Researching the Visual Qualities of Exhibition Design through Experimental and Cross-Disciplinary Methods

This paper is based on my ongoing PhD research, particularly on the questions of practice-based research combined with theoretical analysis. In this paper, I will try to briefly clarify and give some examples of the use of experimental and crossdisciplinary methods in design research. I will start by analysing the relationships between museum objects and cultural history museums based on the assumption that the practices used for representation create meanings. I am particularly interested in how meanings are built into such visual elements of exhibition design as light, colour and materials. The process of meaning creation is semiotic in nature and exhibition design always contains several layers of meanings, which exist simultaneously in a spatial construction. In this paper I will focus on spatial meanings in exhibition design.

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INTRODUCTION

This research was motivated by my curiosity towards museums. What relationship exists between cultural history museums and museum objects? What does a museum represent? As a research target, museums have been examined from several viewpoints, including the pedagogical, the historical and the ideological.[1] In terms of cultural history museums, these viewpoints do not usually concern the question of visuality. My own approach is different and formed from the basis of my background education as an artist and a designer. My material-based knowledge of glass and practices in the visual field strongly influence my interpretation of perception and experience. Therefore, my research concerns the visuality of exhibition design in cultural history museums. I am particularly interested in how meanings are built and created through visual elements in exhibition design. First of all, I will analyse the relationship between an object and a museum, based on the assumption that representation practices create meanings. This will lead me to research the meanings created by cultural history museums in exhibition design.

In my research I question the objective approach adopted by modern museums, which assumes that the perception of knowledge is unified and transferable.[2] Typically, modern museums aim towards "truth" [3]. In contrast, I am interested in an open subjective approach, where there are possibilities for multiple interpretations of the exhibited objects. I emphasise the role of visuality and subjectivity in the meaning creation process when analysing exhibition design in cultural history museums. Thus it has been natural for me to examine the working models of exhibition design partly by making my own experimental museum installations. Using my own fictive museum exhibitions as analysis subjects has made it possible for me to observe the construction of meanings from an insider's perspective.

The visual construction of an exhibition communicates values and meanings. Museum objects placed in a particular space illustrate and represent the themes or stories of the exhibition. In other words, museums construct meanings, not only through the objects they select but also through exhibition design. By doing so, museums actively comment on and create world views from the perspective of their own time and ideologies. Exhibition design transforms the meanings of objects from other cultures and periods within the framework of the current time. Museum objects communicate through exhibition design, reflecting contemporary visual working practices. Museums construct visual world views in their exhibitions, and this forms the perspective of my research, which is concerned with visuality. Accordingly, when an object or a product is exhibited in a museum, it is not in a vacuum. Even a modernist "white cube"[4] creates meanings and historical references in relation to the object. The artefacts' meanings vary according to the context which they are shown, and as such, the process of

meaning creation is semiotic in nature. Through my research, I wish to promote a stronger emphasis on the construction and analysis of meanings in cultural history museums.

CROSS-DISCIPLINARY METHODS

My research on museums is based on the definition of the museum institution as provided by the International Council of Museums (ICOM): "A museum is a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment." I do not wish to question the concept of the museum in itself, but concentrate only on exhibition design in cultural history museums.

As most current design research [5], this study is crossdisciplinary in nature. As I pointed out above, I have analysed the ideas and notions structured by museum exhibitions in my research. The aim of this research was to provide a critical study of exhibition design. The subject of my research - the cultural history museum - is by nature a complex historical institution, which I believe requires examination from the context of various fields. I have found suitable methods and concepts mainly in the fields of design semiotics, museum studies, art history and practical artwork. Using methods from various disciplines, I have particularly tried to grasp a view of museums which is biased towards visuality. The tools for carrying out this research can be grouped into three ways of examining cultural history museum exhibition design: theoretical literature (reading), visits to exhibitions (experiencing) and my own art installations (making). I want to emphasise that all these working methods overlap and were equally important during the research process. They also functioned as source material for analysis.

Museum objects are not always exhibited in the same way; neither does their interpretation remain unchanged. Thus the associated meanings are connected to time, place and culture. This interpretation process, semiotic in nature, can also be applied to the analysis of meanings in a museum context. This is why I have adopted philosopher Charles Sanders Peirce's (1839-1914) concept of the sign as one theoretical starting point for my research. The concept of the sign is central to Peircean theory. The sign is seen as a triadic model, with the subtypes of symbols, indices and icons. From this semiotic point of view, interpretation is seen as a thought process where meanings are in constant movement - in other words, meanings are not fixed. However, according to design semantics researcher Susann Vihma, certain meanings last longer than others, which is characteristic to semiotic design research.[6] Museum visitors can choose to be aware of meaning construction, which is always affected by the content created by the exhibition designer. In my research I have created and tested different surroundings for museum objects. For my fictive museum installations I built environments which construct meanings in certain ways, which I will describe briefly in this paper. By making concrete physical installations as part of the research process, I (as a researcher) actively take part in the object of my research rather than examining it from the outside.

INSTALLATIONS AS TEST SPACES

During the past nine years I have been dealing with the museum theme in my own work as an artist. My interest lies in exhibiting the presentation. The three fictive museum installations made as part of my dissertation acted as test spaces for the interpretation of museum objects. These installations were "Imprisoned Setting" (2000) at the Design Museum, Helsinki, "Memories from a Curiosity Cabinet" (2001) at the Vantaa Art Museum and "A British Noblewoman's Collection from 19th-Century India" (2003) at Kiasma Museum of Contemporary Art, Helsinki. Through these test spaces I have been able to approach the questions of visual semantics in a concrete physical space and location. By simultaneously visiting existing cultural history museums, studying relevant literature and making my installations, I have built spaces which can be experienced as cultural history museum environments. That is to say, I have imitated the way in which authentic cultural history museums work and combined this with the effect of my own visual way of making art.

The role of cultural history museums is connected to transferring experiences from history and other cultures to the present time and place. One operating model is to evoke atmospheres and memories in the museum's visitors. "In the modern age, the function of the museum is to research and demonstrate the social and cultural context of artefacts and to foster relationships between objects and people."[7] But how are histories elicited to the exhibition visitors: as stories, text, sounds or maybe interactive workshops? Different ways of working can evoke different meanings, and exhibition designers need to be aware of this.

Making exhibition designs is about communication. My research approach is concerned with the process of constructing environments. In other words, I am researching on how to create meanings, communicate, through the construction of exhibition design. During and after this process I have analysed the meanings which I created through critical and reflective methods. In artistic practice, visual communication choices are made in the decisions and insights regarding the relationship between the current period in general and one's own personal time. The surrounding world affects the designer's decisions with topical visual elements, which a designer can question and use in his/her work. It is not essential to form stable viewpoints; the aim is rather to express constant movement. This kind of thinking differs from the way in which cultural history museums aim for the objective "truth", whilst still changing the original meanings of objects by placing them in the museum environment.

The most interesting aspect of artwork for me is to conceptualise and visualise meanings. It is a difficult and fascinating task to plan exhibition designs, finding places for the various details in the process. Prior to the opening of an exhibition, it is not completely clear where my experiments have led to. Despite all the planning, three-dimensional spaces are always surprises once complete. It is one thing to experience a space in reality and another entirely to look at sketches or even a three-dimensional model of the space. After the opening of an exhibition, I leave its interpretation to the museum visitors. As an artist I only construct a visual environment for interpretation. As a researcher I am interested in studying and analysing how meanings are constructed in a physical space. This approach gives insight into one authentic and subjective interpretation. This method can be considered different from user experience research, which is currently a much used method in design research. However, I believe my approach to be suitable when researching such a complex and heterogeneous subject as the museum and its way of constructing meanings. One of my main aims is to bring forth an alternative way of analysing museum exhibitions. It is also important to remember that the working methods of museums as institutions have undergone great changes in recent years, and that artistic practices in cultural history museums have attracted increasing interest.[8]

In any case, exhibition design contains several layers of meaning which exist simultaneously in a spatial construction. In textual research it is possible to separate them and analyse them as themes. As part of my analysis, I found that similar themes recurred in all three installations I created for test purposes. These themes have arisen from practical work and its analysis. It is my aim to provide a brief insight into one example of the analysis of practical work, which is connected to both process and communication [9]. I will outline the seven themes which are crucial to the meaning-creation process in visual exhibition design. In this paper I will focus on spatial relationships. My research work, to be published later this year, also analyses existing cultural history museum exhibitions and other artists' exhibited work. Even though this study is concerned with three particular exhibitions, the analysis method could be applied to other similar cases, such as theatre set design. However, the central focus of this research is on the presentation is authentic museum objects, artefacts, unlike for example in theatre.

1. FICTIVE MUSEUM OBJECTS

The activities of cultural history museums are based on the "power of the real thing" [10], the museum object. The object functions as a centre of attention in my own installations as well. The surrounding elements which affect the meanings of the museum object are constructed in the exhibition's design. For my installations, I made my own museum objects of glass. When analysed from a semantic point of view, they are metaphoric museum objects in which all the semantic aspects are present simultaneously. Firstly, the objects are iconic by resembling museum objects I have seen and drawn in museums I have visited. Secondly, they are indices, as the marks on the objects reflect the unique lost-wax glass casting technique in which they were made. Thirdly, they symbolise museum objects in general, even though they were specifically made for exhibiting. Thus their original meanings do not change, in contrast to those of authentic artefacts from different times or cultures, which are placed in a museum environment.

I have been playing around with the role of my glass objects. The artefacts I made belong to a basic category of museum objects: they are curiosities. In the seventeenth and eighteenth centuries collecting curiosities was a privilege enjoyed by only a few. The atmosphere of a curiosity cabinet is connected to a desire to know, find and define.[11] This atmosphere has been a source of inspiration for many other artists as well, including American Mark Dion (born 1961), American Fred Wilson (born 1954) and British Damien Hirst (born 1965).

2. VITRINE

The role of the vitrine or showcase is to protect museum objects, but also to raise the cultural value of the artefact. The vitrine is closely related to the museum object, as many objects are never shown in the museum context outside a vitrine. In museums, internal categorisations are presented through exhibition design. Categories can be conceptualised metaphorically as containers [12] which hold knowledge, feelings, social structures, etc. A vitrine is an everyday and common part of exhibition design, but little attention has been paid to it in a research context.

In my research, I have focused on the vitrine from a semiotic point of view, for example by playing with its conventional roles in my artwork. In my second installation, "Memories from a Curiosity Cabinet", the vitrine took on an active role, being part of the object and creating new meanings in the relationship between museum and object. In the fictive museum object "On the Way to the Museum" (2001), the vitrine defines the borders of the iconic suitcase and marks it with transparent glass edges. Only the handle represents the original cultural history museum artefact (see Figure 1).

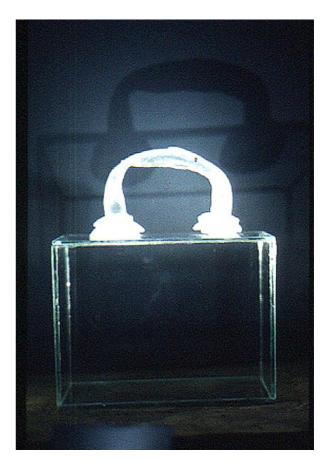


Figure 1: The fictive museum object "On the Way to the Museum I" questions the role of the vitrine.

3. STORIES IN EXHIBITION DESIGN

Museum objects communicate in an exhibition with the help of stories. "Museum pedagogy is structured firstly through narratives constructed by museum displays and secondly through the methods used to communicate these narratives."[13] These stories embody elements of power and political and social viewpoints. In my own installations the interpretation of the past is openly subjective, unlike most cultural history exhibitions, where the aim is to be as objective as possible. The starting point for exhibition design is always the time period in which the designer is found when designing.[14] The challenge for exhibition designers is to make an interesting visual interpretation of the story created around the exhibited object. We can reach to the past or other cultures only through our own perspective.

The stories of exhibition design are connected to the visual choices the designer makes. Certain colours for instance can suggest specific kinds of atmospheres or particular material choices, whereas a certain finish will refer to a particular period. Designers need to be aware of the semiotic references in the details of their designs. As an example, I connected a deep red colour to nineteenth-century British colonialism (see Figure 3). I had observed similar colours being used for example at the British Museum or Sir John Soane's Museum in London. Furthermore, red can create associations to the passion that a collector feels for his/her collection of objects. Certain semantic associations are stronger than others, depending on the nature of the sign – in this case the colour can be seen as a symbolic sign. I have mainly tested the possibilities of storytelling through visual elements, focusing less on supporting texts. I am interested in researching communication through visual rather than textual elements.

4. THE SIGNIFICANCE OF ATMOSPHERE

The narratives tune the visitor to the atmosphere of the exhibition. The stories give viewers their first impression of the exhibition, often before entering the physical exhibition space (through other media like articles, websites or advertisements). However, only when the visitor enters the physical space is it possible to experience the spatial atmosphere. "Atmosphere is a prototypical 'between' phenomenon. Atmospheres fill spaces; they emanate from things, constellation of things and person. The aesthetics of atmospheres shifts attention away from the 'what' something represents, to the 'how' something is present."[15] The feeling of atmosphere moves attention away from the real or fictive museum objects and emphasises the overall exhibition design in the meaning creation process. An exhibition designer can emphasise the atmosphere of the exhibition design to influence the feelings of the visitor. This is connected to an aesthetic experience.

The starting point for my own work is to decide what kind of an atmosphere I want to create. In my installations I have wanted to question Finnish modernist architecture by using historical atmospheres as part of the stories around my fictive installations. Thus I have used the aesthetics of historical museums as the framework for my installations. This decision examines the atmospheres of historical exhibitions in relation to contemporary exhibition design. In my research, I have found that atmosphere is a significant element in exhibition design, although it has not been analysed in this context in the museum field.

The actual concrete elements of lighting, colour, materials and texts create the atmosphere of the exhibition. Atmospheres can therefore be constructed, produced and created. In my installations I have used colour to create a unified atmosphere in museum construction. Strong colours such as red are less common in modern Finnish exhibition design than for instance in Britain, although I have noticed some changes in this situation in recent years. In my third installation connected to this research "A British Noblewoman's Collection from 19th-Century India" I used a single colour on the high walls to contrast with the whiteness of the contemporary art museum, the "white cube". Strong use of colour can immediately persuade the visitor to make a contrast between the white cube and the present installation. This can be seen as an iconic sign, which reminds us of the similarity of cultural history museums in contrast to the whiteness of art museums. Colour can act as main visual element to create associations in the atmosphere, which affects the exhibited artefact as well.

5. SPATIAL INSTALLATIONS

Museum objects are often viewed in a vitrine, a container placed in the museum space. The story of the exhibition leads the visitor through the museum space, which thus embodies movement. A three-dimensional space requires movement and observation from various perspectives to grasp the spatiality. Often a space can look completely different from a far end. When I visit museum installations, I move around in the space to find interesting points of view for making notes. Spatial constructions can lead the visitor's movement in a certain way and often there is even a suggested route for visitors. In my own installations I have tried to provide very little written information for the visitor, in order to emphasise the visuality of the associations which form the experience.

From the perspective of design semantics, it is not irrelevant whether a museum object is shown for example in a modern building or in a decorative nineteenth-century stone mansion. According to Finnish researcher and artist Maarit Mäkelä, "the choice of an exhibition space is an intuitive, personal and sensitive decision, which affects the interpretation of the viewer."[16] It is important to emphasise that different buildings evoke different atmospheres.

The installations I built were experiments – visual, threedimensional tests of my ideas. In recent years I have worked with a particular space in mind, which enables me to take advantage of the meanings connected to that particular space. As the central question in my research deals with the relationship between object and museum, I made my glass objects not only fictive museum objects but also as parts of spatial units. I wish to focus on spatial thinking, because an installation is always connected to a space and no longer exists after being dismantled. It is a temporary construction. When the exhibition ends, borrowed objects are returned, the actress goes on to work in another production and the flooring is packed up. Only the glass objects and documentation (notebooks, models, photos and videos) remain.

A space is the context in which an installation is planned, realised and experienced. Most chosen spaces have restrictions or requirements placed by the museum's management, for example in relation to costs. Although my installations form part of a study, they also belong to the "free market" of the art world. A museum is both a place and a space. A space is a visual experience connected to atmosphere and physical movement. A place is a social, cultural and political state. A space exists in a place. To consider spatiality as part of the meaning creation process departs from the working model of cultural history museums, by which museum objects are originally made for a context other than an exhibition.

Therefore the nature of temporary spatial constructions as part of research can also be problematic. My installations, for example, no longer exist and cannot be viewed simultaneously with the research text. (6 evaluators named by the Research Board of the University of Art and Design, Helsinki, however, made notes on the installations as part of the PhD process.) Therefore, the research text needs to exist independently, with only the help of photographs, similarly to any academic analysis. The presentation demands care in explaining the research objects to readers, as the exhibitions no longer exist in their original form. This problematic situation particularly resembles art historical analysis, where the academic text is often separate from the research target. The difference here is that the author herself is the artist, which work is the target of analysis.



Figure 2: "Memories from the Curiosity Cabinet" installation, Vantaa Art Museum. (Photo: Jefynne Gimpel)

5.1 CONSTRUCTION SITE HUT AS FICTIVE MUSEUM

At Vantaa Art Museum, where I exhibited "Memories from a Curiosity Cabinet", I was fascinated by the twofold nature of the place. There was a clear modern exhibition space – a white cube – and a theatrical space – a "black cube".[17] I placed a construction site hut containing my fictive museum in the white cube and a video installation about the making process in the black cube.[18]

I wanted a space which could be manipulated completely to serve my idea of the "Memories from a Curiosity Cabinet" installation. As I did not want any disturbing natural light, the space needed to be totally enclosed. I also needed a relatively small and compact space, a "neat package", where I could install the fictive museum. My keywords were absurd, old/new, rough/fine, chaos/order and recognisable/unrecognisable. A construction site hut seemed to fit my purpose well. The City of Vantaa lent me a site hut to which I made some alterations; shelves, cables and lamps were removed, the walls were levelled and painted, and a floor was installed. Thus there was a new museum inside the Vantaa Art Museum, containing the collection of a fictional collector, Carla Maria de Welle (performed by actress Tuula Niiranen). The graffiti on the outside of the hut connected it to contemporary urban culture (see Figure 2). The everyday, common exterior presented no clues as to the lit glass objects inside the hut. The site hut symbolized a marginal space with possibilities of change. There was also a metaphor of movement connected to the site hut, as a counterbalance to the stagnation of the museum institution.[19] By connecting a contemporary site hut with a fictive cultural history collection, I pinpointed the temporal contrast which exists in museums. From a semiotic point of view, the site hut creates indexical references to the process of building. It symbolizes an incomplete process. This installation was also a comment on the incomplete nature of the museum institution. A cultural history museum is never finished, and the meanings it creates are always under construction.

The space of the site hut consisted of three parts: the exterior; the exhibition space inside the hut, where my fictive museum objects were on show; and a storage space, where the fictive collector was working and where visitors could not enter. The exhibition space inside the hut was cramped. By choosing this solution, I wanted to create the atmosphere of an eighteenthcentury curiosity cabinet, full of artefacts, in which movement is difficult and restricted to a handful of people at a time. I wanted to have several objects on the shelves to avoid the feeling of minimalist and modernist exhibition design. According to my own visions of eighteenth-century collections, they were orderly but arranged in quite a subjective way according to each collector's interests. This was the atmosphere I tried to create.

5.2 MUSEUM AS SUBJECTIVE CONSTRUCTION

The site for the third installation in my PhD research project was Studio K in Kiasma. As a physical space it was demanding, but it interested me for two reasons: firstly the concrete white cube created by the height (approximately 9 m) and square shape of the space; secondly, the possibility to view the "A British Noblewoman's Collection from 19th-Century India" installation from a balcony above. This was crucial for my visual idea of "a museum as a subjective construction" and the construction of the museum is revealed in its simplicity. There were a further two doors into the space. The exterior of my fictive museum installation was rough, symbolically representing all cultural history museums. A museum is a subjective construction, always built by someone, although museums fail to emphasise this aspect to their visitors.

Looking down from the balcony, viewers could observe other visitors as part of the installation (see Figure 3). A metaphorical parallel could be drawn to a doll's house.[20] Some visual elements were left at the back of the walls, including a scale model of the construction. Usually cultural history museums are not displayed as unfinished constructions, because their aim is to have neat and clean surfaces which reflect their "objective" world view. Inside the installation there were a series of spaces: the first entrance with a corridor, the main gallery, the painting gallery and a second entrance with a portrait and a mirror. Both entrances created the illusion of a fake perspective, which made the spaces seem longer than they were. The walls seemed bulkier from the inside, whereas viewed from above you could see how thin the chipboard walls actually were. As in any design process, contemporary



Figure 3: "A British Noblewoman's Collection from 19th-Century India" (2003) installation in Kiasma, Museum of Contemporary Art, Helsinki (Photo: Minna Kurjenluoma)

recommendations and restrictions such as wheelchair access were taken into consideration.

Besides its physical and social perspectives, from a cultural point of view Kiasma is a challenging place due to its position as part of the Finnish National Gallery. My aim was to make the most of the white cube in my artistic practice and research. Therefore I was not only an outside observer, but an active producer and questioner of meanings. Temporarily, I created a connecting thread in the history of museums. I used the whitecube environment as a place for building references between contemporary art and design, cultural history and natural history museums, to remind us of their common history before the nineteenth century. This is a recent phenomenon, which began to appear in the early 1990s in some museums that combine various museological disciplines, such as Teylers Museum in Haarlem, Holland, or MAK (Austrian Museum of Applied Arts) in Vienna. My installation was also part of a larger exhibition called "Process" which emphasised the nature of process in contemporary art.

6. SHOWING THE PROCESS OF EXHIBITION-MAKING TO THE PUBLIC

In all three installations connected to my PhD research, I displayed the process of making and constructing meanings to exhibition visitors. In the first installation, "Imprisoned Setting", there was a vitrine outside the actual exhibition space displaying the work process with tools, pictures, etc. In the second installation, "Memories from a Curiosity Cabinet", a video installation described the work process. As part of the final installation, "A British Noblewoman's Collection from 19th-Century India", I held six workshops for the museum's

visitors, both children and adults. They created their own fictive museum objects from various materials. The objects were then exhibited in a large vitrine close to my own installation. Their placement in the showcase was similar to an overcrowded warehouse vitrine or a nineteenth-century vitrine, such as those in the Pitt Rivers Museum in Oxford, UK.

The aim was to give the public the opportunity of creating art whilst providing them with a glimpse of the working methods of the museum as an institution. Showing the process of exhibition-making and letting the audience participate in it opens up the operating models of the museum and demonstrates various ways of constructing meanings.

7. VISUAL INSTALLATIONS AS TOOLS

Through the analysis of my installations I have found various layers of elements that physically affect the meaning of the museum object. The conscious creation of meanings through visual elements can be studied by making actual installations and analysing their semantic meanings.

The history of museums was one of the themes for my installations. The viewpoint was openly subjective, not the traditional one adopted in cultural history or museology. Rather, I have sought to create atmospheres and visual ways of exhibiting the museum object from chosen historical periods. The use of history as artistic inspiration is like a treasure chest, which has fascinated me for years. To then turn this partly irrational and emotional knowledge into installations, I had to solve many problems. As in any design process, there were several things to decide and plan. Which exhibition space is suitable for my idea? How is the timetable to be solved? Who will take care of the exhibition's graphic design, website, information and PR? Where do I find partners? As an artist, designer and researcher, I had to keep my vision clear in my

head through sketches, notes and scale models, and develop it from there. I also needed to fill the role of producer, negotiating about exhibition spaces, financing and sponsors, hiring the actress, photographer and lighting designer, making the glass objects, writing exhibition texts, compiling invitation lists, informing about the exhibition to my own interest groups, and organising the building, dismantling and transport of the exhibition together with museum staff. At the realisation stage there are many questions and problems of equal importance to solve for a single artist and museum.

These visual installations have acted as methods and materials for my research, as I have been able to test my ideas in a physical and real space and place. The three installations acted as test spaces for my research questions on the relationship between the museum object and the cultural history museum. Theory and art have intertwined: theoretical literature, museum visits and my own installations have influenced each other. My analysis is based on my own interpretation. I have researched the value of subjective interpretation in exhibition design and found it to be a valuable way to communicate. The installations have played their part as research tools and methods. Once an installation or exhibition design is open for visitors, it suggests certain meanings which visitors interpret from their own perspectives. The process of communication is complex and I have only analysed the construction of meanings from the point of view of practice-based research, not for example from that of visitor experiences.

THE INTERPRETATION OF INSTALLATIONS

An exhibition designer makes the visual layout for an exhibition. Interpretation is connected to knowledge. "To know must therefore be to interpret: to find a way from the visible mark to that which is being said by it and which, without that mark, would lie like unspoken speech, dormant within things."[21] Interpretation changes in time. Each visitor has his/her own background education, culture and situation, which affects the interpretation process. Therefore, museums cannot have a single goal in their exhibition design. If exhibition design were likened to a metaphor, it would not be important to aim for a single interpretation; metaphors allow different interpretations from different people.[22] This kind of thinking can be applied both generally to exhibition design in cultural history museums and specifically to my fictive museum installations. Contemporary art encourages the creation of multiple interpretations. This kind of thinking is not, however, encouraged in cultural history museums. Art is traditionally connected to emotions, whereas historical texts, for instance, relate to academic knowledge. Both inevitably change with time.

Installations are temporary in nature, which gives me the chance of using them as test spaces. This temporary nature and the use of a series of three exhibitions enabled me to avoid the feeling of authority, which marks the meanings and working habits of history museums. Temporary installations do not have the same authority as permanent monuments or exhibitions, which stay unchanged for years. It is fascinating to mix fictional elements with so-called facts. In art, this is relatively easy, as art has achieved a subjective status, unlike museums. In my research I strive to question this. It is important not to define truth in too narrow a way, as atmosphere and emotions are equally important in storytelling. A fictive construction can tell a story in an equally truthful way, but from a different angle. However, I want to emphasise the role of the exhibition designer, who decides and builds the frames for interpretation. It is the setting where the associations come from. As I have tried to explain briefly in this short analysis, it is possible to form and direct the visual elements, yet it is not possible to fix meanings. In Peircean design semantics, the emphasis is on constant movement of meanings between the sign and the interpreter. A museum is an active cultural force and opinion leader. An exhibition as a whole acts as a sign. It is an active producer of meanings.

The visitor experience in a museum is embodied in nature, where information is received not only by the eyes but by the whole body. My installations as such belonged to the field of art and design, but my subsequent analysis has made them a part of design research and particularly the practice-based research tradition, which is a new discipline whose methods are just being discovered. The installations and the research text form a unity, although they cannot be observed simultaneously. During the research process, both the practical work (installations) and practice-based research (installations and analysis) have developed from assumptions made on methods and conclusions.

In this paper I have examined some aspects of practice-based spatial exhibitions as part of research. They interact with the research text and analysis. I have used ideas from museum visits and theoretical literature to construct the installations. The installations demonstrate, question and test ideas in a three-dimensional space, and can later be analysed together with theoretical texts and notes from museum exhibitions as a combination of applied semiotics and practice-based research. This adds a new perspective to museology and discussions on design research.

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REFERENCES

1. Cf. e.g. Aurasmaa 2002, Barringer and Flynn 1998, Bennett 1995, Hooper-Greenhill 1992, 2000 and 2004, Impey & McGregor (1985) 2001, Pearce 1992 and 1994, Pomian 1990.

- 2. Hooper-Greenhill 2000: p. 127.
- 3. Aurasmaa 2002: p. 28.

4. The concept of the white cube is connected to the changes which took place in art galleries in the early twentieth century. Exhibition practices changed from nineteenth-century darkness and close hanging in rooms to white gallery spaces without shadows, dedicated to the techniques of aesthetics. Cf. O'Doherty (1976) 1999: p. 15. The early concept of the white cube originated at The Museum of Modern Art (MoMA) in New York. For more information on MoMA's exhibition history, cf. Staniscewski 1998. By the 1970s and 80s it became clear, however, that not even a white cube is a neutral space. Cf. Corrin 1994: pp. 3-4.

5. Cf. e.g. Desmet 2002, Karjalainen 2004 and Mäkelä 2003.

6. Susann Vihma's lecture on "Semiotic in Design" at the University of Art and Design Helsinki, 11 January 2005. Also cf. Vihma 1995, 1998 and Vihma, Susann: "Design Semantics and Aesthetics" in Jonas, Wolfgang (ed.): *The Basic Paradox* www.verhaag.net/basicparadox/fuebersicht.php (web publication)

7. Hooper-Greenhill 1992: p. 19.

8. Exhibitions such as "The Museum as Muse. Artists Reflect" at MoMA, New York, 1999; "Give&Take" at the V&A, London, 2001; or Fred Wilson's installation "Site Unseen: Dwellings of the Demons" at the Museum of World Cultures, Gothenburg, 2004.

9. Biggs 2004: p. 18. Biggs claims that the term "practicebased research" applies to both process and communication.

10. Pearce 1994: p. 20.

11. Pomian 1990: p. 55.

12. Lakoff & Johnson 1999: p. 20.

13. Hooper-Greenhill 2000: p. 3.

14. This can clearly be seen in some exhibitions which have survived wholly or almost wholly unchanged since the eighteenth or nineteenth centuries, e.g. the Pitt Rivers Museum in Oxford, Teylers Museum in Haarlem, Holland, or Peter The Great's Kunstkammer in St. Petersburg.

15. Böhme 1998: pp. 112-115.

16. Mäkelä 2000: p.40.

17. Finnish theatre director and researcher Annette Arlander writes about the black cube, which is never neutral but associated to a technical, modern and gloomily hygienic atmosphere. Arlander 1998: p. 24.

18. The video installation "Aikaviila" ("Time File") was created in collaboration with Finnish artists Jaana Brick, Petra Koivu and Merja Ranki.

19. Rönkkö 1999: p. 284.

20. In an exhibition review the installation was interpreted as a big doll's house: "The view from the balcony finishes the gaze of power." Kivirinta 2003.

21. Foucault 1970: p. 32.

22. Vihma 1995: p. 87.

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