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### Cultures of light : contemporary trends in museum exhibition

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## INTRODUCTION

Seeing light is a metaphor for seeing the invisible in the visible, or seeing things in an intelligible form that holds all that exists together but is itself devoid of sensible qualities (3).<sup>1</sup>

Cathryn Vasseleu, *Textures of Light*

In this study, my areas of investigation are the art and science of light in a museological context. Light can affect human perceptions and emotions, focus our attention, create a visual mood and may be used to perform an investigative function. It can also be employed as a tool to represent an act, and as a medium. These are the cultures of light that I will investigate in this study. The central question I explore in this study is how do museums operationalize the agency of light? I hypothesize that agents deploy light in such a way that it not only transmits messages that are sometimes narrative, but also, in a somewhat coded way, has a formative function. I will argue that light is being used in innovative ways as a tool by museum staff, artists and other agents to facilitate and guide interpretation. In this study I investigate light as a cultural concept from a cultural-analytic perspective. I extend the wider academic discussion of light from an artistic medium to an exhibitionary tool, then to the more specific uses of light as an investigative tool. I conclude the study with the exhibitionary medium of shadow, or the absence of light.

The two fields of inquiry from which my study and analyses emerge are cultural analysis and museum studies. In addition, the methods I follow are interdisciplinary and are drawn from related fields of practice such as art history, narratology and theatrical lighting theory. I understand the institutional apparatuses and technologies of museums from a post-structuralist perspective of relationships between power and knowledge. That is, I look closely at the discourse of “culture” produced and consumed by a particular subject position, that of the visitor or viewer of museum exhibitions. In this introduction, I will set out my motivations and strategies for bringing them together in the four chapters that follow.

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<sup>1</sup> “The distinction between visible and invisible light, also known as ‘lux’ and ‘lumen’, is an ancient and ambiguous one. ‘Lumen’ refers to the physical movement of invisible rays of light whose perfect linearity is the essence of illumination and requires no organ of sight. [...] On the other hand, ‘lux’ refers to the phenomenon of light, or light as it is experienced in sight, composed of colour, shadow and visible qualities [...]” (Vasseleu, n.1, p. 129).

What motivated my embarking on this research is the perceived importance of underscoring, or spotlighting, so to speak, exhibition lighting. This, in my opinion and that of others, is often not addressed early enough during the design process. This neglect can, at the very least, be responsible for missed visual and interpretive opportunities and, at worst, could lead to degradation and eventual destruction of the artworks and artefacts, an effect the practice of exhibition is designed to avoid. I argue that light is not an empty medium but full and therefore always in some way invasive in the sense that it always guides the interpretation of artworks and displays. I attempt to extend the general discussion of light within the museum environment by demonstrating different ways in which the tool of light can be deployed in the service of the artist, curator, author and most importantly, the viewing public. I will stress the meaningfulness of light by discussing several artworks that play with the impossibility that light is not invasive, and can serve other goals.

My second motivation to undertake research in this area stems from my interest to investigate the as yet unexplored area of seeing light, as seeing the invisible, and what it means for bringing this metaphor into the context of the museum. Light holds a special fascination for me because of its physical properties and manifestations. I am interested in both its psychological and perceptual affects. That is, in the way the phenomenon of light, with all its nuanced radiating facets, affects human consciousness. The quality of light of a given situation affects me to a great degree. I can feel, that is, have an embodied experience when I am subjected to the staged lighting conditions that appear in institutions such as museums. To theorize this experience of light I give an account of the concept of light from a phenomenological perspective so that we may understand this ubiquitous concept in its fullest implications.

In his *Phenomenology of Perception*, Maurice Merleau-Ponty develops the concept of the body-subject as opposed to René Descartes' disembodied subject of the *cogito*. Through perceptible bodily consciousness, the world and the human body are intricately intertwined. Merleau-Ponty argues in "The Intertwining – The Chiasm" that there is a crossover taking place, constantly, weaving a texture of visibilities and invisibilities that both the viewer and the world share through a consciousness of "lateral, transversal" synergy (141). Merleau-Ponty's idea of chiasm is that there is in vision, no such thing as us on this side and the object we look at on the other, but there is something reciprocal about vision as such: somehow, what we experience as "our" vision lies at the side of things. This is what he calls the Flesh. Suzanne Cataldi argues that "[i]n the Flesh ontology, the intertwining at the chiasm refers to the relation of the two sides of bodily being" and that "the 'chiasm' is not only the 'bond'

between perceiving and perceived; between the two sides of ‘Flesh’ – it is also a ‘medium of exchange’ between the self and others” (68-69). That is, the site of bodily flesh is a permeable boundary through which, as Merleau-Ponty argues, light may be sensed. “It is a knowledge of light which does not come through the laws of perception, but through the correspondence between the appearances of things and our kinaesthetic unfolding as bodies in a world” (1962: 310). In his “The Thing and the Natural World” Merleau-Ponty argues that “the lighting directs my gaze and causes me to see the object” (310). This “carnal light,” as Cathryn Vasseleu expresses it, is “not a transparent medium with its own clarity. It is the cloth or interlaced fabric of an anonymous visibility” (45). With all its sensibility, our experience of light comes into being, as Merleau-Ponty maintains, “within the framework of a certain setting in relation to the world which is the definition of my body” (1962: 303). At the nucleus of Merleau-Ponty’s philosophy is a persistent argument for the foundational role that perception plays in understanding the world, as well as engaging with the world. This “primacy of perception” and his notion of light are particularly relevant for my study because light, I will argue, is perceived by the body and affects the way we understand and engage with the world.<sup>2</sup> My approach differs from his view in that I take light as my origination point, whereas Merleau-Ponty positions the body as his point of departure.

The epigraph to this introduction, taken from Vasseleu, brings the distinction between visible and invisible light to the fore. On the one hand, invisible light, or lux, is the subjective experience of the inner light of our bodies which we understand but cannot see. Visible light or lumen is, on the other hand, the physical light our eyes as organs respond to and which aids our bodies’ sight of the external world. This study addresses both the subjectivity and physicality of the concept of light. In her book *Textures of Light*, Vasseleu takes up the concept of light from a philosophical/ visual studies/ gender studies perspective. She presents a “genealogy” of light rather than a history of light:

A history of light refers to a course of events that can be traced in terms of the appearance of light, where light is regarded as the foundation or mythological source of these events. A genealogy of light refers to the continuous reinscription of light as a natural event, or light’s origination as an always already present “first light”. (11)

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<sup>2</sup> For more on phenomenological perception see Merleau-Ponty’s *The Primacy of Perception*. Evanston IL: Northwestern University Press, 1964.

In this work Vasseleu discusses the controversial role of light in the history of philosophy. I would like to emphasize that dealing with this continuous reinscription, or the way messages are continually written and re-written with light, is an essential part of my project. For this reason I present chapters that engage with both the genealogy and the history of light.

By appropriating the notion of a texture Vasseleu is able to reveal the intricacies of the concept of light, which she divides into “true light”, “carnal light” and “perverse light”. A texture is characteristic of something woven into a textile and is comprised of a structure that has a surface feel and appearance characterized as complex. Vasseleu writes that “[t]exture is at once cloth, threads, knots, weave, detailed surface, material, matrix and frame” and uses the metaphor to claim that “light is not a transparent medium linking sight and visibility” (12). I contend that light regarded in this way is not semantically empty but charged with meaning and can be sensed through more bodily senses than just sight and its primary organ, the eye. In the chapters that follow I bring to the surface cases that demonstrate the interconnectedness of lux and lumen with bodily perception and sensations.

In *The Birth of the Museum: History, Theory, Politics*, Tony Bennett identifies three subject positions within museums, namely scientists/curators, museum patrons and visitors or viewers as I shall call them in this study. Bennett’s study focuses on museums and galleries that were created from the late nineteenth century onwards and drew much inspiration from Michel Foucault’s *Discipline and Punish: The Birth of the Prison*. Foucault is of the opinion that disciplinary technologies and forms of observation, especially panopticism, render everything visible to an eye of power. He argues, that “one can speak of the formation of a disciplinary society [...] that stretches from the enclosed disciplines, a sort of social ‘quarantine’, to an indefinitely generalisable mechanism of ‘panopticism’” (216). Bennett explores the power that saturates the museum’s specific discourses of culture. He maintains that museums use culture as a tool for societal management. For Bennett, “[t]he space of representation constituted in relations between the disciplinary knowledges deployed within the exhibitionary complex thus permitted the construction of a temporally organized order of things and peoples” (79). In speaking of a disciplinary society he acknowledges that “the modality of power in modern societies has proved to be one of the more influential aspects of Foucault’s work” (65). A society, for him, “is one not of spectacle, but one of surveillance” (64). While Bennett does not specifically address light, I use his and Foucault’s work as a starting point for my investigation of the ways in which museums address subjective viewers with light.

Light intercedes in a disciplinary discourse. Friedrich Kittler writes in his essay “A Short History of the Spotlight” that it was only when “light direction [...] advanced from simple illumination to planned illusion” that it attracted draconian punishment for its private use (77). He continues Foucault’s idea that “the blinding light of power does not consolidate and transfix the body of society and thus secure [it] in the order, rather it is a separating light, that illuminates one side but leaves another body of society in the shade or thrusts [it out] into the night” (Foucault qtd. in Kittler 77). In the museum environment, light as tool is deployed as a disciplinary device in a Foucaultian sense. Rather than enabling all subjective viewers to have the same (“consolidating”) experience, light “thrusts” each individual viewer into a trajectory of experience that is unique.

In order to demonstrate this, I have adopted the approach of cultural analysis, a project pioneered by Mieke Bal at the interdisciplinary research institute she co-founded, the Amsterdam School for Cultural Analysis. This analytical approach to cultural objects differs from both literary and cultural studies. The central arguments of cultural analysis are explained in Bal’s edited volume *The Practice of Cultural Analysis: Exposing Interdisciplinary Interpretation* and her monograph *Travelling Concepts in the Humanities: A Rough Guide*. In the former, Bal explains that the field “is based on a keen awareness of the critic’s situatedness in the present, the social and cultural present from which we look, and look back, at the objects that are always already of the past, objects that we take to define our present culture” (1). As a critic, in this study I investigate the way the theoretical concept of light (and its absence, shadow) has been and continues to be deployed in museological contexts from my observant position in the present. I argue that the concept of light is interdisciplinary in nature and is what Bal calls a “travelling concept” that moves through various disciplines. My work here is a trace of some of its travels, which enables me to clarify the different meanings the concept has in different disciplines and during various periods of history. This is to say the study is self-reflexive. For this reason I refer to myself in the first person as a viewer of objects produced in the past and still extant today. *The Practice of Cultural Analysis* was my interdisciplinary gateway to the more specific works by Bal that address the social institution of the museum, most specifically *Double Exposures: The Subject of Cultural Analysis*.

Whether the object on display is a painting, sculpture, costume or an installation, decisions must be made on how to illuminate the object(s) that communicate a message to the viewer that he can interpret and from which meaning can be made. There, I seek to understand how the discursive practices of institutions such as museums on the one hand deploy light as a powerful tool to aid interpretation.

On the other hand, light can guide and manipulate viewers' attention and interpretation. This relates to the Foucaultian notion of discipline where the movement and control of bodies is affected by the isolating power of light. Foucault remarks that "[b]y the effect of backlighting [...] standing out precisely against the light, [...] each actor is alone [...] perfectly individualized and constantly visible" (200). It is a kind of power that coerces the body by regulating and dividing up its movement and the time and space in which it moves. It also disciplines, or restricts the vision of the eye as organ by allowing or not allowing sight on the basis of predetermined expected viewing patterns related to the physiological workings of the eye. Does light make docile bodies or active participants? My different cases will bear out that both can be the case.

In *Double Exposures*, Bal endeavours to connect the three meanings of the verb "to expose": exposition, exposé, and exposure", in her study of museum exhibitions (1). Expositions, or setting out on public view, can entail the acts of expounding, explanation and/or commentary about artworks on display. It is an attempt by a museum staff to lay open a meaning and to explain objects and artefacts in a certain way. Exposés are formal systematic public declarations or statements; often exposing crimes, scandals or other previously unknown facts or circumstances. In the context of museums, exposés can be understood as the public telling or revealing of a story in a primarily visual form. Exposure, from a museological perspective could entail publicity or the coming into contact with something. Viewers are exposed to artworks, that is they come into visual contact with not only material objects on display, but as I will demonstrate, also immaterial "objects" such as light fields. I intend to expose the ways in which light contributes to and collaborates with a particular type of exposition – museum exhibitions.

One of a museum's primary functions is to exhibit, and the way in which objects and artefacts are lit contributes to way they are perceived by the viewer. For example, light directed from different angles can either obscure or enhance surface definition and details such as colour and texture. The choices about the lighting are neither purely utilitarian nor arbitrary; instead, they expose the judgement or opinion of the curators about an object. By providing light that is not just utilitarian in nature agents expose objects, physically and rhetorically, including surface attributes and internal qualities. At the same time, they make a pedagogical argument with the effects of light for its exposition through the discourse of the museum and interpretation by the viewer. In line with Bal's work, I suggest that this specific way of exposing objects in a museum constitutes a dialogic relationship between various subject positions. Light is one of the tools, or mediums, that establish such relationships.

This study is multi-textual: it is comprised of an alphanumeric text and a plethora of images. The images play an important role by either illustrating my ideas or showing the reader examples and artworks referred to in the written text. I would like to emphasize that the images illustrate three different modes of lighting. They include: (1) *lightworks* from which light emanates; (2) the *illumination* of a setting or scene and; (3) *perspectival* light where the viewers' point of view is manipulated. In the first chapter the images are intended to catch the complexities of the lightworks displayed *in situ*, that is, they show the works installed in a gallery setting illustrating the way in which the viewer views the piece. In the second chapter the images of the exhibition under analysis are drawn from the exhibition catalogue and do not necessarily accurately reflect the specific illumination conditions in the galleries during the exhibition. They are, however, meant to show general conditions of illumination. For the third chapter, I chose images that show ethnographic artefacts and painted works of art under specialized illumination conditions or modes which do accurately depict the display's lighting effects. These conditions are the actual lighting conditions under which the objects were either studied or displayed and illustrate the agency and visual transformation which take place under these conditions. In the fourth chapter, which includes images of sculpture *in situ*, the figures show the view of the shadows to their best perspectival advantage from a particular viewing position within the gallery, where it is possible that the viewer has the same visual experience as the artist or curator.

The study draws on the literature of light from both the humanities and the sciences. More specifically, the information I have gathered for my research emanates from the fields of art theory and history, cultural theory and analysis, museum studies, architecture and social history. In addition to literary theory, the history and theory of theatrical lighting also play a key role in my study of contemporary trends in museum exhibition lighting. This study situates itself, then, in an interdisciplinary manner between the above cited fields in its attempt to spotlight the field of museum exhibition lighting. For the specific topic of light, two books specifically lead the way.

In *The Museum Environment*, originally published in 1978, Garry Thomson discusses light from the perspective of artefact conservation. The first of his two sections on light addresses issues of colour rendering, measurement and control of radiation and heat, physical laws of light, exposure guidelines and the process of seeing in a museum context. He discusses the fact that there is no absolute standard for brightness and that the human eye is good "at detecting that one thing is brighter than another when both are near at hand" (61). Paramount among his ideas in this section is his discussion of visual acuity and colour discrimination. Thomson writes

that “[n]either visual acuity nor colour discrimination are likely to be at their maximum however the museum is lit”, because museums are lit by carefully chosen artificial light which limits brightness and excludes particular wavelengths of light, unlike objects illuminated by the sun (61). In his second section he explains luminance and subjective brightness, lamps and control equipment, the measurement of ultraviolet light and photochemical reactions that take place between light and exhibited artefacts. After numerous editions and printings, Thomson’s book continues to be the authoritative source for museum lighting and conservation to the present day. But what he does not discuss is the subjective qualities of visible light. In contradistinction, I try to highlight the subjectiveness of light by studying it through a humanities-based discourse analysis, which foregrounds social institutions and political practices.

The other indispensable book in this field that has influenced my analyses is the recent *Light for Art’s Sake: Lighting for Artworks and Museum Displays*, by Christopher Cuttle which addresses issues of aesthetics, visual connections and lighting strategies, as well as typologies of both artificial and natural light scenarios commonly encountered in museum and gallery settings. Although Cuttle’s book does contain a section devoted to the damage to objects, Thomson’s book is more detailed in this respect. Most relevant to the present study is Cuttle’s chapter on revealing visual attributes of museum objects, which primarily addresses lighting paintings and sculptures. I supplement Cuttle’s work by including not only painting and sculpture, but also installation works, ethnographic displays and works of art which emit their own light. In distinction from Cuttle and Thomson’s work my study approaches exhibition lighting from a subject-oriented perspective as opposed to the objectivity that scientific measurements of lighting conditions reveal. In place of numerical statistics, the present study brings to light the spectacular characteristics of exhibition lighting that evoke human perceptual responses.

In response to my motivations, I chose to champion, in a museological sense, well conceived and designed museum exhibition lighting. Because light is essential to vision and vision is an indispensable ingredient for exhibition viewing, I argue that light not only has a communicative function but, more importantly, light also has a formative function in relation to artworks, and sometimes even as part of the artwork itself in the case of lightworks and installation pieces. I critique the unspoken assumption that light is somehow ancillary to the artwork. Works of art have need of well-considered lighting to facilitate maximum viewer reception as well as adequate lux or foot-candles to support human vision. It makes sense, therefore, to devote a study such as this to extending the discussion of museum exhibition lighting. In choosing

both general and specific cases of exhibition lighting for investigation, I hope to justify the choice of cultural objects used in my analysis of light as a theoretical concept.

In the first chapter my analysis of contemporary lightworks situates the theoretical concept of light within the framework of the production of art and its relation to art history. I begin my analysis by discussing light as what Bal calls a “semantically empty” medium, which is, however, capable of affecting the perception of the viewer.<sup>3</sup> In this chapter I investigate works by artists such as Dan Flavin’s *untitled (to Henri Matisse)*, Joseph Kosuth’s *Neon Electrical Light* and James Turrell’s *afrum-proto*, all of which were constructed in the 1960s. More contemporary lightworks I survey are Seth Riskin’s *Blue Light for György Kepes*, Ann Veronica Janssens’ *Red, Yellow and Blue*, Carsten Höller’s *Lichtwand*, Olafur Eliasson’s *360° Room for All Colours* and Mischa Kuball’s *Private Light/Public Light*, all of which, in one way or another, propose their own variation on the theme of light. I also analyze installations of Yayoi Kusama’s *Dots Obsession: New Century* and Ilya Kabakov’s *The Man Who Flew into Space from his Apartment*. Here, in order to understand the way light can affect the viewer, I trace the use of light from an art-historical perspective as an artistic medium from the beginning of the twentieth century until the present day in order to lay the foundation for discussing light as a narrative tool in the subsequent chapter.

I examine the intertwinement of narratology and theatrical lighting in the second chapter. This chapter investigates the way the effects of light can augment the narrative of an exhibition. Rather than examining contemporary art, as in chapter one, this chapter takes the illumination of a contemporary exhibition of eighteenth-century costumes, furniture and decorative arts, organized in *tableaux vivants*, as its primary object of study. The analysis utilizes Bal’s narrative theory as set out in her volume *Narratology: Introduction to the Theory of Narrative* in order to uncover the ways in which light plays a role not only in the individual tableau, but also to bring together into a narrative the whole exhibition, which unfolds in a suite of period rooms within the Metropolitan Museum of Art in New York. Understanding how light narrates, or what it says to the viewer, prepares the ground for examining more specific uses of light within the museum environment.

The third chapter investigates the specific use of ultraviolet light as an investigative tool and atmospheric medium of illumination. After first discussing the physical nature of ultraviolet light, this chapter investigates the way three significantly different exhibitions use ultraviolet light to expose various attributes of their displayed objects. The first exhibition, *Fluorescent Minerals from the Permanent Collection* at the

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<sup>3</sup> Bal, M. “Affect as Medium”. Unpublished manuscript, 2008.

University of Richmond Museums in Virginia, explores the way curators have used an invisible medium as a pedagogical tool to instruct viewers about the scientific principles of mineral fluorescence and, at the same time, expose the hidden aesthetic beauty of the natural world. Next, I study how contemporary artist Regine Schumann deploys ultraviolet light to create a disconcerting “landscape” of colour and light. The third exhibition I analyze is a didactic display and below-the-surface look at a specific group of Piet Mondriaan’s paintings known as the “Trans-Atlantic group”. Here, I examine the way ultraviolet light is used, non-invasively, to look below the surface of paintings in order to uncover the ways in which this particular group of paintings was changed by the artist from its beginnings in Europe to its eventual formal completion on the North American continent. Finally, in order to articulate an interpretative frame of this use of light I examine the notion of the “boundary object”, as conceived by Susan Star and James Griesemer. I consider the possibility of ultraviolet light as a particular kind of boundary object where, through the active agency of light, a translation of information between different communities of practice within the museum environment takes place.

The final chapter looks beyond the medium of light to illuminate the ways in which shadow is deployed as both an exhibitionary and artistic medium. Here, I investigate not only specific types of shadows which appear as darkened shapes on surfaces, but also the relative darkness that can communicate a suggestion of otherness, or performs a formative function in relation to the artwork. Shadows are considered from the standpoint of how they influence our perception. I first discuss their theorization by classical writers such as Plato and Leonardo da Vinci through the lens of Victor Stoichita and Michael Baxandall. Second, I consider several examples of the use of shadow in an exhibitionary environment. I discuss first the shadow cast by a fully-weighted ALARM missile displayed in the Imperial War Museum North in Manchester. Next, I discuss the way Constantin Brancusi deploys shadow in conjunction with his sculpture *Prometheus*. Thereafter, I return briefly to the work of Janssens. And lastly, I discuss the case of Larry Kagan’s shadow artworks, where shadow is a medium necessary for the completion of the artwork. This chapter demonstrates how the luminous environment of the exhibition space is not only comprised of the effects of light, but that the effects of darkness and shadow also play an important exhibitionary role. The complex and multifaceted operations of light, in a museological sense, transcends the disciplinary boundaries between the dissimilar types of exhibitionary practices analysed in this study. Light is exposed here as both a dynamic tool and a vibrant medium for displays across the exhibitionary spectrum.