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Of the little writing available today authored by exhibition designers, most consists of manual-like instructions or pretty-picture compendia, though often interesting and even inspiring, not nearly enough to represent their field as a relevant, necessary profession. Turning to data drawn from exhibition designers' personal experiences as well as their words deeply imbedded within a widely read museum publication, in this thesis I mined and shared exhibition designers' voices as they relate to the exhibition development process and the broader professional museum culture. Specifically, I studied the imagery and text published from 1970 through 2009 in Museum (formerly Museum News), the American Association of Museums' journal that has covered the museum community's trends and issues for more than eighty-five years. I also interviewed a purposeful sample of five exhibition professionals with varied backgrounds and current foci, and, thirdly, I analyzed data collected from my own participant observations as an intern in the 3-D Exhibition Design Department at the Field Museum of Natural History.

Critically silenced, often neutralized and sometimes ignored in the past, my research finds that exhibition designers have emerged at the crossroads rather than the margins of exhibit development. They have evolved their field and in terms of what museums and audiences expect of them, but designers continue to struggle to have their voices and roles considered "scholarly" equal to other

museum professionals. This project intends to contribute, if even in a small way, to understanding the place of exhibition design in museums of the past forty years and the fluctuating present, as well as lays groundwork for future investigations.

## THE EMERGING VOICE OF THE EXHIBITION DESIGNER

by

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A Thesis Submitted to the Faculty of the Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Master of Science

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Approved by

Patrick Lee Lucas

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# APPROVAL PAGE

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#### CHAPTER I

#### THE FLEDGLING EXHIBITION DESIGNER

I began my graduate work in Interior Architecture with a concentration in Museum Studies intending to learn exhibition design. When searching for a graduate program where I could learn these skills, few schools surfaced. Of the programs I looked into, most were art schools, which, with a liberal arts background, made me feel like a fish out of water. My initial attraction to UNCG's program had to do with its interdepartmental collaboration between the Interior Architecture program and Public History. I felt that though I was switching to a design field, taking classes with history students would supplement my liberal arts heart. After all, my interest in exhibition design has everything to do with its multidisciplinary nature.

In order to learn basic and intermediate interior architecture skills and qualify for this program, I took three years of design classes and studios before I applied to the graduate school. In addition to general interiors knowledge, I made a point to direct my projects in a way that helped me learn the techniques and considerations unique to exhibition design, though independent of the broader museum context—"in the completely artificial world of academia" (Polly McKenna-Cress, personal communication, March 11, 2010).

I began graduate-level theoretical work eager to apply my newly learned skills in a way that would prepare me for real museum work, to compare the design methods I had learned to the broader theoretical framework of exhibition design as it pertained to museum studies. To my escalating frustration, however, learning the evolution of the field, why exhibition designers currently work in the ways that they do, and whether exhibition designers' work contributes to museum exhibition relevance, proved virtually impossible. Why do exhibition designers exist in the museum world, and how/when did that come to pass? Why can I not find anything written on these subjects?

I conducted library and Internet searches for books, of which I believe I now own every one that mentions exhibition design, and journals, and asked for recommendations from professors and colleagues. One recurring suggestion came in the form of the scholarly journal *Exhibitionist*, a twice-yearly periodical published by the American Association of Museums' standing professional committee, National Association for Museum Exhibitions (NAME), which seemed promising at the time. No local library carried it, however, and back issues cost around \$15 each. I tried to have my school library order a subscription, but the periodicals manager told me that NAME denied them a subscription because either none or not enough faculty were current members of the organization. Several of my professors requested it to no avail as well. Not fully understanding this outcome, I researched and found that of the thirty-three colleges and universities that currently offer degrees, concentrations, or classes in exhibition

design, only four of them carry *Exhibitionist* in their school libraries, and only one of those four schools offers an advanced degree in exhibition design. Even if this journal represented the field well, it certainly had trouble reaching the right people to make a difference in educating its future.

Of the little writing I found by exhibition designers, most consisted entirely of manual-like instructions or pretty-picture compendia, though often interesting and even inspiring not nearly enough to prove to me that I was becoming a part of what I knew to be an fascinating, relevant, necessary profession. I understood the field's fledgling nature when I first became interested in it, but I had no idea the trouble I would encounter trying to learn more about it. Every other academic discipline and profession seems to have its founding heroes and standard literature explaining the field's evolutionary history. I wanted to know mine. I came across a few, but I knew there must be more. So I made it my mission to seek them out and fill at least part of this gap in the literature so that future exhibition design scholars might know them as well.

Turning to data drawn from exhibition designers' personal experiences as well as their words deeply imbedded within a widely read museum publication, in this thesis I mine and share exhibition designers' voices as they relate to the exhibition development process and the broader professional museum culture. Critically silenced, often neutralized and sometimes ignored in the past, my research finds that exhibition designers have emerged at the crossroads rather than the margins of exhibit development. They have evolved their field and in

terms of what museums and audiences expect of them, but designers continue to struggle to have their voices and roles considered "scholarly" equal to other museum professionals.

Long before discovering these results, however, I began this journey with the literature reviewed in the following chapter. Drawing from sources within and outside the museum world, it sets the stage for mining the evolution of exhibition designers' voices. Starting here, I hope to contribute, if even in a small way, to understanding the place of exhibition design in museums.

#### CHAPTER II

#### INTERNAL VOICES AND EXTERNAL FORCES

Traditionally, museums have focused energy on keeping, preserving, and exhibiting objects with less regard for audiences (Dean, 1996; Falk & Dierking, 1992; McLean, 1993; Miles, 1988). In the past, curators took on sole responsibility for exhibitions and did not accept advice or opinions from anyone, save the occasional financial supporter. For this reason, museums have long fought the stigma of elitism and exclusivity, where the vision for the exhibition resides within a single museum professional (Schwarzer, 2006; Weil, 2002). While curators hold intellectual responsibility for collections, communicating that intellect requires collective input from several sources, including educators and community members, as well as designers, who bring to the exhibition skills in art/artifact representation and information dissemination (Belcher, 1991; McLean, 1993; Weil, 2002).

Currently, museums strive to create audience-focused exhibitions directed toward visitor bodies' unique qualities and desires (Sandell, 2003). Museums have begun to recognize the benefits of celebrating pluralism—inevitable differences amid society such as age, ethnicity, class, and learning styles among many others, which have the potential to alienate if not addressed properly (Chalmers, 1996). They offer variety and choices within and among exhibitions in

order to attract broader, more diverse audiences. Rather than trying to be all things to everyone, however, these institutions recognize their unique place within the museum realm as well. They build mutually supportive networks with other institutions and share authority with the audience community in order to offer additional and richer experiences to that community (Falk and Sheppard, 2006). Designers assume much responsibility for helping to layer contexts within museums and exhibitions that represent and address the variety gathered from external and internal sources.

By documenting design's link to current museum theories and practices, including the exhibition development process and visitor experiences, with this literature review I intend to underscore the rise and importance of the exhibition designer in the museum world. Due to the short evolution of exhibition design as a named profession, little has been written on this particular topic. Via sources from within and outside the museum profession I hope to fill this gap in the current literature.

### **Exhibition Design and Museums**

An understanding of today's consumer culture helps to explain why design has become increasingly important to museum visitors and, therefore, museums. Pine and Gilmore (2007) look at museums in business terms; and they expand on the evolving nature of the quality standards of today's consumer culture, "the experience economy," which design inherently and significantly characterizes.

They argue, "as goods and services become commoditized, what people want today are experiences—memorable events that engage them in an inherently personal way" (p. 76). The idea of *how* to spend both money and, more importantly, time has replaced the importance of *what* to buy. More and more, consumers can obtain goods and knowledge electronically. With the click of a button and from the comfort of their homes, people grasp everything from dirt to diamonds. They can find, read, and discuss dozens of perspectives on historical and cultural events in minutes. So why would anyone ever visit a store, a library, a museum? With a computer, though, inquisitive users limit their experience if not also engaging the holistic, engrossing nature of an experience shaped by immersive, well-designed museum exhibits (Braden, Rosenthal, & Spock, 2005; Carr, 2003; Pine & Gilmore, 2007).

Exhibition developers organize ideas and objects into uniquely engaging, three-dimensional spatial and informational contexts via design so that complex stories and relationships become more easily digestible. The creation of experiences, which touch people on cognizant, sensory, and subliminal levels and/or offer some shared authority, does not happen without deliberate design strategies, and these are the basic goals of all museum exhibitions (Belcher, 1991; Dean, 1996; Falk & Dierking, 1992; McLean, 1993; Schittich, 2009).

This vision for design as an integral part of museum life links to burgeoning literature that suggests new directions for these bearers of cultural memory. Falk and Sheppard (2006) theorize that as communities become increasingly more aware and personally involved with their public institutions, the need for a new museum business model materializes. Rentschler (2006) explains Falk and Sheppard's concerns:

The authors argue that the industrial age business model was linear, top-down, static, and organization-centered, isolated from the world around it. They contrast this model with the Knowledge Age business model, which is bottom-up, changing, flexible, audience-centered and open to the discontinuous changes occurring in society (p.1).

No matter the approach, exhibits represent a significant means to access data and ideas in the information age, increasing in both visual and contextual quality to meet increased visitor expectations. The Knowledge Age model's most important point for this investigation implicates the need for designers' inclusion, along with a number of other experts, at each point of exhibition and program planning (Figure 1). In support of this inclusive sentiment, McLean (1993) emphasizes the interdisciplinary needs of exhibit development. She notes the myriad skill-sets required to ensure quality exhibitions, which include "sensory, cognitive, aesthetic, social, symbolic, and physical elements" (p. 37). For this holistic standard to manifest, exhibit developers must monitor the big picture along with the details, a requisite that demands attention from several sets of eyes. Again, the implication is clear. For an exhibit project to reach its potential

most efficiently and thoroughly, it should involve several different experts with different skills, including designers, from conceptualization to installation.

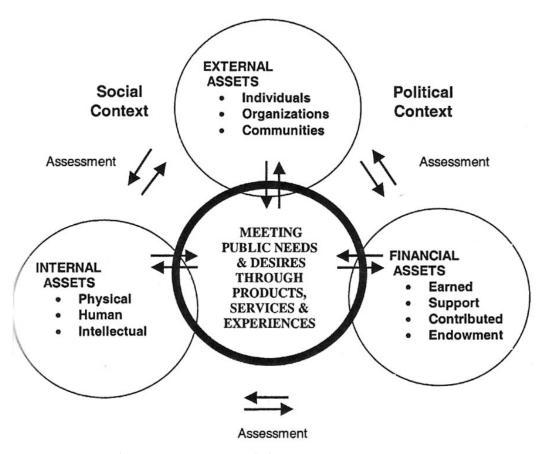


Figure 1. Diagram found on p. 26 (Falk & Sheppard, 2006).

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### **Learning Through Museum Exhibitions**

In an attempt to move away from mass-produced, one-size-fits-all experiences, the Knowledge Age business model encourages museums to embrace a quality-first, constructivist approach that strives not only to benefit from but also represent the disparate perspectives of the museum staff and surrounding community alike (Falk and Sheppard, 2006). In order to address this multitude of perspectives, museums have begun to employ new theories that, like the Knowledge Age business model, step away from traditional, top-down approaches. Howard Gardner's (2006) theory of multiple intelligences, one such pluralistic theory, focuses on diversity among human minds and learning styles, including eight intelligences: linguistic, musical, logical, spatial, kinesthetic, interpersonal, intrapersonal, and naturalistic. Though every person possesses a different combination of these intelligences and in different capacities, Gardner

represents the intelligences with types: a poet, a musician, a mathematician, an artist, a mime, a teacher, a philosopher, and a biologist, respectively. Take a teacher, for example. A teacher employs his/her interpersonal intelligence most prominently during the act of teaching though s/he also needs to apply kinesthetic intelligence if s/he teaches dance or coaches a sport. Other teachers, with different intelligence strengths, may teach poetry, math, or art. Furthermore, each teacher uses a different combination of his/her intelligences when involved in some other activity than teaching, such as reading a book. With varying ability levels and interests in reading, one teacher may prefer science fiction while feminist literature attracts another's attention; yet another may prefer to listen to an audiobook or watch a documentary instead of reading. A simplified example, but the diversity in intelligences influences the way humans perceive and learn in all aspects of their lives. These intelligences create the core of individuals' likes, dislikes, and personalities, and what draws certain people to particular other people, places, and ideas.

The concept of diverse learning helps explain why some people prefer certain types of museums and exhibits while others' interests are held elsewhere. Therefore, if museums strive to reach broader more diverse audiences, they must dig deeper and tackle issues even more complex than the more commonly addressed diversity categories of class, gender, age, and ethnicity (Chalmers, 1996). Diverse learning theory introduces challenges to exhibit planners that may not carry the same provocative weight as these other distinctions, but it demands

a similar contextual layering, which also has the potential to offend if not done properly. Consider the following example. A longstanding, frequent visitor/supporter of an art museum enjoys this institution's atmosphere because it offers some much needed quiet and solitude. Recently, however, information gathered and analyzed from an online survey has encouraged developers at the museum to plan an exhibition that includes some contemporary audio-visual pieces. They believe it will appeal to a younger audience and intrigue some music or film enthusiasts who would not otherwise visit the museum, therefore, potentially sparking new relationships. The effort would be wasted, however, if the museum ruined already established relationships with longtime supporters. Putting up a soundproof wall around the new exhibit may become part of the exhibition design, but that alone is not the solution. If the museum wants to appeal to a broader more diverse audience, engage dialog across social boundaries, and if the point of the new exhibition is not only to please but also facilitate learning for all visitors to the museum, a separating wall divides audiences and minimizes collective experience. Such a situation begs for a multivocal solution that includes complex design strategies, both spatial and social, to address cultural diversity as well as learning diversity (McLean, 1993). And without an exhibition designer, such an approach would not be possible, leaving exhibitions and museums as institutions constrained from providing the very experiences that current day audiences desire and on which they thrive (Falk & Sheppard, 2006; Pine & Gilmore, 1999).

Because museums rely heavily on exhibitions for success, design has begun to hold increasing worth within the museum world (Belcher, 1991; Dean, 1996; McLeod, 2005). The expertise required to accomplish a successful exhibit must come from a number of collaborators, each with unique skills, all brought together in a particular way to address each exhibition's specific needs (McLean & McEver, 2004). Each project calls on a different array of professionals and informants such as educators, curators, and community partners, but every exhibit needs at least one designer to impart the aesthetic and information disseminating skills they apply uniquely to each project. Though each exhibition requires a different arrangement of these skills and in different capacities, all exhibition designers must possess some proficiency for graphic design, interior design, interior architecture, lighting design, and basic carpentry (Dean, 1996; McLean, 1993). Other skills, such as sculptural arts and interior product design, often show purpose in exhibition development as well.

Exhibition content can and should appeal to a range of human senses, but most often, and sometimes exclusively, these installations rely on the visitors' sense of sight for communicating ideas. Dean (1996) explains that at the most basic level, exhibit designers require a comprehensive working knowledge of fundamental design considerations such as value, color, texture, balance, line, and shape in order to produce effective visual communication between visitors and the information presented. Like any designer of two-dimensional or three-dimensional spaces, exhibition designers must plan compositions deliberately



Figure 2: What Pat Moynihan Said About That, The Municipal Art Society of New York, 2004. Found on p. 175 (Lorenc, Skolnick, & Berger, 2007).

and with thoughtful calculation to achieve richly supported human environments, symbiotically and thoroughly supporting exhibition-learning goals. Though compositionally pleasing exhibition spaces can make even the densest or most emotionally charged content easier to digest, poorly designed exhibitions cause negative reactions, no matter the content's beauty and significance.

At the next skill level,
exhibition designers must consider human
scale, which affects all aspects of interior
architecture (Malnar & Vodvarka, 1992;
Rengel, 2003). The fundamental archetypes
of men, women, children, and persons with
special needs all factor into design for
exhibition spaces. When physically
comfortable, people learn better and will
spend more time in a space (Dean, 1996;
Malnar & Vodvarka, 1992); as visitors feel

lost in spaces too vast and empty or smothered in tight, overcrowded exhibitions.

Variations exist depending upon the exhibition's intentions, but human proximal comfort generally relates to the distance created between a person's outstretched arms (Figure 3).

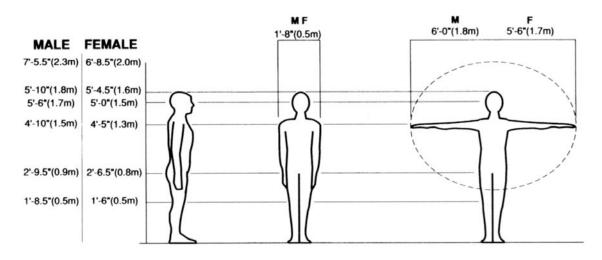


Figure 3. Image found on p. 42 (Dean, 1996).

Visual comfort contributes significantly to visitor satisfaction, including viewing height of printed and three-dimensional materials, as well as lighting conditions, all of which affect human comfort and willingness to engage (Dean, 1996; Miles, 1988). Average adult visual comfort includes a 63" eye-level with an approximate 60° cone-shaped field of vision (Figures 4 + 5), which helps designers focus and arrange displays for proper viewing (Dean, 1996; McGowan & Kruse, 2004). Also, while providing creative lighting variety to complement displays, designers must watch for problems such as glare, color distortion, and reflection, which confuse and irritate visitors, causing lower levels of content comprehension and engagement (Dernie, 2006; Miles, 1988).

Designers must create barriers, such as physical or spatial separations,

and designate resting
places to accommodate
visitors' basic human
proclivities to touch, sit,
and lean. Alternatively,
designers could explore
integrating these
activities as part of the
exhibition goals and
strategies (Dean, 1996).
Furthermore, exhibition

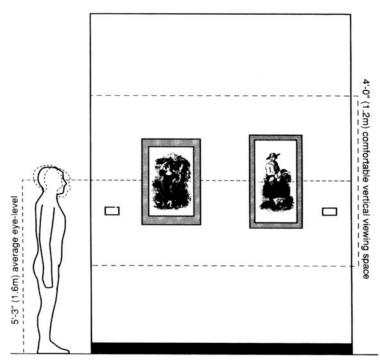
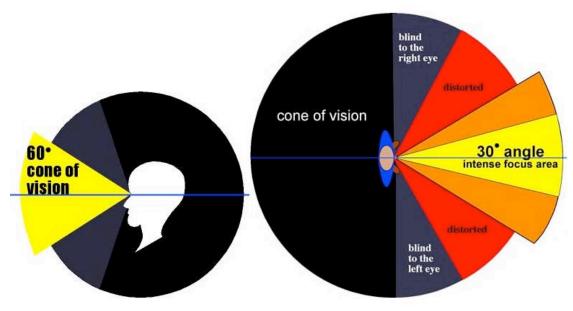


Figure 4. Image found on p. 46 (Dean, 1996).



**Figure 5.** Diagram retrieved from: http://www.shapelyforms.com/perspective101/index.html

designers work under interior architecture's umbrella because they incorporate other important interior considerations, including entry and exit points, traffic flow, and object arrangement, to create functional space (Dean, 1996; Malnar & Vodvarka, 1992; Rengel, 2003). Interior architects of all specialties transform space, but exhibition designers take responsibility for transforming spaces into learning experiences. Falk and Dierking (1992) believe that exhibitions may be the best medium "to convey the concrete facts of reality to large numbers of people" (p. 78). Belcher (1991) claims that beyond that purpose exhibitions also qualify as an art form:

...[A] work of art should elicit an emotional response... By the nature of its design (quite apart from the objects within it, although they obviously form an integral component), a mood is easily created—but the feelings generated by a powerful exhibition go beyond this... Some art is visual; some is tactile; some may be heard. An exhibition can combine all these. It utilizes not just form and space but shape, colour, light, and texture as well, and maybe even sound—and indeed all the basic elements of art and design. It may also utilize imagery and semiotics (p. 41).

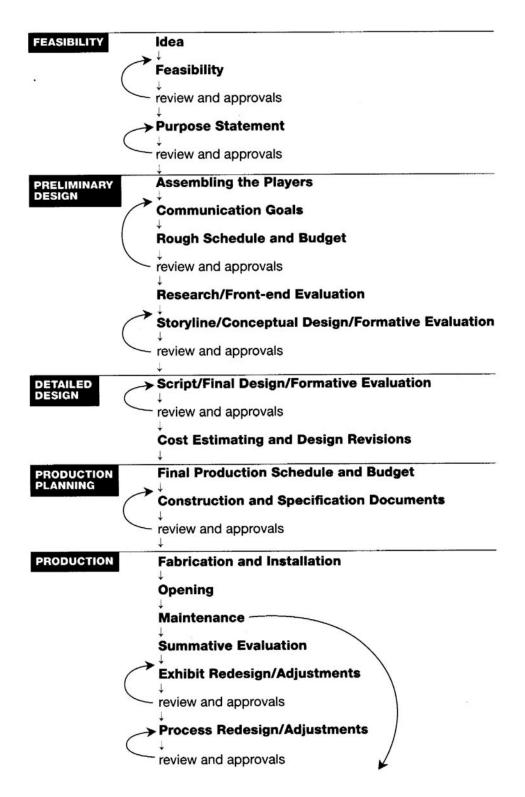
Not only must exhibition designers address physical human needs within exhibits, they must possess a multidimensional skill-set that includes aesthetic and creative senses along with research, interpretation, writing, and management skills in order to fully integrate information, concepts, and experiences desired in a museum setting (McLean, 1993).

### **Exhibitions and Museum Culture**

In addition to physical and intellectual aspects of museum work, exhibition designers must constantly take into account the museum's mission, an overarching guide to decision making at all levels of the institution collectively shared by the entire professional museum staff. The museum's image or brand should reflect its mission and extend into all areas of the museum, including exhibition spaces. It falls to the exhibition designers to carefully manage institutional goals, winding them into exhibits in a way that avoids damaging each exhibit's individual message (Belcher 1991).

Exhibition designers also respond to several external constraints.

Employers and/or clients impose certain limitations, as do government code officials and regulators, but those appear in most all design projects. A community of visitors represents a seminal voice in exhibit making, widening the participants in the design process far beyond the exhibition team and museum staff. Mclean (1993), goes so far to suggest that the traditional linear design model—concept → program → schematics → development → production—does not account for the various and disparate points of view that an exhibition requires. The designer must continually gather and eventually organize all perspectives and contexts into one cohesive vision for the exhibition to properly articulate its intended message. She offers a better-suited, iterative development process for exhibition design to illustrate the range of responsibilities and skills exhibition designers carry out (Figure 6).



**Figure 6.** While most of the steps in McLean's exhibit design process occur sequentially, certain steps require review and approval, which may cause the design team to revert to an earlier stage. Diagram found on p. 51 (McLean, 1993).

Situated within interior architecture and museum worlds, exhibition designers help museum audiences and their respective institutions to make each exhibition as relevant and effective as possible. Increasingly responsive to audience needs, museum exhibitions have come to a place in history with one foot in the entertainment and leisure industry and one foot still standing in the



**Figure 7.** Future Zone, T-online Experience Center, Darmstadt, Germany. Image found on p. 148 (Lorenc, Skolnick, & Berger, 2007).

cultural, educational institution realm. In comprehensive studies of notable exhibits and exhibit design firms around the world, a wide array of exhibits from major expositions to small artist-designed displays help explain current museum exhibit design trends and approaches, all of which center a growing emphasis on visitor experience. (Dernie, 2006; Lorenc, Skolnick, & Berger, 2007; Reinhardt & Teufel, 2008).

According to Dernie (2006), experience starts with the narrative. No

matter the quality of content, a poorly contextualized exhibition leaves visitors disoriented. But Dernie notes a change in the way that designers relay stories and key messages crucial to exhibitions: "The classification of artefacts

according to types and rigorous chronologies has given way to the more flexible construction methods of narrative" (p. 20). The narrative spaces characteristic of today's successful exhibitions feature nonlinear, episodic structuring, a voice entirely different than in traditional museum settings. Their contexts vary

rhythmically through changing emphases and intensity levels, resulting in more memorable encounters than possible in otherwise monotonous layouts. Furthermore, designers who creatively apply graphics, color, sound and lighting effectively transform narratives into powerful emotional and physical



**Figure 8.** Steuben Flagship Store, New York. Image found on p. 146 (Dernie, 2006).

experiences, often underscoring and amplifying exhibition content.

Technique swapping across exhibit typologies results from a current development in exhibition design that has designers focusing work around human behavior rather than social demographics, a more common approach in the latter twentieth century that still influences exhibition concept development. Behavior, which does not necessarily align with age or ethnicity, for example, transcends demographic considerations and helps inform interactive displays' growing relevance (Chalmers, 1996; Lorenc, Skolnick, & Berger, 2007).

Emerging in the commercial design sector, "experience design" has become a buzzword in the exhibition design field as of late (Braden, Rosenthal, & Spock, 2005; Pine & Gilmore, 1999). Lorenc, Skolnick, and Berger (2007) clarify, however, that experience design tenets—like passive storytelling, nonlinear education, and interactive engagement—have been around for well over a century in the form of themed environments like World's Fairs and amusement parks. Yet experience design questions the nature of environmental communication in a number of ways that take themed storytelling to a new level, especially in museum settings. Put into practice, these questions involve utilizing nontraditional models, such as "turning a trade show display into a museum space, or looking at a retail display like a classroom" (p. 36). Dernie (2006) echoes Lorenc, Skolnick, & Berger's observations that boundaries between commercial and cultural exhibits increasingly blur, bringing new paradigms to exhibition planning and execution. While a retail space may resemble an art gallery, some museum interiors appropriate the kind of branding more often found in typical leisure settings, shifting perceptions of museums and their exhibitions as immersive, engaging, and entertaining venues.

Not only have designers reconceptualized exhibitions as immersive experiences to meet the growing demand by audiences, they have retooled tried-and-true techniques for handling information within exhibits, transforming transmission from passive, flat text panels and labels to far more active and engaging approaches.

While not a new idea altogether, interactive and hands-on exhibition elements have become significantly more developed in contemporary applications. As three-dimensional media constructs, exhibitions offer the location for a dialog between space, body, and time. Much like an encounter between any two complementary entities, "performativity" recognizes that the entire body experiences an exhibit. By reaching beyond the usual semiotics of other media, performative spaces allow visitors' movement through the space and interaction with displays to create personal associations, which always prove more lasting (Dernie, 2006). Thus the voice of such exhibits reaches for beyond a simple one-way transmission.

Now used to fundamentally personalize visitor experiences, interactivity also allows exhibition developers to continually share authority with audiences throughout the life of an exhibit, extending the former authoritarian voice to a plurality of voices. Quickly evolving technological advances have enhanced interactive trends and given designers more opportunities for experimentation, opening the possibilities for greater awareness and more effective exhibit content and experience delivery (Lorenc, Skolnick, & Berger, 2007). Reinhardt and Teufel (2008) offer one example featured at the Anne Frank House in Amsterdam from September 2006 to May 2007 (Figure 9):

[T]he museum contains the interactive exhibition entitled *Free2choose*. In practical examples [*sic*], a walk-in "choosing machine" is used to show how fundamental rights can come into conflict with each other. The interactive installation induces a reaction from visitors by showing them

shocking images and complacency-shattering statements [such as], "The underlying question is: When must freedom be given priority? Express your opinion! Your voice counts!" Current worldwide examples of situations are shown where there is a conflict between the right to freedom and the protection of democratic rights (p. 306).



**Figure 9.** Visitors test their ideas about democracy and freedom in the *Free2choose* exhibition at Anne Frank House, Amsterdam. Image found on p. 308 (Reinhardt and Teufel , 2008).

As with this example, another current trend in experience design for exhibitions, the facilitation of dialog that not only reinforces visitors' contextual understanding while inside an exhibition, encourages visitors to continue learning through discourse long after leaving the museum. Sometimes these ongoing discussions take shape as face-to-face and roundtable conversations or through

printed publications, but museums increasingly rely upon online forums and other digital media to advance visitors' voices in the museum realm (Lorenc, Skolnick, & Berger, 2007). Despite resistance from museum traditionalists, simulated environments and the Internet, both generally inclusive and far-reaching, increasingly engage new audiences and offer fresh communication avenues for museums and communities (Dernie, 2006).

The exhibitors (exhibit makers), the observers (audiences), and the exhibited (artist, curators, and/or researchers whose work is on display and human subjects of exhibit topics, who may also classify as observers, when applicable) constitute the museum "community," each with a distinct voice. This trifecta creates what some now call "exhibit culture" or "museum culture," evermore inclusive as museums become more focused on community (Carr, 2003; Falk & Sheppard, 2006; Weil, 2002). Conversations within these cultures ultimately decide how and what exhibitions manifest and their subsequent success. To help exhibition and museum professionals facilitate productive dialog within their respective communities, Reinhardt and Teufel (2008) offer a "canon of new exhibition design for the 21st century" with criteria that open museums and their exhibitions to an increasingly plural approach (Figure 10).

In keeping with ever-growing environmental awareness about climate change and other ecological concerns, I find it important to add an eleventh criterion: Incorporation of sustainable materials and practices. I find this last point especially applicable to the waste-creating, ephemeral nature of exhibitions, even

those coined "permanent." While several scholars have written at length on the topic of sustainability, McLean (1993) provides guidelines specifically created to help exhibition designers plan with more environmental consciousness. Primarily, she highlights the need for museums to use exhibition materials more mindfully (Figure 11).

	CANON OF NEW EXHIBITION DESIGN FOR THE 21 <sup>ST</sup> CENTURY
1	Intensification of observation
2	Information instead of persuasion
3	Facilitation of reception
4	Lack of ambiguity in the message
5	Avoidance of visual monumentalism
6	Correspondence with a new feeling of space
7	Making the volume of the exhibition spaces dynamic
8	Guidance and orientation through clear directions
9	Conscious light direction
10	Use of low-cost materials and media

Figure 10. Canon found on p. 25 (Reinhardt & Teufel, 2008).

	GUIDELINES FOR PLANNING ENVIRONMENTALLY MINDFUL
1	Reduce the amount of materials used.
2	Design for durability. Make things easy to maintain and repair.
3	Design for reuse and second life.
4	Consider each material's "life cycle," from its state as a raw material to its eventual disposal.
5	Use materials that can be recycled.
6	Use recycled materials.
7	Design single material products whenever possible, and design with recyclable parts.
8	Avoid the use of toxic materials.
9	Design for energy efficiency.
10	Use exhibition design to educate the public [about environmental consciousness]

Figure 11. Guidelines found on p. 167-169 (McLean, 1993).

Μ

cLean also provides the American Design Council's seven Design Principles of Environmental Stewardship to outline approaches to exhibition design that echo stewardship concerns in the broader design fields, such as sustainable furniture manufacturing and the inclusion of green roofs in architectural planning (Figure 12).

	DESIGN PRINCIPLES OF ENVIRONMENTAL STEWARDSHIP
1	Advocacy for Safe Products and Services
2	Protection of the Biosphere
3	Sustainable Use of Natural Resources
4	Reduction of Waste and Increasing Recycling
5	Wise Use of Energy
6	Reduction of Risk
7	Sharing of Information

Figure 12. Principles found on p. 170 (McLean, 1993).

These principles align with the Coalition for Environmentally Responsible Economies' guidelines to "encourage corporations and their shareholders to conduct their business as responsible stewards of the environment and to seek profits only in a manner that leaves the earth healthy and safe" (p. 170). These ideas about stewardship suggest a wholly different approach to exhibit design not considered before the last two decades and still widely unpracticed.

All of these criteria and guidelines that McLean (1993) as well as

Reinhardt and Teufel (2008) provide revolve around one commonality: the desire
to make social and physical environments more comfortable and accessible for
as many people as possible for as long as possible, while minimizing the amount
of resources deployed in their manifestation. Though now a canon for designers

and museums of all genres, this resource-sensitive approach adds another facet to the concerns of the people shaping museum exhibitions.

As with stewardship concerns, the various voices that shape our sense of museums and their exhibitions point to an increasing sensitivity required of exhibition designers, along with other museum professionals, to exhibit makers, audiences, approaches, collections, education, learning, information transmission, institutional goals, and many other factors and considerations. The exhibition designer, critically silenced, often neutralized and sometimes ignored in the past, has emerged at the crossroads rather than the margins of exhibit development. To find and define that voice, we must turn to data drawn from the personal experience of exhibition designers as well as that deeply imbedded within museum publications. Such sources suggest qualitative evaluation as a recognized approach to sharpen and clarify the voice of the designer engaged with exhibition making in the museum setting.

## **Grounded Theory and Discourse Analysis**

According to Strauss and Corbin (1998), qualitative research does not attempt to arrive at statistical or other quantifiable facts but evaluates nonmathematical, interpretive data such as human behavior, feelings, and emotion, clearly the world of museums and the designers within them. Qualitative data may also cover social movements and other cultural phenomena. Although some data may be quantified at points within the research, qualitative

researchers process data through interpretation, focusing on people rather than numbers and taking subjectivity's positive and negative attributes into account.

In addition to a dynamic human focus, one reason to perform qualitative research stands out in relation to this investigation: Qualitative methods work effectively to explore areas about which little is known (Strauss & Corbin, 1998). I intend to better understand not only the chronology of the emergence of museum exhibition designers' voices but also its significance to exhibition designers and the people who work with them. In conducting front-end research I found little research written directly about these topics. At the edge of this under-explored area, I must systematically collect and analyze raw data from which to devise theories and approaches, a process that requires qualitative research.

By using raw data nuanced with human perspectives, qualitative researchers discover and organize concepts and relationships into theoretical frameworks. Data collecting methods usually include human interaction through interviews and observations. Conducted on site, these interactions also provide data about people in relationship to their surrounding environments. Though researchers may also incorporate documents, films, or previously quantified data such as census records, the human element—those featured in these sources and those who created the sources—remains at the interpretive center (Strauss & Corbin, 1998). As museums represent fundamentally human enterprises centered in institutions, the qualitative approach should yield abundant data about attitudes and issues that shape human relationships, the exhibition site as

a designed environment to support human activity, and the museum as the built environment and intellectual frame in which humans learn about themselves and others.

Strauss and Corbin (1998) better explain qualitative data possibilities and relate them to the other major components of qualitative research. Including data, there are three components:

First, there are the *data*, which can come from various sources such as interviews, observations, documents, records and films. Second, there are the *procedures* that researchers can use to interpret and organize the data. These usually consist of *conceptualizing and reducing* data, *elaborating* categories in terms of their properties and dimensions, and *relating* through a series of prepositional statements. Conceptualizing, reducing, elaborating, and relating often are referred to as *coding*. Other procedures are a part of the analytic process. These include nonstatistical *sampling*, the *writing of memos*, and diagramming. *Written and verbal* reports make up the third component (p. 11-12).

Of the many qualitative research approaches, two methods best suit this investigation of the emerging exhibit designer's voice in museums: Strauss and Corbin's (1998) grounded theory and Gillian Rose's (2007) discourse analysis.

Grounded theory and discourse analysis both move from observations to identification of patterns, repeatedly interplaying data collection and analysis until results become redundant and saturated (Strauss & Corbin, 1998; Rose, 2007). Although researchers in grounded theory may come to a project from a certain field of study, they do not come with preconceived notions. Instead, they allow theories to emerge from the data, which results in more realistic approaches than

those derived from interrelating concepts, experiences, or speculations (Strauss & Corbin, 1998). Similarly, discourse analysis requires what Rose calls "fresh eyes," meaning that the researcher must suspend knowledge of previously made or studied analyses, making the material more fully available to the researcher and allowing for unexpected insights. The most significant difference between grounded theory and discourse analysis lies in their source materials. While grounded theory works best when used to analyze data collected from human subjects, as in interviews or participant observation, discourse analysis more commonly examines data produced through printed images, texts, and other recorded media (Strauss & Corbin, 1998; Rose, 2007). Since both types of sources constitute the data set for this research, the two-pronged approach should capture the voice in each. In using them together, a conversation emerges quite useful to sorting out the place of the exhibition designer in the exhibit development process.

Lynda Nead (as cited in Rose, 2007) defines discourse as "a particular form of language with its own rules and conventions and the institutions within which the discourse is produced and circulated" (p. 142). However consciously or subconsciously, institutions regulate themselves with evaluation and justification methods produced from their own discourses. Rose gives the example that "art" stands for more than various types of visual objects. It has become the institutions, practices, and language used to classify some things as art and

others as not. Discourses become paradigmatic norms and filter through all sorts of verbal and printed media.

Two types of discourse analysis exist in current qualitative research standards, and Rose (2007) simply labels them discourse analysis I and discourse analysis II. While each type deals with institutional discourse patterns, they signify two somewhat different methodological emphases. Discourse analysis I pays closest attention to images and texts as they pertain to the formation and production of discourse, but discourse analysis II looks more specifically at institutional practices than images and texts. Discourse analysis I leans toward a more defined methodology, but discourse analysis II concentrates more explicitly on issues of institutionally defined power and truth. Though Rose defines this difference, its lack of clear distinction encourages researchers to use them creatively. By reviewing and coding images and texts from within an institution's self-published media—their own institutionally defined power and truth sources—this investigation will combine discourse analysis I and II into a discourse analysis brand specific to this investigation's purposes, explained in detail in the subsequent chapter.

Similar to the ways in which qualitative researchers put their own spin on discourse analysis, grounded theory researchers do not only facilitate; they also contribute an additional human element or voice into the project's fiber. Even though grounding concepts in data requires scientific assessment, the interplay between researcher and data humanizes a project to its core and encourages a

balance between science and creativity. The ability to ask stimulating questions, make compelling comparisons, and appropriately categorize and organize raw data into innovative, realistic theories manifests through a researcher's creative senses. Patton's research (as cited in Strauss and Corbin, 1998) promotes grounded theory as both a science and an art, with nine behaviors to help guide researchers (Figure 13).

	BEHAVIORS TO HELP GUIDE QUALITATIVE RESEARCHERS
1	Being open to multiple possibilities
2	Generating a list of options
3	Exploring various possibilities before choosing one
4	Making use of multiple avenues of expression such as art, music, and metaphors to stimulate thinking
5	Using nonlinear forms of thinking such as going back and forth and circumventing around a subject to get a fresh perspective
6	Diverging from one's usual way of thinking and working, again, to get a fresh perspective
7	Trusting the process and not holding back
8	Not taking shortcuts but rather putting energy and effort into the work
9	Having fun while doing it

Figure 13. Behaviors found on p. 13 (Strauss & Corbin, 1998).

While these guides offer researchers a healthy perspective for looking at projects, following them dogmatically would defeat their creative purpose.

Similarly, in order to provide some standardization and grounds for rigorous analysis, Strauss and Corbin (1998) suggest flexible coding procedures, which

effectually summarize qualitative research processes, which Rose (2007) echoes in discourse analysis. First, build theories instead of testing them. Second, provide yourself, and other researchers if applicable, with analytic tools that can handle the necessary amount of raw data. Third, contemplate and discuss alternative phenomenological meanings. Fourth, work systematically and creatively at the same time. Fifth, identify, develop, and relate the building blocks that create concepts and eventual theories. Finally, and intermittently, repeat when necessary, which the researcher determines with her creative and analytical devices.

Both grounded theory and discourse analysis provide data that relate people to their surrounding environments or institutions, and those collective human experiences define the current foundation for almost all museum-related research. Recently developed theories on shared authority have encouraged museums to become multi-vocal and more collaborative (Carr, 2003; Chalmers, 1996; McLean & McEver, 2004). What was once almost solely the curators' realm has opened up to make room for community partners and newly defined internal processes (Falk & Sheppard, 2006; Sandell, 2003; Weil, 2002). Though exhibitions have always necessitated some design work, the exhibition designer's voice has become more prevalent with the rise of the knowledge age and the experience economy (Falk & Sheppard, 2006; Pine & Gilmore, 1999). Exhibition designers' voices have not always held enough authority, however, for us to understand their perspectives on the exhibition development process. With

sources from within and outside the museum world, this literature review sets the stage for mining the evolution of those voices.

#### **CHAPTER III**

#### **INTERPLAY**

The literature reviewed in the last chapter provided me with a solid theoretical foundation in the current and evolving museum exhibition research. I then moved into the qualitative research phase in which I collected data related to the emergence of exhibition designers' voices in relation to the exhibition development process and broader professional museum culture. I employed two methods, Anselm Strauss and Juliet Corbin's (1998) grounded theory approach and Gillian Rose's (2007) discourse analysis method, for this three-part study. In keeping with these qualitative research methods, throughout this phase I continually interplayed data collection and analysis noting significant patterns.

Via grounded theory, which helps most when used in conjunction with human sources, I conducted two different data collecting studies: participant observation and oral interviews (Strauss & Corbin, 1998). An internship with the 3-D Exhibition Design department at The Field Museum of Natural History in Chicago set the stage for the first data collecting initiative. Here, I engaged in participant observation to further study the required skills expected of an exhibition design professional. Along with the various tasks my supervisor assigned me, I took opportunities to discuss with my colleagues and superiors their perspectives on the future of exhibition design and where they perceive

themselves in the broader contexts of museum professionalism and visitor expectations. These discussions included formal conversations in a number of meetings I attended, some of which I led, with various museum professionals at all administrative levels and informal conversations around the lunch table or in my supervisors' offices. Over the course of the six-week-long internship, I took extensive field notes about my assigned tasks and conversations in an oft-kept journal, which enabled me to purposefully reflect on and regularly analyze my experiences and observations at The Field Museum.

In addition to these first-hand observations, I also followed grounded theory methods to conduct interviews with five exhibition design professionals. In order to acquire an in-depth understanding from these interviews and have ample time to process the collected data, analyze it, and repeat when necessary, I developed a purposeful sample, which gathers an often small but information-rich group for an in-depth study rather than a large, random, statistical sample (Patton, 2002). Taking recommendations from my thesis committee members, trusted museum professionals, and writers found in the literature review, I chose a small, informed number of individuals with varied backgrounds and current foci to interview (Figure 14). They included Kathleen McLean, principal of Independent Exhibitions, a museum consulting firm specializing in planning, design, and exhibition development; Dan Spock, Director of the Minnesota History Center Museum program; Álvaro Amat, Exhibition Design Director at The Field Museum of Natural History: Polly McKenna-Cress, Director of the Museum

Exhibition Planning & Design program at The University of the Arts in Philadelphia; and Nina Simon, who runs Museum 2.0, a blog and design consultancy focused on creating participatory, dynamic, audience-centered museum spaces.

INTERVIEWEES' [P]AST AND [C]URRENT MUSEUM EXHIBITION FOCI										
interviewee	art	history	nat. history	science	children's	multidisciplinary				
Álvaro Amat	Р		C							
Polly McKenna- Cress				P		P, C				
Kathleen McLean				Р	Р	P, C				
Nina Simon		P		P		С				
Dan Spock		С			Р					

Figure 14

With this segment, I intended to find out what museum professionals, who have designed exhibitions and worked with other exhibition designers at various stages in their careers, feel about exhibition designers' voices within the exhibition development process and what significance, if any, that represents to them. The interviews focused in on the two following questions, which I developed with the help of my committee chair:

1. Can you tell me about the evolution of your career, especially relating to exhibitions, starting with your time in college? 2. At your institution, what is the exhibit development process, and when do exhibition designers become a part?

If the interviewee works in a consulting capacity currently, rather that at a museum, I also asked how their answer to question two compares to one or more of the other institutions where s/he worked previously. This gave a nod to how processes have changed over the years and their current differences among various institutions. Throughout the interview process, I engaged in constant comparative analysis by, roughly, the following process: front-end research  $\rightarrow$  interview  $\rightarrow$  review  $\rightarrow$  front-end research  $\rightarrow$  reformatting questions if necessary  $\rightarrow$  interview... identifying the most significant points and patterns among the interviewees' responses in order to extract the richest, but most efficient, data.

Discourse analysis, which examines data produced through printed images, texts, and other recorded media, provided me with the tools to complete the third data collecting piece (Rose, 2007). In this segment, I thoroughly studied the imagery and text published over the last forty years in *Museum* (formerly *Museum News*), the American Association of Museums' (AAM) magazine that has covered the museum community's trends and issues with what a 2008 press release called "the full scope and value of museums" for more than eighty-five years (p. 1). Though *Exhibitionist*, the journal published by the National Association for Museum Exhibition (NAME), an AAM professional standing committee, centers more directly on exhibitions, this research focused around the

broader view of the professional museum culture provided more comprehensively in *Museum*.

For the first step in this process, I created a ledger to record and relate aspects of each *Museum* issue since 1970. First reviewing each issue's table of contents, I noted the departments—regular features found consistently in most issues—about exhibitions, "In Museum" and "Exhibit Review," which the journal episodically featured over the years with various names, such as "Current Exhibitions" and "Exhibits," respectively. I also recorded the number of articles in each issue and noted how many related to exhibitions. Then, I looked at each noted article to see if it mentioned anything about exhibition design and jotted down specifics if so. I also recorded each article's author and any descriptors for him/her. I took special note if/when an article featured exhibition designers and in what capacity. Were they only mentioned, for example, or were they named or quoted? Did an exhibition designer write the article? Also, beginning in 1989, Museum began reporting the winners of the AAM's newly founded Excellence in Exhibition Competition, originally dubbed "Curator's Competition." In the ledger I noted the competition reports, which did not surface every year, the winners, and if/when criteria and judges changed.

From the ledger I devised a table to distill the information down to years, 1970-2009. See table sample below (Figure 15).

MUSEUM (NEWS) EVALUATION									
year	1992	1993 (1)	1994	1995 (1)					
# of issues	6	6	6	6					
# of articles	28	32	25	25					
# of articles w/ relation to exhibits	4	3	3	4					
# of articles that mention exhibition design	1	2	3	1					
# of articles that mention exhibition designer	1	1	1	1					
# of articles written by exhibition designer	1	1	0	0					
# of issues w/ "in museum" (f. "calendar," etc.)	6	6	6	6					
# of issues w/ "exhibit review" (f. "exhibits," etc.)	6	6	5	3					
# of "exhibit review" that mention designer	2	5	0	0					
other exhibition design mentions			1	2					
"curator's comp." in departments		X							
"exhibition comp." as an article				X					
# of competition winners		4		3, 2*					

Red indicates a year that features at least one article that relates significantly to the evolution of exhibition design and/or exhibition designers' voices. (x) = How many such articles.

Figure 15

This process allowed me to track exhibition designers' voices in the highly regarded *Museum* coverage and gain perspective on how the broader museum profession has viewed and treated exhibition design and designers over the last forty years.

Finally, with all data collected, I conducted the project's analysis based on the "Analyzing Qualitative Data" (Lindsey, personal communication, February, 2009) guide:

# 1. Prepare Data Transcripts

<sup>\* #</sup> Winners, # Honorable Mentions

- Transcribe and format data from journal, interviews, and *Museum* matrix
- b. Sort and organize data

## 2. Data Analysis Plan

- a. Preview data
  - Read all available data before beginning analysis
  - Avoid premature creation of conceptual categories
- b. Document method and credibility issues including:
  - Decisions made during data collection and analysis
  - · Rational for all decisions
  - Category schemes
  - Questions that emerge
  - Notes about coding process
  - My reactions at all steps of the process

# 3. First Level Coding

- a. Identify meaning units (segment or chunk of concrete information that is meaningful by itself—a word, sentence, line, paragraph, etc.).
- b. Fit meaning units into categories (abstract concepts that encompass multiple meaning units).
- c. Assign codes to the categories (naming).

- d. Refine and reorganize categories (reviewing all coding for consistency and logic).
- e. Decide when to stop (note redundancy, saturation, and when new data fit easily into category scheme).
- 4. Second Level Coding: Identify similarities and differences between categories to detect relationships.
  - a. Sort meaning units according to categories
    - Pulls individual text units out of context of individual stories
    - Allows me to consider data across participants
  - b. Compare categories to look for relationships (temporal, causal, nesting?)
- 5. Interpret Data
  - a. Develop a conceptual classification scheme
  - b. Present theories or themes

Targeting the evolution of exhibition designers' voices in the exhibition development process and in the broader museum profession, the methods employed for this investigation intend to provide rich, saturated data for the analysis discussed in the following chapter. Other findings may include the contributions of exhibit design to the successes and setbacks of museum professionalism, the current state of affairs within the field, and speculations about the field's future bearings. While this analysis may not determine

conclusive evidence, it will aim to broaden an understanding of exhibition design within museum studies.

### **CHAPTER IV**

### THREE CONCENTRIC PERSPECTIVES

The three data collecting sources discussed in the last chapter represent three concentric points-of-view in relation to exhibition designers' voices in the exhibition development process and within the broader museum profession. My own experience represents the first and smallest perspective in this analysis. Tracked through a field journal I kept throughout the course of an internship experience in the 3-D Exhibition Design department at The Field Museum of Natural History, the events and my reactions trace one pre-professional's introduction to and interpretation of the exhibition designer's voice in the exhibition development process and within a professional museum culture. The interviews I conducted with five exhibition professionals, all of whom have designed exhibitions and/or worked closely with exhibition designers at various stages in their own careers, define the second or middle-level perspective. Their voices speak to the current state-of-affairs for exhibition designers in the exhibition development process, provide a first-hand, insider perspective on the evolutionary pattern of exhibition design as a field, and represent a sample of the very voices that this investigation set out to find. Finally, the American Association of Museums' bimonthly journal, *Museum* (formerly *Museum News*), corresponds to the American museum community at large, this investigation's

widest-ranging perspective. By dissecting the periodical's structure and benchmark articles as they pertain to exhibitions, their designs, and designers, I built a framework for analyzing the evolution of exhibition designers' voices within the broader museum profession from 1970 through 2009.

Exhibition designers' recognition and roles evolved tremendously in *Museum* coverage over the past forty years. While in 1970 the term "exhibits designer" barely existed, by 1991 one author claimed "designers [were] full members of the exhibition team" (Klein, p. 44). The rise in recognition began in the late '80s and continued through the '90s. Then, for unknown reasons, coverage dropped through the aughts, leaving questions about where design stands today with respect to the broader museum profession. Did design become commonplace in museums and, therefore, not worth reporting, or did *Museum* pass off its exhibition reporting to another AAM journal, such as *Exhibitionist*? If that were the case, why did coverage in *Museum* not drop off, and instead increased, in 1981 when *Exhibitionist* first came on the scene?

Regardless of *Museum*'s dropped coverage, exhibition designers' responsibilities continue to evolve, and ring through the five exhibition professionals' voices presented here. Expressing a hopeful concern that the collaborative process necessary to facilitate optimally effective exhibitions, which includes designers becoming involved from the beginning, continues to spread and take hold in the many institutions that still resist it, they also encourage designers to speak up in order to facilitate their own continued growth as

individuals and to perpetuate their profession. The little first-hand experience I gained took place in a positive nurturing environment, but I still feel some hostility and restraint against inclusiveness in the broader museum culture, making it difficult for young or new exhibition designers to amplify their voices successfully. Though the current museum climate begs for further development, looking at the field since 1970 puts into perspective how far the field has come.

# **Evolving Discourse**

Throughout the 1970s, of the forty-three articles in *Museum* that related to exhibitions, seven mentioned a designer, and designers wrote or co-authored three of them. Two articles in this decade supported noteworthy relationships with exhibition design's growing significance in museum culture. The first, featured in the 1977 March/April issue and titled "Creative Compromise: The Curator and the Designer" marked *Museum*'s first recognition of curators collaborating with designers on exhibitions. Then, in the November/December 1978 issue, *Museum* published "Museum Studies," a report resulting from the AAM Museum Studies Committee's two-year-long assessment of training for museum careers. Though the report blanketed standard requirements for all the divergent professions within museums and did not mention design under the subheading "Statement on Preparation for Professional Museum Careers," it listed "Exhibits Designer" as a position along with his/her "Duties and Responsibilities" in this statement:

"The exhibits designer translates curatorial and educational staff ideas into permanent, temporary or circulating exhibitions. The designer is responsible for the esthetic planning and design of exhibitions through renderings, drawings, scale models, lighting and arrangements of objects and signage. The exhibits designer may supervise the production of exhibitions and have administrative responsibilities" (p. 61).

Less than two years later, however, *Museum* released "Museum Studies: A Second Report," which still described the exhibit designer as a translator rather than a contributor of his/her own ideas, but then filled half of a page with education, experience, knowledge, ability, and skill requirements. This new statement illustrated an increase in specialization for all positions, suggesting a premature release of and/or backlash from the first report.

During the 1980s, the number of articles about exhibitions dropped to twenty-two, six mentioned designers, and designers wrote three of them. These figures closed the ratio gap a small amount, but more significantly, the number of articles relating significantly to exhibition design and designers' changing roles increased from two in the '70s to seven in the '80s. In addition to the "Second Report," the October 1980 issue also marked the first exhibit review to mention the exhibition designer by name. Though the reviewer reported only on the designer's faults, and this occurrence did not set a trend of mentioning designers in future issue's reviews, the recognition benchmarked a decade of increased designer acknowledgment in *Museum*.

The November/December 1982 issue features the first major article written by an exhibition designer, "Almost Everybody Loves a Winner: A Designer Looks at the Blockbuster Era." Previous to writing this article, Stuart Silver had served as the design department director at the Metropolitan Museum of Art for twelve years, 1966-1978, but had moved on to become vice-president of Design Communications at Knoll International furniture company while continuing to act as a design consultant to museums. In this cover story, he credited the very existence of exhibition designers to the rise of blockbuster exhibitions in the art world, such as The Treasures of Tutankhamen in 1976. And though Silver gave credit to his own generation's growing pains for providing a roadmap to an exciting new era in exhibition design, he also said, "Given a little knowledge, a modicum of taste and some practical experience, the truth of the matter is that virtually anyone can design and install a passable art exhibition," nodding at the rampant lack of respect for designers' and their craft still practiced within the broader museum culture in the early 1980s (p. 26).

The mid-'80s remained a low point for exhibition design representation in *Museum*, but the late '80s marked a considerable rise in coverage, with the next significant article in 1987. "Philosophy and Fun at the Staten Island Children's Museum" featured "Exhibition Design" as a subheading and discussed, for the first time in a *Museum* article, that exhibition designers contributed to exhibition's interpretive ideas. Authors Secor and Skolnick (1987) wrote:

[T]he idea behind exhibit design is to turn everything into an exercise that fosters understanding...it becomes another interpretive device. Color can be used for mood, but it can also be used for code...Using the subject matter as the focal point, begin asking questions: What kind of lights would create the right environment? What colors? What does this exhibit want to be (p. 39-40)?

The authors addressed designers as their audience and in an instructional manner, suggesting that these ideas had not yet taken hold as common practices. The explicit recognition of design and a designer's importance in the exhibition development process, however, served as another significant benchmark, which continued through the 1990s.

With articles titled "Exhibit Design and the Psychology of Situation" and "Celebrating Designs That Do More Than 'Perpetuate the Present," 1988 and 1989 commenced the period when exhibition designers not only began to receive more regular recognition in *Museum*, but also higher expectations. 1989 marked the first annual Excellence in Exhibition Competition, and in that year's last issue—the decade's last issue—Gary Kulick and James Sims, both Smithsonian employees, made a "Clarion Call for Criticism," declaring that the time had come for "museum exhibitions to receive the scrutiny they deserve" (p. 52). Among several revelations, the authors announced that, even though many curators were "startled to find that a designer can be articulate about an exhibition," designers were possibly the only professionals who could properly critique an exhibition as a whole, including design and content (p. 56). They also directly related the lack of suitable exhibit reviewers to the then nonexistence of a

graduate-level exhibit design program. By illuminating that no establishment in 1989 produced scholars with the holistic interest or knowledge required to publish appropriate exhibition reviews, Kulick and Sims foreshadowed the character of exhibition design's growth in the next decade.

In the 1990s, the number of articles relating to exhibitions jumped back up to thirty-nine with twelve mentioning designers, eight designer-authored articles, and a record ten articles relating significantly to the evolution of exhibition design and/or exhibition designers' voices. Four out of the ten noteworthy articles showed up in the March/April 1991 issue. In what suggests an open reaction to Kulick and Sims' challenge, or at least a continuum, Jane Bedno wrote "Professional Preparation," an article debuting the then newly founded Museum Exhibition Planning and Design program at the University of the Arts in Philadelphia. Bedno served as the first director of this pioneering academic program for exhibition designers, which began in 1990. She opened the article discussing the longtime need for and inexcusable lack of exhibit design specific education. Then she discussed that other museum professionals often regarded exhibition designers as just another pair of hands that did not have enough scholarly training to warrant treatment as academic equals. She admitted that, traditionally, designers often had "little exposure to [museum] discourse" and may not have fully understood "the significance of protecting the integrity of...or addressing other nondesign requirements of an institution" (p. 54-55). In summary, Bedno explained that exhibition designers, like all professionals,

needed specific training to do their best and gain recognition as equal collaborators on exhibition teams.

The remaining significant 1991 articles highlighted exhibition designers coming into their own as expert generalists and collaborators on the exhibition development team, able to synthesize ideas into interpretive concepts that create effectual storylines (Klein, Rabinowitz, Volkert). In "Monologue to Dialogue," James Volkert, a project manager of exhibitions at the American Museum of the American Indian in1991, discussed museums readying to enter the era of multiple perspectives. He explained that museum history had, at that time, gone through two distinct eras. The first, having evolved over 2000 years, focused on objects and museum superiority or exclusivity. The second era began when museums realized the need to interpret their objects for public understanding, creating two phenomena that related directly to exhibition design, museum blockbusters and interactive or participatory exhibitions. Conversations also began in the museum community, Volkert explained, about how people learn in their environments, leading to museum education and its marriage to exhibition design. He then challenged exhibition creators to expose their methods and identities to the public, acknowledge the inherent biases in interpretation, and open the process to real civic dialogue, thereby creating "fundamental" philosophical changes in museum presentations" that rely more fully on visitor experience expectations and leading into a new era for exhibition planning and design (p. 48).

After 1991's intensity, 1993, 1995, and 1996 each offered one important article about exhibition design, all of which highlighted the career of an exhibition designer. The 1993 article, written by Ralph Appelbaum, and the 1996 article, an interview with Ralph Appelbaum, showcased the philosophy and career of this museum planning and designing rockstar of sorts. With more than thirty years experience under his belt currently, and projects like the Newseum, the Corning Museum of Glass, and the United States Holocaust Memorial Museum in DC, Appelbaum helped define the process and benefits of quality exhibition development and design in museums. Continuing the 1991 discussion, Appelbaum also identified designers as generalists who must master their craft's many specialized techniques while, more importantly, collaborating and synthesizing. Like Volkert, Appelbaum called on designers, as synthesizers, to open exhibitions to multiple cultural perspectives and lead museums into the next era.

1998 marked the Excellence in Exhibition Competition's tenth anniversary, the first year the competition adopted the Council of Standing Professional Committees' (SPC) Standards for Museum Exhibitions and Indicators of Excellence, and the first year that AAM SPCs other than the Curator's Committee participated in judging. The standards included content, collections, audience awareness, interpretation, evaluation, ergonomics, design, and production, which remain the standards to this day.

1999 rounded out the decade with three strong articles that continued

exhibition design's recognition growth and postulated for the then future, which, in a more concrete and insistent way than before, honed in on an experience initiative. Kicking off the year, *Museum* published an article adapted from B.

Joseph Pine II and James H. Gilmore's Book *The Experience Economy: Work is Theatre & Every Business a Stage*, which also shows up in this project's literature review. Illuminating to museums that experiences relate to their audiences, Pine and Gilmore stressed:

While commodities are fungible, goods tangible, and services intangible, experiences are memorable... Just as people cut back on goods in order to spend their money on services, now they also scrutinize services in order to spend their time on memorable—and more highly valued—experiences (p. 46).

Design inherently and significantly underscores memorable experiences, making this article a crucial statement to the broader museum profession about the important dynamic exhibition designers contribute to the whole of institutions.

Exactly ten years after Gary Kulick and James Sims made their "Clarion Call for Criticism" in 1989, Marlene Chambers, then publications director at the Denver Art Museum, wrote "Critiquing Exhibition Criticism." In this forum, Chambers analyzed the collective museum-professional thinking of "museum-going as a primarily didactic educational experience," and how it informed exhibition reviews and, thereby, exhibitions designs (p. 65). Then, hoping to potentiate a greater range of experiential results, she suggested a new constructivist approach with multi-vocal critiquing criteria, which she dubbed the

LEGO School of criticism.

Finally, Jane Bedno showed up again at the end of the 1999, bookending the decade. In an article co-written with her husband, Ed Bedno, the two exhibition planning and design professors recounted the changes museums faced in the previous thirty years, the most important of which highlighted increased visitor sophistication and expectations. They also commented on the rise of the team approach to exhibitions, interactivity, immersive experiences, allages considerations, digital displays, and exhibitions as civic forums. To properly culminate the exponential growth in the exhibition design profession and exhibition designers' voices reported in *Museum* throughout the 1990s, the Bednos concluded their article with the following proclamation on exhibition designers' then current state of existence:

[E]xhibition designers should be concerned with planning, research and development, proposal writing, visitor studies, communication methods, curatorship, conservation, program support, management, education, scheduling and coordination, audio-visual support, graphics, electronic media, interactive technologies, computer modeling, fabrication, wayfinding, handicapped access, documenting and presenting, architectural space, and formative and summative evaluation, in addition to creating a sense of joy and wonder on time and under budget. As a result, exhibition design and its equally important sibling, exhibition planning, have moved from an informal apprenticeship system to a recognized profession (p. 61).

In an additional show of appreciation, the 1999 Excellence in Exhibition report listed each winners entire design team by name.

If the 1990s *Museum* seemed to make it a mission to report on exhibition design, the aughts all but forgot it. The number of articles relating to exhibits dropped back down from thirty-nine in the '90s to twenty-six in the '00s, a mere four more than the 1980s. With only two articles mentioning designers and zero written by them, the '00s had four and three less than the '80s and five and three less than the '70s, respectively. Furthermore, with only three articles throughout the entire decade that contributed to the continued evolution of exhibition design, all of which extended previous theories rather than formulating new ones, the aughts raised several questions about where design stands today with respect to the broader museum profession. In 2001, Lynn Dierking, associate director of the Institute for Learning Innovation at the time, collaborated on "The Family and Free Choice Learning" with two associates at the Institute and the then curator of education at the Baltimore Zoo. The article specifies design's importance in creating readable, relevant spaces to accommodate and encourage communication among several individuals with different learning styles, continuing the marriage between education and design in museums, which Volkert divulged in 1991. While Dierking's newly explored theories about learning styles made strides for museum education, they related indirectly to design. MIT research associate Michael Schrage's 2004 Museum article, "Collaboration and Creativity," basically listed interaction patterns that lead to successful collaboration. Similarly to Dierking's article, while this topic affected designers and all other exhibition professionals who presumably worked on a team at this

point, the core argument lacked originality in this forum. Extending their previous theories shared in 1999's "The Experience Economy," Pine and Gilmore wrote "Museums and Authenticity" for *Museum* in 2007. Though the reasons for and ways to deliver authentic experiences affect all museum professionals, and their previous article offered design strategies, this article never mentioned the word "design," bringing the aughts to a close with questions about where design stands today within the broader museum professional culture.

Though the *Museum* coverage discussed here thoroughly shares exhibition design's evolution over the last forty years, it leaves uncertainty about the last ten years and the current state of affairs for exhibition designers.

Through continued speculation via the museum professionals' voices featured through the interview coverage discussed next, this analysis concedes that exhibition designer's voices, though often quiet and nuanced, continue to evolve.

## **Speaking from Experience**

In speaking with Dan Spock, Director of the Minnesota History Center Museum program, it came to my attention that the most prevalent factor contributing to this nuanced evolution has to do with the various institution types. While science centers and children's museums have consistently collaborated with exhibition designers for the longest period of time, art and history museums have for the shortest. Natural history museums find themselves somewhere in the middle. Variations and exceptions exist within this general spectrum, but that

will become clearer as I discuss other factors later. The spectrum does not rest on museum type alone, but on the differences in their general internal characters. Art museums, for example, tend to focus most heavily on collections. When looking for exhibition ideas in art museums, curators first assess what the collection can offer and, sometimes, combine that with objects they might get on loan. Then they form an exhibition concept based on the available objects. History museums also house large collections, but their objects range from profound to mundane and may not carry the inherent visual interest of an art collection. For this reason history museums employ a scholarship-first model that looks to the collection to support a predefined thesis, which may morph as the collection's offerings become clearer, but only secondarily. Spock extrapolates that both the collection model and the scholarship model "tend to have a very curator-dominated process, and often you will see in the institutions that do one of these two models that the curator will work on it for a year or more before anybody else does anything" (personal communication, March 12, 2010). Only after the curator has made all decisions will s/he linearly hand it off to a designer, if at all, and others who create exhibition environments.

On the other end, science centers and children's museums sometimes do not have collections at all. These institutions must create experiences in order to share their messages, causing audiences to become a much bigger part of the exhibition development equation. While all museums have a responsibility to their audiences, children's museums, in particular, must cater to their visitors' sense of

experience. With their short attention spans and tendencies to break objects, extraordinary planning must go into exhibits for children, making the necessity to incorporate designers, educators, and other specialized team members into the exhibition development process more obvious at children's museums.

Spock believes that people who run science centers began leaning toward the audience-focused, experiential exhibition model because they are already comfortable with and committed to research methods that deal with human subjects:

...[When] everybody started talking about, 'well, let's understand what visitors are actually doing here, and what they are learning, and what they are getting from this experience,' ...[science center employees] embraced that task more wholeheartedly, went after it, and started to apply it without making it an ideological issue (personal communication, March 12, 2010).

The science centers discovered earlier on than other institution types that, in a museum context, an overall experience reaches visitors on a much more profound level than anything written on a label or any particular object on its own. Without a sense of experience, without making a compelling, memorable impression, all the good intensions put into an exhibition amount to almost nothing.

Museum 2.0 blogger and museum consultant, Nina Simon's experience backs up Spock's theories. In the years leading up to Simon's consultant days, she worked for extended periods of time at two museums, one a history museum

and the other a science center. She shared her experiences working on one major project at each institution. At the science museum, she worked closely with designers from the start, but at the history museum, the designers came in after the curatorial and education staff had already made the decisions. Another factor came into play here, however. Simon felt that the process had worked the way it did at each institution because of their internal structures. While the science museum had a design team on staff, the history museum had to contract out the design work.

Whether museums have design staff, which most often reflects the institution's size and resources, informs whether exhibitions form from true collaboration. Spock, for example, works for a large, partially state-funded history institution that applies the experiential model and includes designers from the start. Again, however, this does not happen across the board. The history museum where Simon worked had considerable funds, but quite a small staff. Kathleen McLean principal of Independent Exhibitions, a museum consulting firm, and Polly McKenna-Cress, who worked for exhibition design firms and museums for fifteen years before becoming a professor and the Director of the Museum Exhibition Planning & Design program at The University of the Arts in Philadelphia, both spoke positively about collaborative experiences working with museums as outside partners. McLean also said, however, "even in museums, a lot of times the system is such that, as a designer, it's rare in a museum environment to be included in some early conversations. We don't

seem to be able to get out of this rut" (personal communication, March 5, 2010). Furthermore, Álvaro Amat, Exhibition Design Director at The Field Museum of Natural History, an institution known for innovative exhibitions that has staffed designers since the 1970s, has only very recently managed to help change their system so that designers can collaborate with the project managers, developers, and curators from the early stages of most projects to help define the exhibition and visitor experiences.

This leads to another factor contributing to the exhibition designer's voice in the exhibition development process, whether the institution finds interest in innovation. Relating back to Spock's first point about institution type, science centers tend to look more toward the future, while art and history museums inherently stick to antiquation. It takes innovators like Amat, McLean, Simon, and Spock to make things happen for museums. McKenna-Cress shared that some of her alumni have found jobs as exhibition developers in art museums with tough, stick-to-what-works curators. Though they had trouble at the start, when the curators see that the team approach makes for a more holistic product, it takes less time to convince them to change their process, suggesting that exhibition design academic progress now shows at least some of the promise that its pioneers hoped it would contribute to the profession.

Finally, the last factor contributing to the exhibition designer's voice in the exhibition development process has to do with the designer. McLean expressed that often young or new designers lose their voices in the process because their

desire to work clouds their desire for inclusion in decision-making. Amat feels designers must frame their suggestions properly and learn to ask the right questions. When his or other designer's suggestions come across as "informal, absurd, capricious, arbitrary or serving a personal aesthetic," he believes the designer has failed to properly convey these creative solutions in reference to the visitor (personal communication, March 11, 2010). S/he must learn to justify the strategy convincingly, with solid arguments, to speak of the real purpose of the strategy in the big picture of the exhibition goals, and about its potential effectiveness, while also communicating the creative process (influences, evolution of the idea, composition, sources) in order to make themselves a real part of the team.

In summary, exhibition designers' voices tend to receive more recognition and have more room to develop at institutions that observe a team approach and encourage collaboration and innovation. Not as a rule, but this tends to happen at museums that focus more on audience experiences, which happens more commonly at science and children's museums than other institution types, though history and natural history museums seem to move more in that direction. Also, museums that have the resources to staff designers tend to work more closely with them. Regardless of these factors, however, nurturing exhibition designers' voices and the evolution of the field starts with designers. If they do not have the desire to speak up and evolve, they will continue to get shut out of the process.

## **Listening to the Inner Voice**

As someone who tends to not have the ability to quiet myself or stop asking questions, I feel that I experienced as much as I could during my six weeks interning at The Field Museum of Natural History in 2009. I arrived in early June, and during my first few days I communicated my goals to my supervisor, Álvaro Amat:

- 1. To work collaboratively within the exhibitions department and with experts outside of the department, including curators and educators, if possible.
- 2. To attend as many meetings as possible in order to learn proper jargon and etiquette.
- 3. To allow my assignments to overlap so I might improve my time management skills.

Together we came up with a game plan that allowed me to accomplish those goals.

Throughout my time at The Field Museum I worked on three different exhibition projects of three different sizes, each at a different stage of development. The largest exhibition, *Mammoths and Mastodons: Titans of the Ice Age*, I worked on the least of the three because the majority of the design work and some of the production work for this exhibition was completed before my arrival at the museum. I attended a few meetings, including 3-D/2-D and media/interactives design reviews, asked questions, and extended my Adobe Illustrator skills to help translate some of the curator's necessary changes to a dwarf mastodon mock up that would eventually become a full-scale model for the exhibition.

Bunce Island: A British Slave Castle in Sierra Leone was the smallest of the three and the exhibition for which I was given the most responsibility. This exhibition's curator, historian Joseph A. Opala of James Madison University, whom I never met, originally developed this project to display at his home campus. It consisted of twenty-one, 32" wide X 60" tall, pre-designed, pre-printed vinyl panels full of interesting, rich content, but very poor graphic design. With too much text, too many too-small images, and an inconsistent color pattern, the panels' quality did not align with The Field Museum's standards. Unfortunately, these problems were realized much too late. In fact, this project did not seem to receive nearly the attention it needed until much too late. Sometimes things slip under the radar, especially such small projects as Bunce Island in such a big place as The Field Museum.

Bunce Island was set to open on July 29, and it was my job to arrange and fit the panels into place in the small gallery designated for the exhibition. Long story short, I did just that. The exhibition team consisted of a project manager, a 2-D designer, a production staffer, and myself. We held two short review sessions with the directors in which I presented the designs I created.

Unfortunately, because important parties had taken vacation at inopportune times, the reviews were held too close to the opening date to make any major improvements, but we worked through some options to somewhat improve the look of the exhibition. We decided to hang the panels behind sheets of acrylic to hide flaws, improve their aesthetic value, and protect them from future damage;

and I created a place to add an artifact, which came as a relief since the original "keep it simple" plan only showcased these subpar panels. That plan had taken shape before my arrival and before anyone really knew of the panels' poor quality. Just having finished the installation documents for *Bunce Island*, I left days before the opening. My teammates informed me that with only a few bumps during installation, which again had to do with the panels' poor quality, it turned out well. Also, the opening was a great success with several local celebrities present.

The third exhibition I worked on, a small-to-medium-sized exhibition about Chinese rubbings, was so early in its development that it did not yet have a title. I worked about an equal amount on this project as *Bunce Island*, but my contribution was much more conceptual and abstract than the work I produced to ready *Bunce Island* for installation. This project, however, allowed me to work closely with anthropology curators, conservators, and interns, from whom I learned a great deal about Chinese rubbings. Without going into lengthy detail about Chinese rubbings—it is an extensive and complex study including art, history, culture, and technology—I can safely say that I feel like I know much more about this topic than about Bunce Island. Most significantly, the first meeting that Amat and I attended in order to begin conceptualizing the exhibition with the rest of the Chinese rubbings team marked the first exhibition at the Field that designers had been included that early in the process. I believe that because I helped evaluate, chose, and organize this exhibition's artifacts for contextual

and aesthetic value from the very beginning, I felt more invested and learned so much more than I did from the *Bunce Island* panels that I never had the opportunity to help create. I found that, for me, working with the raw artifacts and collaborating with the experts in person helps me learn the subject matter so much more effectively and, therefore, communicate more holistic design ideas for exhibitions than anything I could produce while working from pre-digested, previously decided materials. I ended up feeling some pretty real remorse at having to pass off the Chinese rubbings project to the next intern, though I left extensive notes hoping to make some kind of difference in the outcome.

From my experience, I can see McLean's point that young designers can allow themselves to "get trounced" (personal communication, March 5, 2010). In addition to becoming completely emotionally involved in the Chinese rubbings exhibition, I found myself taking my superiors' words as gospel. Fortunately, my superiors also found interest in what I had to say, but I am sure that does not always happen. Therefore, I think if a young exhibition designer wants to nurture his/her voice and/or to find a forum, s/he must find a forward thinking institution in which to let it all soak in. After s/he has some years under his/her belt, then s/he might try to bring some innovation to an institution in need. It takes quite a while in the current museum climate for someone to build the volume that people like Kathleen McLean, Dan Spock, Álvaro Amat, Polly McKenna-Cress, and Nina Simon have, and learn to use it effectively.

#### **CHAPTER V**

# THE EMERGING EXHIBITION DESIGNER

I took on this project as an extension of my academic career in the hope that I might learn more about my future life as an exhibition designer and, for the reader, to help shed some light on how the exhibition designer has progressed in relation to the exhibition development process and within broader museum professionalism. In order to trace the field's evolutionary history, I chose to mine current and past, experienced, innovative exhibition professionals' voices. By meticulously exploring the last forty years of the American Association of Museum's representative journal, *Museum*, personally conducting interviews with several such professionals, and interning in the exhibitions department at a large, well-established museum, I found an authentic representation of those voices. In the process, I learned several key things about my own path and some ideas for the future of this continually developing discipline.

Though exhibition designers' voices have amplified as they have become increasingly involved in certain institutions, exhibition designers across the museum profession still struggle to gain acceptance as scholars. The few graduate-level academic programs for budding exhibition designers produce well-prepared minds, but seasoned museum professionals often overwhelm young designers, pushing them out of the exhibition development stages and

limiting their roles to aesthetic styling. This in relation to the idyllic articles featured in *Museum* through the 1980s and 1990s, which collectively express the importance of and need for exhibition designers' input at all stages of the exhibition development process, suggests that something has gone awry or that the coverage never actually represented the field in an authentic way. In either case, this inconsistency leaves room for future academic investigations that might use this one as a springboard.

Another topic for future investigators has to do with the currently debated exhibition design process and how it inserts into the exhibition development process. Polly McKenna-Cress, Dan Spock and Kathleen McLean all mentioned during their interviews that the current process, borrowed from other design fields like architecture and industrial design, has helped bring efficiency and a certain level of professionalism for designers to exhibition development, but some feel it may not represent the ideal for exhibitions. McLean expressed that this process' inherently linear approach—waiting for contracts and such before moving on to subsequent stages—hinders the more organic, individualized process necessary for exhibits, and implied she would like to see it put to rest. McKenna-Cress insisted that though they teach this process in the graduate-level Museum Exhibition Planning and Design program at UArts, they impress upon their students that the process only serves as a foundation, and each project must nuance it with unique criteria. Spock informed me that the process and possibly even the team approach to exhibitions, which sometimes tends to work toward

consensus rather than innovation, debatably results in a "check the boxes" approach that can produce boringly similar outcomes for different projects (personal communication, March 12, 2010). Maybe this explains why art museums resist changing their development models, though that may represent an initiative toward continuity rather than innovation. It seems fair to assume that every institution needs a different approach and then flexibility for each project. Nevertheless, investigating this situation further could have distinct implications for exhibition designers' future in museums, and I hope to hear more about it.

My advocacy for sustainability within exhibition design represents a third area of future work for which this project plants seeds. McLean began this discussion in 1993 (see Chapter II), but environmental mindfulness has yet to take hold across the museum world as a routine practice in exhibition development and design. The waste-creating, ephemeral nature of exhibitions, even those coined "permanent," suggests to me an obvious need to incorporate sustainable materials and practices into the process. Institutions must become more environmentally aware to remain relevant and authentic stewards to society, and, therefore, I hope to see more museum exhibition teams insert sustainable practices into their evolving doctrines. Since sustainability has become so ingrained into current design education, the responsibility falls to exhibition designers, especially those, like myself, emerging presently, to help spread environmental consciousness through museums.

Exhibition designers' unique privilege to collaborate, not only with other designers, but also with other top-notch intellectuals from a multitude of disciplines, represents the biggest lesson I have learned throughout my academic career, which this project reinvigorated, a lesson I will carry as I enter the professional museum world. All designers must collaborate, but from the few opportunities I have had during my graduate studies, I know that collaborating, across disciplines or not, can prove frustrating and tedious, even though that collaboration offers the promise to discover something completely new with each project. When we learn to celebrate each other's unique expertise, however, and our potential to create multi-vocal experiences for our audiences and our own working environments, we might realize that we work in one of the most interesting and exciting professions of our time. Polly McKenna-Cress called this "intellectual generosity" and "professional empathy," and explained that when deliberately applied, these practices provide an even playing field, security for each team member, and a positive outlook for the project (personal communication, March 11, 2010). I think that if exhibition developers adopted intellectual generosity and professional empathy into their process tenets, the benefits would filter through their teams, reaching their audiences and whole institutions. I aspire to help bring these practices into the profession, in line with this project's intensions, to add another element, if even in a small way, to exhibition design's place in museums.

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