Three Case Studies on Digital Technology Implementation in Museums for Disabled Patrons

A thesis presented

By

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ABSTRACT OF THESIS

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This thesis explores the interrelation between physical disability access and digital technology implementation through case studies of The Metropolitan Museum of Art, the Museum of Science, Boston, and Philadelphia’s Magic Gardens. Specifically, this interrelation is examined through the frame of what new museum theorist Janet Marstine calls “guises,” a form of what Jacques Derrida called “parergra.” Using a case study approach in which each of the three museums studied represented one of the “guises,” I explored the museums’ physical and online opportunities. In doing so, I seek out ways in which each museum is (or is not) offering digital technological implementation to offer alternative visitor experiences to patrons living with disabilities. My immediate findings indicate that few museums are incorporating digital technology into their disability access programming, though all have the means of doing so in differing ways.

Finally, I make suggestions for each museum on how to escape the “traditional” narrative of disability access to incorporate digital technology as a primary opportunity for patrons living with physical disabilities.
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Introduction

In addition to content delivery, museums today focus on contemporary themes of audience engagement, visitor participation, interactivity, and outreach opportunities. Exciting exhibitions, dynamic collections, and approachable learning programs are now just some of the norms a visitor will find in nearly any museum they step foot in. Furthermore, museums are incorporating innovative digital technologies into the visitor experience. The word “digital” here is used to encompass online and electronic software that engage communication between visitor and museum.¹ Such digital technologies as 3D modeling and virtual exhibitions are aimed to heighten the museum experience. Unfortunately, it seems that many digital opportunities cater only to normative concepts of the museum visitor: educated, economically advantaged, and able-bodied. Imagine, though, if the visitor does not fall into these “traditional” categories. How do museums structure access for physically disabled patrons? When sight, or sound, or hearing, or touch, or mobility are compromised, what other opportunities do museums provide to allow for an enriching museum experience?

Museum practitioners have begun to offer critiques on specialized tours for physically disabled visitors.² These tours are usually offered to visual or hearing impaired visitors, and involve a staff member guiding the patrons through museum exhibits using allowed touching of artifacts or American Sign Language or audio interpretation. Critics argue that these tours are

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¹ The precise definition of digital technology from the Merriam-Webster dictionary is “data in binary form” or “electronic technology that generates, stores, and processes data in terms of two states: positive and non-positive. Positive is expressed or represented by the number 1 and non-positive by the number 0.”
² For this thesis, I conceptualize of physical disability as pertaining to either total or partial loss of a person’s bodily functions, such as walking and gross motor skills, or total or partial loss of a part of the body, such as persons with an amputation, visual impairments, hearing impairments, etc.
limited and limiting, because they are only allowing the visitor to experience the museum through a pre-determined tour and tour guide. In contrast, museum theorists have argued that digital technology provides more than physical implementation, and brings in noteworthy characteristics of digitality, such as participation, dialogue, and empowerment. Museum visitors can engage in learning as active dialogue, rather than as a passive process of communication. (Hawkey) Furthermore, by using digital technology, museums can have a lasting effect on the visitors experience by providing alternative methods of learning outside of the physical space. (Edwards and Schaller)

In this thesis, I argue that digital technology implementation in museums can allow for different avenues of “doing” for people with differing ways of experiencing life: 3D modeling capabilities, online exhibition software, and personal media applications are only a handful of digital technologies that museums can implement specifically for the use of disabled patrons. Through the following case studies, I endeavor to examine the types of digital technology used in three specific museums and offer suggestions for further implementation with specific regard to opportunity and accessibility for physically disabled museum visitors. The museums chosen for this study were The Metropolitan Museum of Art, the Museum of Science, Boston, and Philadelphia’s Magic Gardens.

The research questions that guided this study were as follows:

1. What (if any) digital technologies are used by each museum? For example, does the museum employ audio tours, online exhibitions, personal guide software, TV, or computer software, among other technologies, in the construction of their physical
museum and/or online presence?

2. Are these technologies for the specific use of physically disabled patrons? Are the digital technologies used marketed as being for “everyone” or is there a particular audience in mind?

3. What type of physical disability are the employed digital technologies an aid for? Would visitors with sight impairments, hearing impairments, or mobility difficulties (among others) benefit from these particular digital opportunities?

4. How does disability access and digital access inter-correlate? That is to say, when does accessibility for disabled patrons and digital accessibility for museum visitors stop traveling separate paths and instead become implemented simultaneously? How does the institutional system of the museum influence these correlations, or lack thereof?

5. Does the budget/funding/monetary value of the museum effect the programs and digital opportunities they provide? What suggestions, if any, can be made to the approachable museum who seeks to make these relationships inherent in professional practice?

The following thesis begins with a background on museum theory, disability studies, and digital technology studies through which the case studies are “read.” The main theory through which the “reading” comes from is a form of what Jacques Derrida coined “parerga,” or “framing.” New Museum theorist Janet Marstine illustrates four new “parerga,” what she terms “guises,” by which museums can be examined. It is through these “guises” (shrine, market-driven industry, colonizing space, and post-museum) that I
frame my case study analysis. Following the theoretical background, the individual studies are presented, along with a description of methods: participant observation and textual analysis. The participant observation explores the kind of digital technologies being used by each museum, and the audience for these technologies. A thorough textual analysis was also conducted on museum artifacts, audio-guides, panels, online exhibitions, brochures, labels, and websites, to determine how the museums governing institutional process is acting upon the visitor. Together, participant observation and textual analysis reveals the inter-correlation between disability access and digital access.

Through the case studies, I argue that museums, such as the Metropolitan Museum of Art, with the largest budget (what I am calling shrines) are the most likely to have physical opportunities for disabled patrons. However, there are fairly few digital components used throughout the museum, and even fewer that are meant specifically for patrons living with disabilities. Second, science museums, aquariums, and children’s museums (for this project, labeled as market-driven industries and colonizing spaces) such as the Museum of Science, Boston, are the most likely to have digital components integrated throughout their construction, and possibly some specifically aimed at disabled patrons. However, these digital opportunities are rarely “open.” By “open,” I mean opportunities that encourage an active and varied expression by patrons. Thirdly, small museums and museums with the lowest working income, such as Philadelphia’s Magic Gardens, are the least likely to have many accessibility opportunities, physical or digital. However, many of these museums are young (under 30 years old,) community-centered,
and committed to providing open discussion between museum and patrons. With their emphasis on museum/visitor interactivity, these museums are the most open to suggestions on providing alternative digital access for patrons living with disabilities.

In the end, my goal in studying digital technologies for disabled museum patrons is to offer practical suggestions for museums to harness the potential of digital technology to offer differing avenues of accessibility to disabled patrons.

Theoretical Background

This section provides theoretical background of the main camps of thought that inform this case study: Museum Studies, Disability Theory in Museum Studies, and Digital Technology Studies.

A. Museum Theory

Museum studies texts often represent one of two perspectives: a practitioner approach or an academic/theoretical approach. The first, practitioner-oriented texts, are usually written by practicing museum professionals-conservators, curators, and museum educators—for direct implementation into the daily operations of other museums. These texts offer little traditional theoretical museology and instead focus on how to create/change/design/implement new or already in-use museum programs and operations. They also often have a normative assumption of what museums do. In these texts, museums are the authorial place to discover “truth” and what is “real.” Museum visitors are idealized as well-educated, economically advantaged, mild-mannered patrons.

An example of this first camp can be seen in Beverly Serrells practitioner-aimed text,
Exhibit Labels: An Interpretive Approach. In this text, Serrell endeavors to produce a hands-on guide for museum professionals to create dynamic exhibition labels for museum patrons. Unfortunately, throughout her text, Serrell makes poorly-based assumptions about audience experience, audience reading level, bilingual readers, and the integrity of visitors and professionals (Serrell, 37, 101). Another concerning example is John Salmens text Everyone’s Welcome: The Americans with Disabilities Act and Museums. The text is again written as a practical guide for museum staff, in this instance to identify the needs and possible solutions for patrons living with disabilities (Salmens 4, 9). While Salmens intentions are seemingly innocuous, his emphasis on physical accessibility only is problematic. These “traditional” views of disability access must be challenged in order to arrive at alternate views of experience.

The second theoretical camp that directly frames this research project are practitioner-influenced scholarly texts. These texts are not always written by museum professionals, and do not necessarily contain information ready to be used in daily operations. Instead, these works are a form of Derrida’s “parerga,” or framing devices through which to read real-life situations (Derrida, 18). The framing work can either aid professionals in “reading” their institutional systems or patrons, or can allow for more traditional scholars to continue large-scale theoretical conversations. Many of these works are influenced by post-colonial theory and post-structuralism. These second-camp authors see museums as unstable institutions that are ruled by the subjectivity of their human components.

Noted museum theorist John Falk harnesses this notion of “subjectivity” with his seminal text Identity and the Museum Visitor Experience. Falk argues that people visit and make meaning
from museum experiences based on their ability to fulfill identity-related goals and interests. Falk details five individual identity needs that are served by museums; the explorer, experience seeker, re-charger, professional/hobbyist, and facilitator (Falk). As Falk argues, the inherent instability of museum structures makes museum patrons continually search for the “right” museum that serves their specific identity.

Lianne McTavish continues this exploration of subjectivity in the digital realm to question the notion of “museum as authority.” In “Visiting the Virtual Museum: Art and Experience Online,” McTavish argues that virtual museums both reinforce and challenge notions of authenticity and institutional authority (McTavish). McTavish argues that digitality is a new form of “parerga” and questions if museums’ digital media are truly interactive, or simply an established set of pathways that creates a new “frame” (or perhaps even reifies existing ones.) Rachel Barker and Patricia Smithen also question “authorial” presentation with their text “New Art, New Challenges: The Changing Face of Conservation in the 21st Century.” Barker and Smithen challenge the notion that art and the museum are eternal, both physically and ideologically. They observe that modern and contemporary art forces conservators to have a more pivotal role in museum collections. Conservators are beginning to need to negotiate between the “needs of use” of the public and the preservation of the physical art itself (Barker and Smithen).

In *New Museum Theory and Practice*, Janet Marstine argues that museums shape the most basic assumptions of past and present history and information. Museums, unlike what the practitioner-aimed texts maintain, are not “pure” or “authentic” spaces. Marstine asserts,
But…objects have an ‘afterlife’ which must be acknowledged if we are to be critical thinkers. Decisions that museum workers make - about mission statement, architecture, financial matters, acquisitions, cataloguing, exhibition display, wall texts, educational programming, repatriation requests, community relations, conservation, web design, security and reproduction - all impact on the way we understand objects. Museums are not neutral spaces that speak with one institutional, authoritative voice. Museums are about individuals making subjective choices. (2)

In the same vein, Marstine states that the “…decisions these workers make reflect underlying value systems that are encoded in institutional narratives.” (5) Specifically, Marstine outlines four common institutional narratives, or “guises,” that a museum adopts as a narrative framing device: the shrine, the market-driven industry, the colonizing space, and the post-museum. The guise of “shrine” is the oldest and most traditional way to view a museum. “Shrines” are seen as sacred spaces that offer enlightenment and confer meaning upon objects that have no basis in their physical reality. The “market-driven industry” is built upon Marxist theory, where the guise foregrounds innovation, consumption, and display. “Market-driven industry” museums encourage consumerism of both the artifacts and supplementary materials (such as IMAX theaters, gift shops.) The “colonizing space” views the museum as engaging in classification processes that define both people and culture. In forming their collections and programs, museums often reveal more about themselves, the colonizer, than about the colonized. The last guise, the “post-museum,” can be seen as a sort of utopia museum. The most hopeful of the four frames, the post-museum is open and communicative about its agendas, strategies, and decision-making processes, and often encourages other communities to aid them in making-meaning.

Obviously guises may overlap or fulfill only partial ends. Nonetheless, the notion of museum frames is a useful concept to consider the underlying value systems at work and, as
such, where digital affordances may be found for disabled visitors. To that end, this project endeavors to read and classify the three museums studied through these “parerga” guises. It is a given that the shrine, the market-driven industry, the colonizing space, and the post-museum will deal with both disabled accessibility and digitality in varied ways. By reading these museums through a singular frame, we will be able to more fully understand the sections of inter-correlation between the two.

**B. Disability Theory in Museum Studies**

Disability studies is an interdisciplinary field that encompasses overlapping disciplines in the sciences, humanities, and social sciences. Disability studies researchers examine how social, political, cultural, and economic constructs define “disability.” Noted disability theorist Lennard Davis incorporates this interdisciplinary approach in his 4th edition of *The Disability Studies Reader*. Davis’ work emphasizes the global, transgender, homo-national, and post-human conceptions of disability including articles on physical disabilities, issues of pain and trauma, mental disability, and invisible disabilities.

Contemporary scholars have begun to move away from disability as a medical concept to notions of the disabled body in society. The concept of societal influenced disabilities has since become a burgeoning field, where scholars such as Simi Linton have begun to explore the divisions society creates for people living with disabilities. In *Claiming Disability*, Linton uses metaphor to show how society constructs specific disability “tropes,” such as the normal versus the pathological and the competent citizen versus the ward of the state (Linton).

Scholars have recently begun to question how the emerging field of digital technology
can work with disability studies. In *Making Computers Accessible: Disability Rights and Digital Technology*, Elizabeth Petrick describes the historical process of providing computer access to disabled patrons and argues for further similar advancements. Petrick argues that “…people with disabilities are paradigmatic computer users, demonstrating the personal computer’s potential to augment human abilities and provide for new forms of social, professional, and political participation” (Petrick, 5).

In *Disability and New Media*, Katie Ellis and Mike Kent argue that digital design is actually negatively enforcing disability when it could be a solution (Ellis). Ellis and Kent, for example, argue that the internet will not be fully accessible until disability is considered a cultural identity in the same way that class, gender, and sexuality are.

A new addition to the multidisciplinary reach of disability studies, and one that is critical to this study, is the incorporation of museum theory and studies. In *Re-Presenting Disability: Activism and Agency in the Museum*, Richard Sandell brings together researchers, museum practitioners and scholars from different disciplinary, institutional, and cultural contexts to explore issues surrounding the cultural representation of disabled people (Sandell). In particular, Sandell focuses on both the inclusion and marked absence of disability-related narratives in museum, gallery, and exhibition displays. In *DeafSpace: An Architecture toward a More Livable and Sustainable World*, Hansel Bauman brings disability studies into the realm of practical architectural study. Bauman explores how architecture can be created to in tune to deaf “ways of being” and expresses a challenge to contemporary designers to create alternative accessible construction patterns.
Another example that examines how physically disabled patrons are often excluded from the actual designing of accessibility programs comes from Carmen Papalia’s text “A New Model for Access in the Museum.” Papalia, a visually impaired museum practitioner and artist, argues that the traditional methods of “doing” in museums (looking, reading, and learning) are limited and limiting to people living with disabilities. Papalia maintains that people living with disabilities bring alternative ways to learning and museum education, and as such, should be consulted in creating accessible museum programming. Papalia argues:

Each visitor to the museum sees and understands things differently, and brings a valuable lens to the art experience - although these perspectives are not often acknowledged as relevant ways of knowing. This overlooked spectrum of ways in which one might understand and appreciate art reflects the spectrum of ways in which people learn, and represents the many paths that lead to the production of knowledge. Still, very few methods of interpretation are endorsed by museums - which makes the interpretation and appreciation of art a specialized activity for the educated, able few. (Papalia)

Museum professionals need to think creatively to promote an ever-changing, textured visitor experience.

C. Digital Technology Studies

It is important to understand that when we speak about digital technology studies and theory, what we are indeed chronicling are theories of technology and their study. To this end, there are two dominant theoretical camps from which the main theories have emerged, respectively called social theories of technology and group theories of technology.

Social Theories of Technology

Social theories of technology are mainly concerned with how technology affects and is affected by social communities and particular individuals. The first social theory that is of import
to this research study is a sociological theory of knowledge called Social Construction of Technology (SCOT.) SCOT is informed by social constructivism. Social constructivism, in contrast to purely cognitive theories of knowledge-making, maintains that individuals construct knowledge and meaning from and for one another. Individuals subsequently bring this knowledge and meaning into group formations, where new meaning is created and shared. These "new" cultures contain groups of shared artifacts and shared meanings. Culture (with it’s shared meanings, processes, and knowledge structures) becomes a dominant part of development. In bringing technology into the mix, SCOT argues that technology is not what determines human action in its creation. Instead, it is the shared knowledge and meaning of various cultures that shapes the creation and implementation of technology. Furthermore, one cannot understand the ways a technology is used without understanding how that technology is embedded in its particular social and cultural context.

Proponents of SCOT, include Trevor Pinch and Wiebe Bijker.” In their seminal article, “The Social Construction of Facts and Artefacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other,” Pinch and Bijker examine the success and popularity of the chain-driven bicycle as a technology in comparison to it’s “ancestor” the Penny Farthing. Pinch and Bijker argue that it was not that the chain-driven bicycle was more “advanced” technologically then the Penny Farthing, but that the chain-driven bicycle was serving different societal and cultural needs than that of the Penny Farthing, leading to its almost instant success.

Pinch and Bijker illustrate two key concepts that are integral to SCOT and it’s
methodologies as a theory. The first is Interpretive Flexibility, where each technological artifact has differing interpretations and meanings for various social and cultural groups. This flexibility allows for a multitude of different problems to be solved according to specific groups. The second core concept is Closure, where Interpretive Flexibility ends in one of two ways. There can be either rhetorical closure, which is when social groups actively see the problem as being solved. Or, there can be a redefining of the original problem at hand. The importance of Closure, whether rhetorical or a redesign, is that closure is never permanent. There will always be new social groups forming that demand for another round of Interpretive Flexibility.

A sharp criticism of SCOT came in 1993 from Langdon Winner in “Upon Opening the Black Box and Finding It Empty: Social Constructivism and the Philosophy of Technology.” Winner argues that SCOT explains how technologies emerge, but does not explore the consequences that these technologies have, which, in turn, does not suggest how technology matters in a specific society. According to Winner, SCOT is also elitist, in that it examines only those social groups who give dominant contribution to the construction of technology. SCOT ignores those disadvantaged groups who do not have a voice in the contribution, but are still directly affected by it. Finally, Winner denounces SCOT for looking only at immediate needs and issues that influence technology. In the end, Winner argues that SCOT is unreliable in that it cannot track deeper cultural and societal changes through technology.

A second social theory of technology is Actor-Network Theory (ANT) from Bruno Latour in his seminal text *Reassembling The Social: An Introduction to Actor-Network Theory*. ANT, as a theoretical concept, is unusual in that it does not readily aim to explain traditional
meaning-making questions such as “how” or “why” in regards to the formation of networks. Instead, ANT focuses on exploring the relationships within a specific network. Specifically, ANT is a “material-semiotic” method and theory that maps the relationships between material “things” and semiotic “concepts” (Latour). As the name implies, actor-network theory aims to examine how these material-semiotic relationships act as a whole. To that end, actor-network theory has at its basis the insistence that an “actor” can be human or non-human. Both human and non-human actors work in relationships that run parallel to one another. Therefore, Latour argues, that instead of being concerned about whether technology is becoming too “humanized,” people should embrace technology as being inherently human. After all, technology is made by humans, for the need of human issues, to substitute human actions. What we should focus on is the importance of these material-semiotic relationships and ensure for their smooth function.

Social theorists argue that technology can never be neutral. As it is created and constructed by human hands and human thought, there will always be inherent power dynamics and subjective interests that govern its use. Specifically, theorist Herbert Marcuse examines the extensions of this subjectivity in his text “One-Dimensional Man.” In the text, Marcuse draws on a Marxist capitalist concept and argues that capitalism has become so ingrained in society that people have begun seeing themselves as extensions of the technology they are using. Marcuse writes that “…people recognize themselves in their commodities: they find their soul in their automobile, hi-fi set, split level home…” and subconsciously adopt the subjective rationale behind the production of their products (Marcuse, 9).

*Group Theories of Technology*
Group theory as a concept is interested in how technology affects group processes. In general, these theories are concerned with communication media and how technology assists in the communication between groups of individuals. The first group theory of interest to this project is Social Presence Theory. Emerging from a newly-created computer-mediated communication, Social Presence Theory takes a technological step back and assumes that the more contact a group has with each other, the more the key components of “presence” will increase. These components of “presence” include greater intimacy, immediacy, warmth, and inter-personal rapport. As these aspects of “presence” increase, so too is social influence expected to increase. Since more text-based forms of communication (e-mail, text messaging) are less “social,” they are seen as less likely to produce high social presence or influence. In their influential text “Supporting presence in collaborative environments by haptic force feedback,” E.L. Sallnas et al. classify different communication media along a one-dimensional sequence of social presence. Sallnas et al. maintain that the degree of social presence is dependent upon the degree of awareness between a communicative interaction (Sallnas). For example, face-to-face communication has the highest degree of social presence because of its heightened interaction whereas e-mail has the lowest. John Short et al. continues this exploration of Social Presence Theory with their text *The Social Psychology of Telecommunications*. Short et al. define social presence as a property of the technological medium itself (Short). As the degree of acoustic, visual, and physical contact that a technology allows increases, so too does its social presence and subsequent influence.

Another group theory that is of interest to this study was developed by theorist and
philosopher Ned Kock called Media Naturalness Theory. In his text “The Psychobiological Model: Towards a New Theory of Computer-Mediated Communication Based on Darwinian Evolution,” Kock states that throughout humanities existence, people have communicated primarily through face-to-face contact. As such, evolution has led to the development of a brain that is inherently designed for this form of communication. Kock argues that since other forms of computer and technological based communication are relatively new, our brains have not yet begun to evolve for their specific use (Kock). By using communication media that do not contain key elements of face-to-face communication, we are creating cognitive obstacles to communication and communication learning.

*Museum Studies, Disability Theory, and Digital Technology Theory*

Theories of technology, specifically digital technology, have recently been brought into museum and cultural-heritage studies. As digital technology has become increasingly prominent in modern society, museum practitioners and theorists have begun to conceptualize ways in which museums can more easily incorporate the technology in their programs and exhibitions. However, issues arise when museum professionals base their technological implementation on problematic theoretical approaches. Much of the digital theory we have discussed is entirely too concerned with normative types of social presence, such as speech and hearing. For patrons living with disabilities, many aspects of traditional social presence and influence are both limited and limiting. Technology must become a necessary tool in changing accessibility opportunities. However, many museums do not want to promote this type of change because it takes away their authorial purpose. Alternative technological advances allow visitors to become their own
“curators” of information and meaning, leaving some institutions insecure in their “authentic” status.

Museum theorists Susana Bautista and Ross Parry provide an apt example for the inclusion of problematic technological theory. In both Bautista’s text *Museums in the Digital Age: Changing Meanings of Place, Community, and Culture* and Parry’s text *Recoding the Museum: Digital Heritage and the Technologies of Change*, the focus remains on the need of an ever-changing museum. Drawing off of social theories of technology like SCOT, Bautista and Parry maintain that museums must change in accordance to community and culture (Bautista, Parry). As relevant social groups change, so should the museum to compensate, especially since change is such an inherent aspect to digital heritage. However, neither Bautista nor Parry focus on Winner’s counter-argument, especially with the elitist concept of SCOT. As an incredibly disadvantaged social group, people living with disabilities have little opportunity to contribute to the creation of alternative technology that would benefit them in museum settings.

Other technology theories, such as Social Presence Theory, seem to collapse when brought into conversation with necessary digital communication technology employed by museums. In “Structuring Visitor Participation,” Kevin Walker maintains that mobile technology has the potential to support museum visitor meaning-making by framing and focusing interactions and program activities. Digital technology also enables visitors to attain relationships with virtual communities outside the museum and after their initial visit. Social Presence Theory falls short when considering disabled patrons who cannot communicate through “traditional” aspects of social presence, such as hearing, speech, and face-to-face mobility opportunities.
Social Presence Theory also fails by privileging these forms of “presence,” and not considering virtual communities as viable situations for high societal contribution and influence.

John Falk creates a poignant example of how ANT can succeed as a constructive theory when it is properly executed. In “Enhancing Visitor Interaction and Learning with Mobile Technologies,” Falk focuses on the needs of the individual visitor to create a meaning-making context within an unfamiliar place, the museum. As Falk states, “…the process of meaning making is the process of making sense of experience, of explaining or interpreting the world to ourselves and others. In museums, meaning is constructed from objects, and from the sites themselves.” (Falk) The digital devices that museums employ become a way for people to construct a personalized narrative and “meaning” context within this unfamiliar space. In Falks text, both human and non-human actors are simultaneously behaving in parallel ways to construct a working material-semiotic network.

In *Crippling the Museum: Disability, Pedagogy, and Video Art*, Sarah Brophy and Janice Hladki argue that “cripping” (or creating accessibility) fundamentally depends on practices of disturbance and unsettlement. Like Papalia, Brophy and Hladki see the disturbance of traditional disability access as necessary to break through the exclusionary status-quo. This alternative necessity is highlighted in Amanda Cachias work ‘Disabling’ the Museum: Curator as Infrastructural Activist. Cachia continues the argument by stating that part of the decolonizing work of disability studies is to offer opportunities to both curators and artists where their work can be displayed within unconventional gallery settings (such as the virtual platform) in order to ‘crip’ art history and contemporary art
practice (Cachia, *Disabling*).

In practice, Cachia has also curated an online exhibition that offers four diverse, newly commissioned projects focused on disability that utilizes the unique platform of cyberspace in which to distribute their work. The four exhibition creators, Katherine Araniello, Cassandra Hartblay, Sara Hendren, and Montreal’s in/accessible collective, use the cyber presence to expand their ethical and critical frameworks. The projects all explore diverse cultural and political contexts through their works, and discover limitations and affordances of an online reality. Most importantly, their work stresses how the “crip” movement in cyberspace demonstrates the barriers that are created by museum programs created for the “average” person.

**Methods and Methodology**

As Anne Dyson explains in her text *The Case: Approaches to Language and Literacy Research*, the case study method

…is the messy complexity of human experience that leads researchers to case studies in the qualitative or interpretive tradition. They identify a social unit…that becomes a case of *something*, of some phenomenon. (3)

Dyson goes on to explain that the case study method allows researchers to gain insight into “the processes through which people interpret or make meaningful” a specific “experience, event or phenomena (3). Case study analysis is particularly useful in providing deep analysis of individual participants or sites. Although not generalizable, case study analysis may be used for comparative purposes.

**A. Site**

For this thesis, I focused on museums located in major metropolitan cities on the East Coast
(Table 1.)

Table 1: Museums Studied

<table>
<thead>
<tr>
<th>Museum</th>
<th>Location</th>
<th>Type</th>
<th>Annual Attendance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Museum of Art</td>
<td>New York</td>
<td>Art</td>
<td>6.2 Million</td>
</tr>
<tr>
<td>Museum of Science, Boston</td>
<td>Boston</td>
<td>Science</td>
<td>1.5 Million</td>
</tr>
<tr>
<td>Philadelphia's Magic Gardens</td>
<td>Philadelphia</td>
<td>Art/Gallery</td>
<td>50,000</td>
</tr>
</tbody>
</table>

I chose one “traditional” museum, the MET, that draws international and domestic tourists for its renowned collection of fine art. To contrast this, I chose one science museum, the Museum of Science, Boston. Finally, I chose Philadelphia’s Magic Gardens because of its focus on contemporary art practices.

B. Data Collection and Analysis Procedure

Table 2: Methods Employed

<table>
<thead>
<tr>
<th>Museum Visited</th>
<th>Day of Visit</th>
<th>Duration of Visit</th>
<th>Methods Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Museum of Art</td>
<td>Saturday</td>
<td>Three Hours: Self-Guided</td>
<td>Observation, Textual Analysis of brochures, pamphlets, postcards, online website, exhibit labels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One Hour: Docent Tour</td>
<td></td>
</tr>
<tr>
<td>Museum of Science, Boston</td>
<td>Saturday</td>
<td>Three Hours: Self Guided Half Hour: 3D Film</td>
<td>Observation, Textual Analysis of brochures, pamphlets, postcards, online website, exhibit labels</td>
</tr>
<tr>
<td>Philadelphia’s Magic Gardens</td>
<td>Sunday</td>
<td>Two Hours: Self Guided Fifteen Minutes: Gallery Talk</td>
<td>Observation, Textual Analysis of brochures, pamphlets, postcards, online website, exhibit labels</td>
</tr>
</tbody>
</table>
For each museum visit, I allotted myself at least two hours of what I am calling a “self-guided” walk-through of the museums collections and exhibitions. These walk-throughs consisted of a systematic, linear approach, and a haphazard “collection-hopping” approach in order to experience the museum as suggested by museum maps and guides. I participated in the reading of exhibit labels, individual art piece labels, and museum brochures, as well as using technology offered by each museum. I conducted these “self-guided tours” on weekend days when visitor attendance would be at its peak to allow for optimal observation of visitors. I also attended at least one other offering in each museum. The offerings I chose, docent tour, 3D film, and a gallery talk, were considered tours “very popular” with other visitors of the museum.

I viewed other museum visitors in their interaction with the collections and exhibits, interactions with museum staff, and passive interactions during tours and films.

Outside of the museum I conducted my textual analysis of the artifacts I had collected. For each physical and online artifact, I created a written spreadsheet that detailed the artifact, the information gathered from it, and pertinent language included in the artifact that speaks to either digital technology, disability access, or monetary issues.

After gathering my data, I constructed codes of “History,” “Guise Framing,” “Physical Experience,” and “Online Experience.” The “History” code was chosen to focus on how each museums specific history allows them to function within their guise. This code was especially useful when I came across pertinent examples from the museums past that I believe highlights this functionality. The “Guise Framing” code was chosen to examine how Marstine’s theory
“worked” in the daily practice of the museum. The “Physical Experience” and “Online Experience” codes were chosen so that I could highlight both physical and online opportunities that the museums offered. Given that my final suggestions are based off of how these two codes function within the realm of disability access, I elected to separate them to concentrate on their nuances in greater detail. My observational and textual data were then filtered into each code, such as information gathered from “Museum Information” brochures being filtered into the “History” category, and so on. The basis for this decision was to aid in compiling disparate types of information (online data, postcards, brochures, exhibit labels, etc.) into an easily followed narrative. I then read the information for each specific museum against the theoretical guise framing from Marstine’s text. This parallel reading allowed me to seamlessly incorporate my observation and textual analysis with my concepts drawn from each museum’s guise.

Case Studies

The three case studies below begin with a brief background of each museum. Then, using Marstine’s theoretical framing descriptions, each museum is examined under a particular “guise.” By examining the museum according to its “guise,” we can better understand how disability access and digitality function within it. Information gained from personal observation, participation, and textual analysis are incorporated throughout each case. Following each case study, suggestions for further digital implementation for disabled patrons are suggested.

A. Metropolitan Museum of Art

History
The Metropolitan Museum of Art, commonly referred to as “The Met,” located in New York City, is the largest art museum in the United States and one of the ten largest art museums in the world. Divided between seventeen curatorial departments, its permanent collection houses over more than two million art works. There are two buildings that compromise The Met: the main building located on Manhattan’s Museum Mile near Central Park East, and The Cloisters, located in Upper Manhattan, which features and houses the museum’s medieval art. This project will focus only on the main building, as the collection there is substantial enough for a study of this length.

Founded in 1870, the museum’s permanent collection consists of works of art from the classical age, Ancient Egypt, works from nearly all the European Masters (e.g. da Vinci, Raphael, Michelangelo, Tintoretto, and Botticelli), extensive collections of American and Modern art, as well as African, Asian, Oceanic, Byzantine, and Islamic art. Aside from these collections, the museum is renowned for housing vast collections of musical instruments, costumes, rare books and manuscripts, jewelry, antique weapons, armor, and interior installations that range from first-century Rome to contemporary American design. The Met also organizes and hosts traveling exhibitions throughout the year, as well as several self-curated “pop-up” exhibitions.

Guise Framing

As Janet Marstine states,

One of the longest-standing and most traditional ways to envision the museum is as a sacred space…In the paradigm of the shrine…it is a place of sanctuary removed from the outside world. Museum collections are fetishized; the museum as shrine declares that its objects possess an aura that offers spiritual enlightenment as it inspires Platonic values of
beauty and morality. (9)

Moreover, the guise of “shrine” depends upon the authorial declarations made by the museum. The shrine suggests “authenticity” and “superiority” in its selection and presentation of objects. Visitors of shrines believe they experience this “spiritual enlightenment” because they are being led by a “true” art “expert” in the shrine’s presentation of curatorial expertise. These specialist curators “…give an assurance that museum objects are ‘authentic’ masterpieces that express universal truths in an established canon or standard of excellence” (Marstine, 9). In keeping with the guise of the shrine, The Met declares itself one of the “finest art museums” that houses “comprehensive collections” of art that gives the visitor an “unparalleled” view of over “5,000 years of world culture” (MetMuseum.org). As a shrine, The Met protects its “treasures” with over seventeen curatorial departments, all charged with the “care” (curare meaning “to care”) of the art. These curators dedicate themselves to the acquisition and conservation of their collections, often valuing the object over the idea it came from. Curators of The Met must “protect” art from its original source and house it “safely” in the museum. The Met as a shrine is influenced by the “church, palace, and ancient temple architecture” (Marstine, 10). Its use of grand staircases, dramatic lighting, and marble and granite construction evoke the silent spectacle of the ritual space. Indeed, former Director Philippe de Montebello has said “…it is the judicious exercise of the museums authority that makes possible that state of pure reverie that an unencumbered aesthetic experience can inspire” (de Montebello, 155).

Physical Experience

As a traditional shrine, The Met’s functional layout allows the seasoned museum visitor
to fall into a “comfortable” museum experience. Upon arrival, the guest is greeted with a large, circular front-line information desk that is ironically Panopticon-esque. Footsteps on the marble floor echo into the cathedral ceilings as visitors walk past the reading material-books, pamphlets, flyers in multiple languages- ringing around the desk. Multilingual staff members (experts) are poised to assist perplexed visitors who seek guidance. The indoor collections are sprawling, yet decidedly manageable. Room after room is filled with art, traditionally displayed either hanging on gallery walls, organized in clear glass cases, or spaced periodically on the floor. The rooms have a clear and concise “theme” and “meaning” that are distinct between collections. In some form, usually located in one of the lower corners, is a small label that lists the title of the artwork, known or unknown artist, material of art, and notable information deemed of interest by the museum-i.e., labeling that suggests an expert (e)valuation of the object.

For disabled patrons, this “routine” experience of the shrine museum means that there are ample physical opportunities for access. For patrons with mobility challenges, there are elevators that reach all floors, as well as ramps that connect collections with inclines/declines. The Met also offers limited wheelchairs for patrons to borrow while they explore the museum. If disabled patrons have access to vehicular transport, the museum garage is open 24 hours a day, seven days a week, with rates ranging from $20 to $48.

For patrons with visual or auditory disabilities, sign language interpretation is available for tours either scheduled by the museum or requested by outside groups. Large print exhibit labels and written exhibit information are available for some special exhibitions—but not for the museums permanent exhibitions. Audio guides are also available for free to visitors with hearing
and visual impairments. These audio guides are “numbered” according to the museums collections, where a number located on a specific art piece corresponds to a snippet of information available on the guide. Assistive listening devices and real-time captioning service are available at museum lectures for patrons who submit an in-advance request. Indeed, it seems that most opportunities for disabled patrons come either in the form of guide-interpreted tours (problematic, but outside the scope of this project) or outdated technology. There are a few large “screens” located throughout the museum that show either looping picture feeds, quotes, or general information that may count as technology that offers opportunity for disabled patrons. However, there are no digital technologies employed by the museum specifically for the use of patrons with disabilities. It is possible that The Met has paid too close attention to Salmens text on how to incorporate the status-quo accessibility opportunities for disabled patrons, and has yet to explore, by Brophy and Hladki’s insistence, the necessity of “disturbing” and provoking change in this traditional approach.

**Online Experience**

Outside of the physical museum, The Met’s new Director Thomas Campbell has implemented his insistence on alternative accessibility for museum visitors. As such, The Met has developed a huge online presence through its official website. Unfortunately, it seems that “accessibility” in this case does not have a specific portion afforded to patrons with disabilities. Some portions, such as video-taped museum lectures and tours, have real-time captioning and American Sign Language components, but there are few online offerings for disabled patrons. It also seems that much of the online material is supplemental for learning and engaging after the
initial visit and not material to use during the visit for ease of access. Online offerings such as Artwork of the Day simply highlight one piece of the permanent collection and give a more extensive written background on the work. Highlights of the Collection and The Collection Online (which comprises over 400,000 pictures of art pieces) are portions that appear to be of most use to website visitors perusing the collections before a planned visit.

The most promising online repository that The Met has developed, METMedia, still has its fair share of issues in execution, too. METMedia is a permanent portion of the museums websites, and encourages visitors to “See the Museum in New Ways.” METMedia contains Videos, Audio & Podcasts, Apps, and Games for children, teens, and adults as a new way to offer alternative engaging experiences. However, access to METMedia is predicated upon the user being able to hear, see, and physically “do.” The Video portion of METMedia contains member lecture series by “experts” on art periods, specific art works, and artists. The Audio & Podcast portions contain recordings of member lectures, museum curator “insights” and small portions of the audio-guide available at the museum. For visitors with visual or hearing impairments, these “alternative” technologies prove limited at achieving the access of able-bodied patrons. The Apps and Games portion, mostly aimed toward children and teenagers, focuses on learning from artists featured in The Met collections. The games help children learn colors, shapes, and how to identify the “fake” picture among the “real” ones. These games place children firmly in the “student” position to be taught by the “expert” artists. The added layer of specialist here, the teacher-artist, helps The Met solidify their position of “authentic connoisseur.” These Videos, Audios, Apps, and Games fail because of their basis on Social
Presence Theory; they focus solely on the physical aspects of communication and learning to foster greater presence, or interpersonal rapport between visitor and museum. In fostering high levels of social presence, and therefore social influence, The Met reinforces its position as “authentic” art “expert.” However, the basis on Social Presence Theory is not accessible to those individuals who cannot traditionally create presence, through speaking, hearing, or “doing.” This Social Presence theoretical bent to the digital media also ignores alternative ways of meaning and presence-making that only virtual communities are capable of.

Beyond these other games, the “82nd & Fifth” iPad App is based on the 2013 award-winning online series 82nd & Fifth. The iPad App presents audio and photographs from over 100 curators from The Met speaking on over 100 art pieces from the museum’s collection. Each art piece was chosen because it “changed the way” a specific curator “saw the world.” (MetMuseum.org) The App is available in English, Arabic, Chinese (simplified), Chinese (traditional), French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, and English subtitles. The multiple language opportunities “…make 82nd & Fifth easily available to audiences internationally and to those who prefer to access rich media content via tablets. Visitors can download, favorite, and share episodes, and create their own collections” (MetMuseum.org). Yet, simply having an App be multilingual does not actually extend access any further than, say, a Disney movie translation does. That the App only furthers traditional social presence (hearing, watching) solidifies its failure as an accessible digital technology for patrons living with disabilities.

Suggestions
Offering suggestions for The Met regarding further implementation of digital technology for disabled patrons seems, at first, to be relatively simple. However, upon further examination, their institutional guise of shrine provides hurdles that prove hard to navigate. A first suggestion would be to expand the exciting “82nd & Fifth” App to all personal Smartphone technology, such as Android, which would open additional potential for app development. The “82nd & Fifth” App technology could be synced so that it works in person during a museum visit, as well as with distant access. Specific curator contributions could be made that target art that might be particularly compelling for disabled patrons. Indeed, this additional curation could be done by members of the disabled community.

A second suggestion would be to incorporate digital technology throughout the physical museum space and not simply have it as a supplemental material. Specifically for younger visitors, it would be extremely beneficial to incorporate any of the games into the actual construction of exhibits and collections. It would encourage younger visitors to have a more engaged and personal experience with the art. Unfortunately, it is possible that The Met does not actively encourage “personal” curator-ship of their collections. The museums reluctance to allow visitors to create and discover their own narratives stems from deeply ingrained institutional systems.

The third and most important suggestion is to create digital media that correlates with the museums disability access mission and policies. Aside from traditional resources like audio-guides, assistive listening devices, and real-time captioning, there is little emphasis on creating digital technology specifically for patrons living with disabilities. The Met has the social
influence and the funds to achieve this feat. They could easily construct and implement resources that many museums won’t ever be able to do. However, it seems the guise of the shrine functions as a barrier between disabled patrons and digital accessibility. The Met must work to push against the boundaries of the traditional shrine and aid disabled patrons in constructing their own accessible narrative.

**B. Museum of Science, Boston**

*History*

The Museum of Science (MoS), located in Boston, Massachusetts, has become an international and domestic tourist destination for the city. The MoS houses over 600 interactive exhibits, including live animal husbandry programs, mathematics and electricity attractions, and classic taxidermy “trophy-rooms.” The MoS, originally named the Boston Society of Natural History, was founded in 1830 and was originally located in the Back Bay area of Boston. After World War II, the museum was renamed and relocated to what is now called Science Park. To better serve visitors of the museum, the Science Park/West End station of the Massachusetts Bay Transportation Authority was opened in 1956. Today, the museum also comprises the Charles Hayden Planetarium and the Mugar Omni Theater, the largest IMAX dome theater in New England. The MoS started a $250 million dollar campaign in 2013 to upgrade both their physical structure and their education content, including the opening of the Hall of Human Life (opened in November 2013), the Yawkey Gallery on the Charles River, and an exhibit titled *What is Technology*?

*Guise Framing*
Continuing her discussion on guise frames, Marstine makes links between the market-driven industry and Marxist theory. Marstine states that, “The discourse on the museum as a market-driven industry has been shaped by Marxist theory, which looks critically at the economic and social foundations of culture (Marstine, 13). The MoS as market-driven industry analyzes societal and cultural needs and phenomena and provides the people with solutions. While older and more “traditional” museums (like shrines) promote their institutions as “authentic” and “uncontaminated” spaces free from consumerist values, the MoS in its market-driven industry guise understands the necessity for alternative funding avenues. The museum as market-driven industry obtains funds through government funding, corporate funding, charitable foundation, and/or privately donated funds (Marstine, 11). The market-driven industry museum positions itself primarily as a tourist attraction. To provide extra services that visitors need, market-driven industry museums (much like the MoS) often undergo large building campaigns. Marstine states that “New facilities may include reception and orientation areas, restaurants, cafes, shops, bookstores, ATM machines, cloakrooms, rest rooms, school group areas, children’s wings, education centers, and theaters. And though these areas are sited in basements, lobbies, or hallways, apart from exhibit galleries, they can be an attraction in themselves” (Marstine, 13).

A prime example of the MoS functioning in its market-driven industry guise is its housing of multiple traveling exhibitions. The MoS has housed notable traveling exhibits in past years, including Ramses II, The Lord of the Rings Motion Picture Trilogy: The Exhibition, Body Worlds, Harry Potter The Exhibition, and Star Wars: Where Science Meets Imagination. Of these “blockbuster” exhibitions, Marstine rightly asserts that “Crowds move quickly through the
galleries and the objects become mere advertisements to sell reproductions on cards, coffee mugs, posters, and umbrellas” (Marstine, 12). Outside grant money also factors into the revenue from these traveling shows. Some grants that museums apply for are based on visitor attendance. These temporary exhibitions provide boosts in yearly attendance level that MoS can then factor into the applications for these outside grants, where high attendance is seen as being equal to a high level of “success.”

**Physical Experience**

Upon first entering the MoS, visitors encounter large LED screens displaying ticket times and prices for the museum, IMAX, 3D, and Planetarium shows, as well as times for the Butterfly Garden and Live Animal Presentations. Visitors are encouraged by admissions staff to purchase an extra ticket for a film or presentation with their regular admission. As a market-driven industry museum, the MoS provides vibrant colors, intriguing sounds, and a multitude of things to “do.” Children run about and a dim cacophony of laughter comes from various wings of the museum. Interestingly, it seemed that many parents used the museum as a sort of make-shift babysitter. Unsupervised children wandered all about the museum, often in large groups. There was a huge amount of trust both in the museum staff for the safety of their children, and trust in the museum exhibits to keep the attention of their children. In terms of layout, the museum is separated into wings. The largest wing is the Blue Wing, which houses the Butterfly Garden, the Theater of Electricity (which features the worlds largest air-insulated Van de Graaff generator,) and exhibits on scientific thinking, renewable energy technologies, mathematics, and models. The Red Wing houses the Mugar Omni Theater, the Charles Hayden Planetarium, the Discovery
Center, and the Museum Store, and seemed to be the most popular with visitors. The Green Wing, which houses exhibits on New England Habitats and classic explorer trophy-rooms, was the least popular.

In the museum, there were several types of technology incorporated throughout the exhibitions. The main type was scientific technology, which came in the form of mathematic models, optical illusions, renewable energy technologies, stairs equipped with trigger musical technology, a Rhoads ball sculpture, and the largest air-insulated Van de Graaff generator that demonstrates artificial lightning bolts, Tesla coils, and other electrical apparatus. The more traditional digital portion of the technologies were mostly TV or monitor screens. Half of these screens were looped videos or pre-recorded voice-overs played alongside a slide-show. The other half were “interactive” games, questions, or “click to know more” slides. These were “interactive” in that a visitor could click on screens and navigate the information themselves, but the choices were limited and once the options were exhausted, there was no more. However, all of this technology, digital or scientific, was hugely popular with all visitors. There were lines for most of the technology and many visitors went back in line after they had their “turn.” It seemed that often, especially with children, visitors didn’t necessarily care about the information they were being given or what they were learning. They just enjoyed the sensory experience of touch, feeling, and “doing.”

This experience was directly juxtaposed to the experience of walking through the Green Wing. The fossil exhibits and trophy-rooms were un-interesting to most children and teenagers, who went through the exhibits quickly. The adults going through the exhibits seemed to enjoy
them, but even then, they mainly viewed the exhibits and did not read any accompanying text. It did not seem to be a coincidence that these exhibits, the ones with no digital or scientific technology, were the ones that least interested museum visitors.

For patrons living with disabilities, the museum can easily be a confusing space to navigate. The museum does employ familiar access opportunities, such as elevators, escalators, wheelchairs, and assistive listening devices. However, it was the extreme sensory experience of the museum that could be disorienting to disabled patrons. Patrons with mobility issues would have a difficult time navigating through the crowds. Many of the exhibits had tight spaces, or spaces that required patrons to crouch, reach, or physically touch. Some portions of the museum, like the Theater of Electricity, may actually be physically uncomfortable for some disabled patrons to experience. Aside from physical opportunities, the MoS did not have digital or scientific technology specifically for patrons with disabilities. There was no “disturbance” to the status-quo or “alternative” opportunities offered to disabled visitors. There was no emphasis on the individual creating knowledge through their experience, which is what scholars like Papalia would be looking for in the MoS.

Online Experience

The MoS dedicates a large portion of their website to a section called “Museum Online.” There are several digital components aimed at previous museum visitors, like the View Your Data page. On this page, past-patrons can view their personal data from activities they engaged in, like their experiences in the Hall of Human Life. Unfortunately, the online digital media also draws heavily from Social Presence Theory. There are videos and podcasts that focus on
supplemental material that is not included in museum exhibits. By focusing on the physicality of hearing and seeing, patrons living with visual or auditory disabilities do not have the opportunity to experience the media. There is also a heavy emphasis on “subscribing” to the videos, podcasts, and YouTube channels. This matches up very well with the MoS functioning as a market-driven industry, as “subscribing” is another way of “consuming.”

Suggestions

In offering suggestions for the MoS, I would first encourage the museum to continue offering online digital exhibits. However, they need to incorporate alternative ways of viewing, hearing, and “doing” for visitors living with disabilities. They have the perfect platform set up to allow for virtual communities to create significant personal and individualized meaning through their online exhibits.

Second, the museum needs to begin to conceptualize open technology access. The MoS today employs what I have previously called “closed” technology. This technology is structured so that museum visitors navigate pathways already outlined by museum staff. There is no visitor meaning-making being done. This closed technology provides limited opportunity for able-bodied visitors, which proves problematic for visitors who have hardships in using the technology physically.

Finally, the museum must begin to think of how new digital technology can be created simultaneously with their disability opportunities. With the museum being as overwhelming to the senses as it is, it is imperative for this new technology to offer alternative ways for disabled patrons to navigate the exhibitions and collections. It would even benefit its market-driven guise
to explore these avenues. The MoS would certainly gain more and alternative sponsors, charitable donations, and government funding if they specifically focused on the interrelation of digital technology and disability access.

**C. Philadelphia’s Magic Gardens**

*History*

Philadelphia’s Magic Gardens (PMG) is a fully mosaicked visionary art environment, museum, gallery, and community center located in Philadelphia, Pennsylvania. PMG is dedicated to the preservation and interpretation of artist Isaiah Zagar’s mosaic environment and public murals. PMG is over 3,000 square feet of mosaicked art work, including an indoor building and an outdoor sculpture garden that comprises approximately one city block. The construction of PMG took Zagar over fourteen years to accomplish, and was once slated for demolition. In 2002, the neighborhood community, unwilling to witness the destruction of Zagar’s creation, began grassroots campaigning to raise the funds to purchase the site. PMG hosts daily public programs, family-centered programs, and tours that incorporate themes of art and community. As a community arts center, PMG hosts private events, such as weddings, business functions, tutoring classes, and neighborhood community meetings. The more “traditional” art gallery portion of the museum houses revolving exhibitions.

*Guise Framing*

Of the post-museum, Marstine begins by stating that

…this term [is] to suggest an institution that has completely reinvented itself, that is no longer a ‘museum’ but something new, yet related to the ‘museum.’ The post-museum clearly articulates its agendas, strategies, and decision-making processes and continually reevaluates them in a way that acknowledges the politics of representation…The post-
museum actively seeks to share power with the communities it serves, including source communities. (19)

As a post-museum, PMG understands that visitors are active participants in their own narrative. The post-museum does not generalize an audience, but instead actively encourages disparate and diverse communities to engage in museum discourse. The museum staff encourages source communities to take ownership of their own identity. In the functioning of a post-museum, PMG does not shy away from conflict or controversial exhibitions or narratives. Most importantly, the post-museum aims to promote social understanding and equality both within and outside their museum space. Marstine does agree that the post-museum is a new and emerging “parerga,” one that is often difficult for highly “traditional” institutions to achieve. The post-museum is a guise to aspire to, hoping to become, as Andreas Huyssen states, “…a space for the cultures of this world to collide and to display their heterogeneity, even irreconcilability, to network, to hybridize and to live together” (Huyssen, 35).

One poignant example of how PMG functions in its guise of post-museum is the emphasis on encouraging source communities to actively participate in the construction and implementation of specific revolving exhibits. Specifically, in August 2014, PMG partnered with the City of Philadelphia Mural Arts Program to display pieces by the Restorative Justice Program. The exhibit, called Beyond the Wall, featured paintings and mixed-media pieces created by participants of the Restorative Justice Program: youth who have had contact with the juvenile justice system and inmates at the State Correctional Institution at Graterford. Incorporating concepts of restorative justice, Beyond the Wall enabled participants to communicate, heal, and restore communally. For Beyond the Wall, PMG functioned not as an
“expert” curator, but as an advocate for shared responsibility and “power” between source communities. Functioning as a post-museum, PMG listens to societal concerns and responds by offering a platform for these discussions and communications.

**Physical Experience**

Before entering the museum, visitors are able to glimpse the inner-workings of the site. The outside wall of the sculpture garden faces the public street and is mosaicked with bottles, colored glass, cut tiles, and bicycle tires. Upon entering the museum, patrons experience a space that is bursting with riots of color. The walls, ceiling, and floors are covered in cut mirror pieces, tiles, and broken china. The inside of the museum is simply a repurposed Philadelphia row-home, which means the admissions area and galleries are extremely tight. Frequently, the artwork in the galleries protrudes from the walls. The outside portion is an open sculpture labyrinth with several levels, winding tunnels, archways of various heights, two separate flights of stairs, and one small seating area. The museum is a sensory experience that engages sight, sound, and, even though it is prohibited, touch. As the majority of the museum is a permanent art installation, there are few traditional labels for patrons to read, though there is a brochure available at the admissions desk. Museum staff frequently roam the site to answer patrons questions and ensure museum safety. It seems that, in the guise of the post-museum, PMG is allowing patrons to create their personal narrative within the mosaics, instead of identifying how the art should be viewed.

In terms of technology, there were very few opportunities provided by the museum. There is one TV that shows a recorded question and answer session with Zagar on a looping
feed. Also, there is one small postcard in the admissions area that informs a patron that there is an audio-guide available for the museum. However, this audio-guide was not created by PMG but by an outside tourism organization and only works with Apple software. Unfortunately, the guide was very difficult to access and several of the information clips did not play. As a small non-profit, it is not surprising that PMG does not have the funds to implement expensive digital technologies. Indeed, this is an often unfortunate aspect of the post-museum. The “newness,” either in age or art sensibility, of a museum can create financial hardships. This disadvantage is frequently felt in “supplemental” departments, such as technology usage and implementation.

Unfortunately, PMG is not readily accessible for patrons living with disabilities. There are no elevators or escalators found at the site, and there is no possibility for their construction. Inside the first gallery, there is an inclined ramp leading to the back gallery in a separate building. Outside in the garden and labyrinth, the courtyard area is flat, with a step leading to the gardens first level. The walkways in the garden are tight with little space for maneuverability. There are also two large flights of steps located in the labyrinth that take patrons to lower levels of the installation. One flight of stairs is wide with no railing, while the other set is much narrower with an iron railing. The weather is an important factor in the accessibility of the site to all patrons. During rainstorms, the staff cautions visitors that the outside tiles can be slippery, and may sometimes even close parts of the outside off. If there is snow, or other more serious forms of inclement weather, the outside portion is permanently closed to visitors.

Aside from mobility challenges, patrons suffering from visual impairments could easily have a difficult time navigating the space. While PMG does offer a service for patrons with
visual challenges, these guided tours are only offered to groups who reserve a tour before the visit. However, recent conservation efforts have made museum staff cautious in continuing tactile programs. After almost twelve years of being open to daily public tours, the mosaics are beginning to show wear and tear. As Barker and Smithen have discussed, PMG is starting to face decisions regarding both the use of the museum and the preservation of the artwork. In the guise of the post-museum, it seems that PMG has opted to have their preservation efforts continue the natural narrative of the site. The staff makes their conservation efforts a public appearance, and allow for the community (who uses) to aid them in preservation.

*Online Experience*

PMG’s online website is bright, colorful, and filled with pictures of the site, which implies that staff understand the uniqueness and possible disarming nature of the museum. Two prominent sections of the website are the public programs and education opportunities that are provided by the museum. There is a very real emphasis on community found on the website. However, aside from certain still images chosen by the museum, there is no subdirectory for a museum “collection.” The specific revolving gallery exhibitions do have dedicated portions of the website, again with only text information about the exhibit and a few still images.

Another relevant reason for this lack of digital collections is, once again, lack of museum funds. PMG constructs their website in-house and delegates the maintenance to only a few part-time museum staff.

PMG does make excellent use of free digital technology in the form of social media outlets. The museum is actively involved in Facebook, Twitter, Tumblr, Instagram, Flickr, and
Pinterest. Not only do they post daily on these sites, but they actively encourage participation from outside sources. PMG solicits pictures, comments, and concerns from their past, present, and future patrons. Visitors, potential visitors, and community members can engage in these virtual communities much the same way they can in physical communities. These instances of highly developed relationships proves that Social Presence Theory does not adequately categorize forms of communication, especially digital forms. These virtual community members have a personal rapport between them, and certain community members are seen to have large amounts of social influence. These virtual communities are incredible opportunities for patrons and potential patrons living with disabilities. The insistence on individual curation outside of the museum space provides access to the disabled community’s own unique narrative. These virtual communities are a perfect space to allow for a broad audience to witness different ways of viewing, learning, and “doing.”

**Suggestions**

There is one main suggestion that I would like to offer for PMG’s consideration. The first part of the suggestion is to actively reach out and encourage the participation of the disabled community in the creation of their public programming and education opportunities. Currently, the museum incorporates the narrative of many neighborhood source communities in their programming. It would be natural to incorporate the disabled community in the creation of their own public or educational narrative. The museum already has close ties with several organizations in Philadelphia that work closely with people living with disabilities. It would also be incredibly advantageous for the museum to incorporate free digital technology into these
The second part of the suggestion pertains to the software possibilities of these new programs. While the museum is already well versed in social media technology, a web-publishing platform such as Omeka could be useful in creating collections curated by people living with disabilities. Omeka is an open-source, flexible publishing platform for the display of “…library, museum, archives, and scholarly collections and exhibitions. Omeka falls at a crossroads of Web Content Management, Collections Management, and Archival Digital Collections Systems” (Omeka.org). The beauty of Omeka is that it was designed for users to focus on content and collection interpretation, not programming or IT technical functions. PMG staff would be able to build online collections and exhibitions of the mosaics that otherwise cannot be shared easily online. They could then invite visitors to digitally contribute to the content found in the collection. This would actively encourage a kind of interaction between disabled patrons and institution that falls directly in line with the post-museum guise. Visitor and museum would be simultaneously creating and curating an exhibition or collection. They would be both sharing in the responsibility, controversy, and narrative of the created exhibit. By offering this kind of digital interaction to patrons living with disabilities, PMG would be offering an unparalleled access opportunity to an entire community.

Conclusion

Museums must begin to conceptualize alternative physical and online experiences for physically disabled patrons. Using the theory of “guises” allows us to understand how museums
frame disability access and digital technology implementation in differing ways. As this study shows, museums such as The Metropolitan Museum of Art, the Museum of Science, Boston, and Philadelphia’s Magic Gardens can all harness the opportunities afforded by their guise and provide innovative avenues for disability access. “Shrine” museums, for example, such as The MET can provide truly groundbreaking digital implementation for disabled patrons due to their generous museum budget. “Market-driven industry” museums such as the Museum of Science, Boston can use consumerism and science together, allowing for innovative scientific digital exhibition technology specifically for disabled patrons. Finally, “Post-museums” such as Philadelphia’s Magic Gardens can afford ample opportunities to think outside normative notions of museum digital and disability access, and create alternative ways of “doing” that are dynamic and rewarding.

Further research involving larger scale case studies of several more museums and studies on the implementation of certain types of technology in a specific museum would only be the beginning of this necessary field of work. Other relevant research would include examining how the socio-economic status of disabled patrons directly effects their choices regarding museum experiences. Only by constructing and using digital technology specifically with regard to patrons living with disabilities can true disability access in museums happen.

**Bibliography**


http://cjds.uwaterloo.ca/index.php/cjds/issue/view/7/showToc

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