcend class and cultural difference (Hein, 2009:18). The new satellite museum places emphasis on the public programming of the museum, rather than the collection and preservation of objects. A museum should respond to the demographic environment and approach the community to engage in the production and reception of museums exhibitions (Hein, 2009:45).

3. A museum is assumed to be a social institution whose functions and programmes must serve society in a specific manner (Moifatswane & Van Schalkwyk, 1999:60). A museum should empower the population of the city through the documentation of an area’s historical, natural, and cultural heritage (Kreps, 2003:122).

4. A museum is context focussed and should reflect what is important to the community to which it belongs (Kreps, 2003:123). A museum should accommodate cross-reference between exhibited objects and the museum’s context. This will allow the objects to become more real, while the context of the city is given an increase in value (Brawne, 1965:9).

5. A museum should be for everyone in the city. Recent thinking regarding museums is marked by the drive towards pluralism and diversity and the aim to have this reflected in the visitors (Hein, 2009:44).

“The basic role of a museum in the community is to make itself accessible – accessible both in the literal sense of opening hours and the convenience of location, but also in its displays, its public programming and in its administration. In all its programmes it must see itself as belonging to all, a benefit to all, to be used by all.”

(Moifatswane et al., 1999:60)

2.2.7. The New Satellite Museum in Pretoria

For the purpose of this study a satellite museum (as the design intervention) is defined as a museum branch of another larger museum (in this case the Ditsong: National Museum of Cultural History). A satellite museum is in a different location than the original museum. The satellite museum design intervention is positioned as a point on a regular city user’s everyday route in order to provide people with an unexpected museum encounter. The satellite museum is a catalyst project to create awareness of the Ditsong: National Museum of Cultural History. A satellite museum does not need all the auxiliary spaces a museum usually requires, since the facilities of the original museum can be used.
2.3. FOUR APPROACHES TO MUSEUM ARCHITECTURE

2.3.1. Introduction

In order to develop a better understanding of museum spaces and in order to formulate an approach to the design of exhibition spaces in a museum, the author selected four architectural practices that have designed various museums.

The architects whose work is studied are Peter Zumthor, Daniel Libeskind, Herzog & de Meuron and David Chipperfield.

The four architectural offices were selected based on the author’s perception of a contemporary museum and how the author perceives the selected architects’ work:

- Peter Zumthor successfully creates atmospheric architecture.
- Narrative is an important element present in museums designed by Daniel Libeskind.
- Herzog & de Meuron designed the Tate Modern that functions as a public space.
- Although David Chipperfield’s museums have an iconic feel, they portray a continuous message.

The author identified 5 main aspects that play an important role in the spatial design of an exhibition. The architects’ works are discussed in terms of the following aspects:

1. Entrance
2. Thresholds
3. Path and visitor orientation
4. Transfer of information
5. Dialogue between object and visitor
2.3.2 Museum Architects

Peter Zumthor

**a. Buildings as museums**
Peter Zumthor (1988:24) believes that a good building has to "be capable of absorbing the traces of human life". A body of architecture that is exposed to human life has the ability to become a witness to the reality of past life (Zumthor, 1988:26). This approach allows his buildings to become museums of human life by preserving the present.

**Design application:**
The new satellite museum is positioned inside an existing building where traces of human life are visible. By adding another function into the existing building, the building becomes a living museum where the present activities of people become entangled with objects of the past. This relates to Peter Zumthor’s concept of buildings as museums of human life.

**b. Thresholds and paths**
Zumthor’s description of the inner structure of a building speaks of his understanding of thresholds and can be applied in the design of a path for visitors in a museum:

"I like the idea of arranging the inner structures of my buildings in sequences of rooms that guide us, take us places, but also let us go and seduce us. Architecture is the art of space and it is the art of time as well – between order and freedom, between following a path and discovering a path of our own, wandering, strolling, being seduced. I give thought to careful and conscious staging of tensions between inside and outside, public and intimate, and to thresholds, transitions, and borders."

(Zumthor, 2003:87)

**c. Dialogue with context**
Zumthor (1988:23) stated that the creative act of design should be focused on the dialogue with the issues of our time. In contemporary architecture there should be a balance between revealing the ‘vibrations’ of the site and being concerned with contemporary trends (Zumthor, 2006:42).

Architectural language is as vital to a building’s character as language is vital to a person’s humanity (Mumford, 1952:44). Each building is built for a specific use in a specific place and for a specific society (Zumthor, 1988:27) and thus speaks a specific architectural language. Every work of architecture intervenes into an existing historical situation and should enter into a meaningful dialogue with this context. The purpose of an intervention is to make visitors see the existing situation in a new light (Zumthor, 2006:17).

**Design application:**
Thresholds:
A major element in the design intervention is the treatment and design of thresholds. In some instances the threshold is a definite boundary that is crossed. (Examples are: the existing entrances into the building, when a visitor walks onto or off the ramp where it meets the floor levels and at the museum entrance on the mezzanine level.) In some instances the threshold is no more than a change in floor finish and the retail and museum spaces are merged into one space. The thresholds of the design intervention create tension between the existing building and the new museum spaces.

Path:
The ramp provides a definitive path for the visitor to follow, but once inside the museum, the visitor can discover a path of his or her own and the thresholds into the different spaces should be welcoming and seductive.
**Design application:**
The new satellite museum is positioned in an existing building to deconstruct the idea that a museum is located in an iconic building that speaks of high culture. The design intervention allows regular users of the building to see the building and the CBD of Pretoria as a living museum. The ramp structure of the design intervention visually contrasts with the existing building.

**d. Layers of experience and information**
It is said that Peter Zumthor pares architecture down to its barest, yet most spectacular, essentials (Pogrebin, 2009). In contrast to the principles of minimalism that encourage transparency and simplicity, Zumthor’s work delays understanding and has an enigmatic atmosphere to it (De Monchaux, 2009). The Bregenz Art Museum, for example, is a devotion to mystery, as some of the architectural elements become more enigmatic as a visitor experiences the building (Mystical Presence, 1997:46). The building’s ethereal skin consists of plates of overlapping etched glass, through which one perceives the interior forms of the building (Mystical Presence, 1997:48).

In a time of an endless flux of signs and images, Zumthor creates buildings that enable a human visitor to experience it, but do not constantly talk to the visitor (Zumthor, 1991:33). When there is no message to unravel and the building is simply there, a perceptual vacuum is created within which a memory may surface (Zumthor, 2006:17). Instead of stirring up emotions with buildings, emotions should be allowed to emerge (Zumthor, 1991:29).

Zumthor (2006:30) refers to the Italian poet Giacomo Leopardi who saw beauty in a work of art when it offered the viewer the opportunity to deduct different meanings from it. People are moved by works or objects that have numerous layers of meaning that change as the angle of observation changes. Depth and multiplicity can be obtained in architecture by focussing on the details, to create a place where interpretation is possible (Zumthor, 2006:30).

Zumthor does not think of architecture as a message or a symbol, but as a background for the life around it (Zumthor, 2006:12). This is evident in the calm, peaceful grey galleries of the Kunsthaus Bregenz where art is allowed to dominate the spaces (Mystical Presence, 1997:48). According to Zumthor (2006:22), there are two fundamental possibilities of spatial composition. Firstly, the closed architectural body, isolating space within itself, and secondly, the open body that embraces space that is connected to the endless continuum. While the visually closed interior spaces of the Kunsthaus fall into the first category, it manages to make an ethereal connection with the outside world (Mystical Presence, 1997:48).

**Design application:**
The ramp structure of the new satellite museum creates a visual focal point in the atrium space. When a person is on the ramp, it forms a backdrop for the exhibition of chairs.

Spatially, the museum exhibition spaces form a flexible backdrop for a curator to fill with exhibitions and objects. The spaces do not have visual links to the exterior and isolate the space within itself.

“There is an intimate relationship between our emotions and the things around us. That thought is related to my job as an architect... In my work, I contribute to the existing physical framework, to the atmosphere of places and spaces that kindle our emotions.”

Zumthor (2003:85)
Daniel Libeskind

a. Experiential transfer of information
Daniel Libeskind’s name is associated with museums and projects associated with public memory. Libeskind is of the opinion that the text of architecture is read by the whole body, not just by the eyes or the mind and he promotes architecture that people can enjoy through their senses, rather than through their intellect (Booth, 2000:25). Similar to the way that a person can listen to a fugue by Bach without the need for an explanation of the thematic structure, a building should create an experience that does not have to be explained (Booth, 2000:25).

Design application:
The new satellite museum consists of exhibition spaces that promotes the display of objects in contemporary artistic ways. Information regarding the objects is obtained from labels and computer stations, but the spatial experience of walking on the ramp, through the spaces and experiencing objects in unusual ways, is read by the body in a manner that doesn’t need explanation and is open for interpretation.

b. Interactive transfer of information
Libeskind’s museum schemes continue an ongoing effort by architects to break away from rectilinear architecture in order to stimulate a more active role for the viewer (Newhouse, 1999:90). The aim of the Jewish Museum in Berlin (completed in 1999) is to tell the story of the relationship between German Jews and Non-Jews (Newhouse, 1999:91). Because of the subject matter and spatial narrative, the building works as a museum with or without exhibitions. The building is narrative architecture - not of the literal kind, but of a deeply abstracted materiality (Greenberg, 1999:24).

Libeskind calls the Jewish museum project ’Between the lines’, because it is about two lines of thought and order: one line is straight, but broken into fragments, while the other is a zigzag continuing indefinitely (Foundations of Memory, 2003:15). Galleries documenting the achievements of Berliners follow the zigzag. Another line, perpendicular to the street, slashes across the galleries. The spaces that are created by this line are empty, raw-concrete voids, free of artifacts and dimly lit by slit-like windows and skylights, representative of the absence of the Jewish lives lost in the Holocaust (Russell, 1999:78).

There is no final space that ends the story or puts it together for the visitor. The story should continue in the minds of the visitors. Visitors exit through the basement where they had entered or through the garden (Russell, 1999:79).

Design application:
The content and objects displayed in the satellite museum are less controversial than the Jewish museum, therefore the spaces do not have to create a similar emotive experience. The ramp structure creates an interactive experience where people can sit or linger while feeling surrounded by objects. The exhibition spaces offer interactive opportunities where lighting is used to throw shadows and create interesting focal points.

c. Entrances
With the Imperial War Museum North (IWMN) in Manchester, Libeskind aimed to create a space that was at once intimate and civic (Foundations of Memory, 2003:14). The concept that gives the building its form, are shards of a shattered contemporary world that is reassembled as an emblem of conflict. The curvaceous building consists of three interlocking shards that represent the elements of earth, water and wind (Williams, 2000:30).
The Air shard with its projected images is the dramatic entrance of the museum (Foundations of Memory, 2003:14). As the building is visible across strategic points of the city, the participatory experience of the visitors start before they enter the doors (Foundations of Memory, 2003:14).

Visitors enter the Berlin Jewish Museum from underground through the existing museum, and are then confronted with three corridors (Russell, 1999:79).

**Design application:**
A visitor would enter the Standard Bank Centre through one of the three existing entrances. The entrance in Van der Walt Street is identified as the main entrance and once inside the building the visitor becomes aware of the museum boundaries that are blurred with the boundaries of the commercial spaces.

The entrance onto the ramp is a pertinent space in the intervention as a visitor can make a choice to walk past or to use the ramp. The entrance of the museum on the mezzanine level is a dramatic threshold where there is a definite spatial distinction between the inside and outside of the museum.

d. **Path and visitor orientation**
The Felix-Nussbaum-Haus in Osnabruck, a monographic museum, houses paintings depicting the horrors of the Holocaust by Jewish artist Felix Nussbaum, as well as temporary exhibitions and information about the artist’s life (Newhouse, 1999:90). The museum is an extension of the existing Museum of Cultural History. The monographic museum’s ideal is to exhibit an artist’s work in spaces that compliment it and relate to the conditions in which it was created (Newhouse, 1999:90).

The Nussbaum museum symbolises the artist’s constant displacement and exile (Allen, 1998:10). The architecture evokes the experience of the Holocaust with intentional disorientations that differ from the neutrality of some contemporary museums (Newhouse, 1999:91). The museum provides a multi-sensory experience with sloping floors, slashed window slits and heavy steel doors (Newhouse, 1999:90).

The first part of the museum is the Gallery/Corridor; a long blank concrete wall tucked between two historic structures that also functions as entrance way (Newhouse, 1999:90). The Gallery/Corridor represents the artist’s interrupted life and is connected to the oak-clad exhibition area that houses the Nussbaum paintings. The two areas are connected to the existing Cultural Museum with a wide, zinc-clad suspension bridge.

**Design application:**
As opposed to the museums designed by Daniel Libeskind, the new satellite museum should not create disorientating spaces. A visitor should intuitively know how to move through the space and be aware of the museum’s position in the existing building.
Herzog and de Meuron

a. Dialogue with context
Herzog & de Meuron’s view of architecture as being less concerned with the gradual transformation of existing structures, can be applied to the adaptive re-use of buildings. Herzog & de Meuron’s architecture responds to what is already on the site (Kudielka, 2005:284), but instead of simply reflecting or absorbing their surroundings, the buildings differ from their surrounds, comment on them and even transform them in an irreversible manner (Ursprung, 2005:32).

The new Parrish Museum (located in Long Island, USA) has a long profile that houses two rows of galleries along a central corridor. The design fits gracefully into the surroundings, as the recessed concrete walls and the white corrugated metal roof creates an “agri-industrial” look that refers to the area’s farmland history (Cilento, 2009).

Design application:
The ramp structure of the new satellite museum alters the atrium space by providing an element on which a person can have a unique spatial experience of the atrium. The structure also changes the circulation in the building.

b. Flexibility
“Reflecting the changing nature of art museums, Herzog & de Meuron’s finely considered architecture serves as a stimulus to creativity rather than a static constraint.”

(South Bank Show, 2000:49).

The room sizes of the Parrish Museum can be adjusted with temporary walls, to account for the changing sizes of non-permanent exhibits (Cilento, 2009).

Jacques Herzog says of the museum: “Its clarity in concept, in combination with the straightforward construction details and building materials, can be seen as a process of purification in immediate response to the brief,” (Cilento, 2009).

The intervention that the architects did in the converting of the Bankside Power Station into the Tate Modern consists of a variety of spaces for the exhibition of art. The Tate’s director (Nicolas Santa) described these spaces as “a set of instruments which will be played in different ways by artists and curators in the years ahead,” (South Bank Show, 2000:48).

Design application:
The exhibition spaces of the museum have to be flexible to accommodate changing displays and to offer a curator options to work with. The concept for the design is a museum in flux, meaning that the spaces should be able to change according to differing needs. It is the interior architect’s duty to create spaces within which curators can design different exhibitions.

c. Path and visitor orientation
Herzog & de Meuron designed the VitraHaus in Weil am Rhein, Germany on the Vitra Campus in 2006. Two themes that appear repeatedly in their designs are visible in the concept for the VitraHaus: the archetypal house and the theme of stacked volumes (Architects Concept, 2010). The architects use the term ‘domestic scale’ to describe the proportions of the interior exhibition spaces. The main purpose behind the design of the building is the presentation of Vitra furniture as if they are in a person’s home (Argyriades, 2010). The interior scale allows people to feel at ease while moving through the building and it displays the furniture in a realistic environment.

“It is apparent that Herzog & de Meuron look at the world from the threshold between the fanciful and the scientific, the playful and the reverent, the metaphysical and the material. Their built work seems to exist on a horizon, where junctures can be made to appear between surface and depth, subtleness and the sublime, metaphor and reality, flux and permanence.”

- Nicholas Olsberg (Huiiban, 2002)
Visitors are taken to the fourth storey of the building by a lift, where the circular downward tour begins. The orientation of the houses is determined by the views of the surrounding landscape (Architects Concept, 2010). The interior spaces are complex due to the angular intersection of the different houses and also from the organic winding shape of the staircases. The interior walls are painted white in order to give priority to the furniture displays. The worm-like structure of the staircase sometimes reveals views of the visual relationship of the block houses and at other times it blocks the view, creating a fluctuating experience as a person moves down the stairs (Argyriades, 2010).

In the Tate Modern multiple entrances to rooms enable visitors to determine their own path through the museum (South Bank Show, 2000:49).

**Design application:**
Similar to the spaces in the VitraHaus, the exhibition spaces in the satellite museum are on a domestic scale. The scale is determined by the existing height of the floors of the building, but it also creates a realistic environment in which furniture can be displayed. Visitors follow the ramp downwards from the ground floor level to the lower ground floor. The spatial qualities of the ramp differ from the exhibition spaces on the mezzanine level.

d. Thresholds
The facades of Herzog & de Meuron’s buildings, as threshold between building and urban space, are given concreteness by means of images and carefully selected materials. These ‘ghostlike’ facades realise the oneness of monument and building (Ursprung, 2005:30). An example of this is the serigraphed curtain walls in the Ricola Industrial building (Moneo, 2004:391).

Herzog & de Meuron use the fact that architecture gives life to materials by allowing materials to express themselves for what they are. In doing so, new forms emerge (Moneo, 2004:365). The architects give importance to the way materials meet.

**Design application:**
Materials are used to define thresholds in the design intervention. Materials that let light through or are perforated speak of undefined thresholds, where solid screens indicate a defined threshold.

e. Dialogue between object and visitor (The exhibition of architecture)
Exhibitions give Herzog & de Meuron the opportunity to involve visitors in experiments that they otherwise would not have been able to do (Ursprung, 2005:21). The exhibitions are used to try out new procedures which can later be applied in buildings. Through these exhibitions a new system of representation and a new spatial logic are invented (Ursprung, 2005:26). At the 1995 Exhibition in the Centre Pompidou in Paris with artist Remy Zaugg, the centre was transformed into an atmospheric space saturated with white light, making it seem as if the plans and drawings had an aura of their own (Ursprung, 2005:25). The exhibition sets out to explore how used models and objects from the architects’ office can find their voice again (Ursprung, 2005:36). They ask the question: “Is there a form of presentation that makes sense of the objects and documents that captivate visitors, mobilizes their entire attention and all their receptive and perceptive faculties?” (Ursprung, 2005:34).

**Design application:**
Any object that is to be placed on display should be considered and questioned in order to enable the object to find its ‘own voice’. 
David Chipperfield

a. Dialogue between object and visitor
David Chipperfield is seen as a purist and a minimalist (Powell, 1996:20). According to Isabel Allen (2006), Chipperfield’s buildings defy fashion and have a quality of timelessness. Chipperfield insists that minimalism means, if anything, ‘an interest in the specific concerns of modernism. It is not a style, but a way of doing things simply and sensibly,’ (Powell, 1996:20). As opposed to Herzog & de Meuron, Chipperfield prefers to see his work as being reductivist, characterised by rigour and control (Powell, 1996:20).

The Folkwang Museum in Essen (designed in 2007) has a history of being looted and rebuilt, but has been brought back to life through the architecture of David Chipperfield (Connolly, 2010). The design for this single-storey museum speaks the same modern language as previous works by Mies van der Rohe. The ceiling-to-floor windows, planar lines and free-flowing plan all express Chipperfield’s dedication to quality and the craft of building. Chipperfield states that in recent years, art galleries have placed more focus on the building and not enough on the art. About the Folkwang museum he says: “Here, art comes first: you don’t have to walk more than a few steps to find it,” (Glancey, 2010).

Chipperfield says that “the architect’s task is to merge ideas and building crafts,” (Powell, 1996:20). From Chipperfield’s architecture, the assumption can be made that quality museum architecture should be timeless and be able to fit into unpredictable future trends. This timelessness does not mean that the building should not have a presence or character of its own; Chipperfield deviates from ‘Architecture of the image’ to create a museum experience that will inspire and welcome people for many generations to come. A minimalist approach to gallery spaces allows the building to become a backdrop for the artwork or artifacts on display.

Design application:
The designed museum spaces should become a backdrop for various types of installations.

b. Path and visitor orientation
The recycled glass and concrete space of the Folkwang Museum radiates calmness and is described by some as “resembling a meditation centre”. The building appears to be weightless when compared to the industrial surroundings (Connolly, 2010). According to Chipperfield a person would want to lose himself in the design, as well as being able to orientate himself (Glancey, 2010).

The Museum of Modern Literature in Marbach, Germany displays works of 20th century literature that includes various artifacts. The rational architectural language is created with a clear concept using solid materials such as fair-faced concrete, sandblasted reconstituted stone with limestone aggregate, limestone, wood, felt and glass (Chipperfield Classic, 2006). The influence of Mies van de Rohe is visible in this structure and the legacy of classicism is visible in the simplicity of the form and symmetry of the plan. The museum provides panoramic views over the surrounding landscape, connecting the interior spaces with the exterior landscapes.

Design application:
The descend of the ramp enables a visitor to the satellite museum to orientate in the building. The museum spaces are visually closed off from the urban context, but the type and content of the exhibitions should speak of the spirit of the place.
c. Entrances
As the visitor enters the Museum of Modern Literature from its highest point, pavilion-like interiors are revealed through their display and archive spaces, encouraging movement and awakening interest (Chipperfield Classic, 2006). Bookish warmth is conveyed with the dark timber-paneled walls in the exhibition galleries, illuminated only by artificial light (Allen, 2006:28).

Design application:
Artificial lighting contributes to the impact of the entrances onto the ramp and into the museum on the mezzanine level. Similar to the Museum of Modern Literature, the interior spaces leading from the entrance should encourage movement and awaken interest.

d. Thresholds
With the restoration work of the Neues Museum in Berlin, the architect had to deal with an existing structure that was heavily damaged during World War II (Jodidio, 2010:104). The original volume of the museum was restored with the use of pre-fabricated concrete elements and recycled bricks. New building sections create continuity with the existing structure and restore the original sequence of the rooms (Jodidio, 2010:104). Chipperfield followed the guidelines of the Charter of Venice by ‘respecting the historical structure in its different stages of preservation’. A delicate balance is created between renovation and updating the existing space while preserving the spirit of the museum. Chipperfield had to deal with the thresholds between the existing building and the new intervention in this project.

Design application:
The thresholds between the design intervention and the existing building are not emphasized, but rather hidden in a sense. Where the new meets the old, the new covers the old or is connected in such a manner that a person is not immediately aware where the old ends and the new begins. This relates to the detail design and resolution on construction level.

2.3.3. Conclusion
Through an investigation of five aspects evident in various museums (entrance, thresholds, path and visitor orientation, transfer of information and dialogue between object and visitor), the author has gained insight into the design of museum spaces. The knowledge gathered through precedent studies is reflected in the design that is presented in the chapters 7 to 10 in the document.