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THE EFFECTS OF SECURITY GUARDS AND GALLERY GUIDES ON
VISITOR EXPERIENCE AT THE SOLOMON R. GUGGENHEIM MUSEUM

A Thesis in
Art Education
by
Amanda Krantz

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The thesis of Amanda Krantz was reviewed and approved* by the following:

David Ebitz  
Associate Professor of Art and Art Education  
Thesis Advisor

Christine Marmé Thompson  
Professor of Art Education

Wanda Knight  
Associate Professor of Art Education  
In Charge of Graduate Programs in Art Education

*Signatures are on file in the Graduate School
ABSTRACT

A visitor will never be in an art museum without security personnel present. Yet, despite visitors’ constant exposure to security personnel, we know little about the effects of security personnel on visitor experience in art museums. The following research addresses this topic, looking to the Solomon R. Guggenheim Museum, which employs two types of security personnel: Security Guards—traditional security personnel—and Gallery Guides—hybrid security personnel and educators. Using quantitative and qualitative methodologies, I compared the effects Security Guards and Gallery Guides have on visitor experience to understand the impact of security personnel on visitor experience in art museums.
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CHAPTER 1

INTRODUCTION

Imagine being able to go into a museum, anywhere in the world, anytime of day – without any guards.

DiNicola, 1996, p. 1

What DiNicola refers to are the benefits of being able to visit art museums online. His argument that you can travel to any museum at anytime is compelling. But, of all the benefits associated with online museums, why does DiNicola find the absence of guards to be one of the most noteworthy benefits? DiNicola insinuates that security guards at art museums negatively impact the visitor experience. But, is this true?

1.1. Personal Experience

In my personal experience visiting art museums, I have noticed that the presence of security guards evokes a variety of feelings in visitors. Some visitors dislike guards, while some visitors appreciate of guards. And, some visitors do not even notice security guards. I too have had a similar range of experiences. For example, one time I felt security guards were overbearing, scolding me for standing too close to a Van Gogh painting that was not encased in protective glass. Another time, I was thankful that a security guard was able to direct me to the wing of the museum I was seeking.

But, my interest in the interaction between visitors and security guards at art museums has been shaped by more than just my experience visiting museums; it has been colored by the time I spent guarding galleries at the Peggy Guggenheim Collection in Venice. I spent approximately four hours a day, three to four days a week on guard duty.
During this time, I realized the influence security guards have on the visitor experience, both for good and for bad. Take, for instance, the following scenarios from my experience as a guard.

Scenario 1: There was a woman in the museum with a very large bag. Given the small size of the building, museum policy states that only bags smaller than approximately 12” X 6” are permissible in the building. Free lockers and a bag check are available. When I approached the woman and politely asked that she return to the coatroom and check her bag, she was outraged. I tried to explain why the policy was in place, but she was still irritated. In the end, she returned to the front desk and requested a refund for her ticket. She did not reenter the museum that day.

Scenario 2: An English speaking woman approached me in the gallery. She saw a sign announcing a talk on the life of Peggy Guggenheim. I informed her that the talk about to be given was going to be in Italian. She inquired whether there were to be any other talks in English. Unfortunately, there were not. Because I was about to start my lunch break, I proposed that I give her a short talk as soon as I was relieved from my post. The woman thanked me profusely for my time.

In the first scenario, I can state with some certainty that the woman had a negative experience, while the woman in the second scenario had a positive experience at the Peggy Guggenheim Collection. As I believe that every experience informs people’s thoughts, feelings, and attitudes, I do not think that the two scenarios are isolated experiences bearing no impact on each visitor’s future experiences at museums. Rather, these experiences, which the guard impacted, may affect future experiences at the Peggy Guggenheim Collection. More still these experiences potentially may impact visitors’
attitudes toward art museums or their feelings toward art in general. Having been the catalyst of both positive and negative visitor experiences, I believe it is important to consider and analyze the interaction between security guards and visitors in art museums.

1.2. Research Objectives

In this research, I explore the effects of security guards on visitors by investigating the effects of security personnel on visitors at the Solomon R. Guggenheim Museum. The following research questions focused my study:

1) What are the effects of Security Guards on visitor experience at the Solomon R. Guggenheim Museum?

2) What are the effects of Gallery Guides on visitor experience at the Solomon R. Guggenheim Museum?

3) How are the effects of Security Guards and Gallery Guides on visitor experience the same?

4) How are the effects of Security Guards and Gallery Guides on visitor experience different?

1.3. Research Setting

Unlike most art museums, the Solomon R. Guggenheim Museum employs two types of security personnel: Security Guards, whose role is that of traditional security personnel, and Gallery Guides, whose roles is that of both educators and security guards. These two types of security personnel are equally responsible for museum security, but they differ in other ways. One significant difference is that Gallery Guides have degrees in the arts—be it studio art, art history, or art education—and are trained as educators to
talk about art with the visitor. Gallery Guides emerged from the Guggenheim’s interest in creating a positive visitor experience.

This study takes advantage of the opportunity to compare how two types of security personnel affect visitor experience. In this study, the setting is a controlled variable while the type of security personnel, either Security Guard or Gallery Guide, is variable.

1.4. Case Study Methodology

To address the research objectives, I have employed several methodologies: unobtrusive timing and tracking and free-form observations of visitors at the Guggenheim, interviews with Security Guards and Gallery Guides, and observations of a Gallery Guide training session. Both quantitative and qualitative methodologies were employed so that the strengths of each methodology address the weaknesses of the other. (Borun & Korn, 1999; Diamond, 1999)

This research takes form as an instrumental case study. In an instrumental case study, the researcher approaches the case study with a broad research question or inquiry (Stake, 1995). The particular case is chosen because, although it is only an individual case, it has the potential to create insight into the broader research questions.

The instrumental case study is appropriate for this research because the objective is to achieve a better general understanding of how security personnel affect visitor experience in art museums. I believe that observing visitor interaction with Security Guards and Gallery Guides at the Guggenheim will provide such insight.
1.5. Purpose and Significance of the Study

My research on the effects of security personnel on visitor experience contributes to the larger body of visitor studies. Over the last few decades, there has been an increasing focus on how visitors experience museums. Researchers such as Judy Diamond (1999), John Falk and Lynn Dierking (2000), George Hein (1998), Gaea Leinhardt and Karen Knutson (2004), and Kathleen McLean (2005) have looked at how architecture, lighting, exhibition text, and object placement, among other things, influence visitor experience—visitor experience being everything from learning experience to customer service experience. Although these studies have investigated numerous variables, no study has given substantial consideration to how security guards affect visitor experience. This research will begin to fill this gap. Hopefully, it will lead to further critical research on relations between security personnel and visitors.

In addition, this research will provide practical applications for the Solomon R. Guggenheim Museum. The data collected on visitors will be particularly useful for assessing the effect of security personnel on visitor experience, and may also provide ideas for ways to improve interactions between other security personnel and visitors.

This research will also be useful to other museums interested in evaluating the role of security personnel. While the research will provide results specific to how visitors respond to the particular models of security personnel at the Solomon R. Guggenheim Museum, the data collected will provide greater insight into how visitors respond to particular aspects of security guards, which may be common among a variety of art museums.
CHAPTER 2

VISITOR EXPERIENCE, SECURITY PERSONNEL, AND THE
SOLOMON R. GUGGENHEIM MUSEUM

In reading this section, I ask readers to be cognizant that there is little published regarding the role of security guards in museums. Thus, some of the sources referenced in this chapter are dated, while other sources still resonate. Nevertheless, I have tried to present references that I believe create an accurate portrayal of security personnel today.

2.1. Visitor Experience

Visitor experience is a broad term that refers to all experiences visitors have in any variety of museums. Visitor experience can include learning experience, customer service experience, and aesthetic experience, among other things. While there are many researchers who discuss visitor experience in museums, I have used John Falk and Lynn Dierking's (1992) concept of the visitor experience as described in the Interactive Experience Model.

2.1.1. Visitor Experience and the Interactive Experience Model

Having recognized the complexities in defining and describing the visitor experience, Falk and Dierking (1992) created the Interactive Experience Model in order to discuss visitor experience more systematically. The Interactive Experience Model states that there are three contexts that shape visitor experience: personal context, social context, and physical context (Falk & Dierking, 1992; 2000).

As defined by Falk and Dierking (1992), the personal context is the set of experiences, knowledge, ideas, and motivations unique to an individual. The social
context refers to an individual’s social experience in the museum, and it accounts for all social encounters a visitor has with other visitors and museum staff. The physical context is the museum architecture, exhibition design, objects, artifacts, and other elements that create the physical environment.

It is important to note that the personal context, social context, and physical context are “continuously constructed by the visitor” (Falk & Dierking, 1992, p. 3). This means that a visitor’s experience is always changing because the three contexts are always changing. Also, because the three contexts are continuously being constructed by the visitor, each person has a unique visitor experience.

The interaction of the three contexts determines the visitor experience (Falk & Dierking, 1992). This is well demonstrated in the visual representation of the Interactive Experience Model, shown in Figure 1 (next page). According to Falk and Dierking (1992), the visual representation of the Interactive Experience Model depicts “a three-dimensional set of three interacting spheres, each representing one of the three contexts” (p. 4). At the point where the three spheres representing the three contexts intersect or interact is the visitor experience. Although the spheres representing each context are the same size, each context is not equally important in determining an individual visitor’s experience. The influence of each context on visitor experience is dependent upon the individual visitor.
2.1.2. Expectations

Expectations are also an important determinant of visitor experience. In the Interactive Experience Model, expectations lie between the physical context and personal context (Falk & Dierking, 1992). Expectations are significant because museum visits are just one leisure time activity among many. Otherwise stated, museum visitors have chosen to visit a museum over several other leisure experiences (Falk & Dierking, 1992; Hood, 1983; Hood, 1989). In choosing to visit a museum, a visitor considers two things: (1) the experiences desired and (2) the leisure activity that could provide the experiences desired. The visitor also may consider time, money, and convenience. Visitors seek experiences that will fulfill their expectations, and if the experiences visitors have do not meet expectations, then visitors leave with often critical opinions (Falk & Dierking, 1992).

2.1.3. Visitor Experience and Research in Museums

Visitor experience has been studied for decades. From Arthur Melton (1935) who studied visitors in the 1930s, timing and tracking how visitors moved through the
galleries, to George Hein (1998). Some researchers have focused on how specific aspects of a museum affect visitor experience. For example, Kathleen McLean (1993) discusses overall exhibition design and its effect on visitors in *Planning for People in Museum Exhibitions* while Beverly Serrell (1996) writes about exhibit labels and their effects on visitors. No study, however, has looked at the affects of security guards on visitor experience.

### 2.2. Security Guards

While Falk and Dierking (1992) note that security guards are normally the first museum official encountered, they do not mention that, for some visitors, security guards may be the only official the visitor is likely to encounter (Samis, 2007). Curators are scarcely seen in the galleries during normal museum hours. Docents and educators, while less scarce than curators, are not ever-present. Security guards, however, enter the galleries before the museum opens and the visitors filter in. Security guards are also the individuals who announce the closing of the museum and make sure the last visitor has safely exited. But, what is the importance of security guards? What do security guards do? How is the role of security guards affected by the mission of the museum?

#### 2.2.1. Importance of Security Guards

According to Burcaw (1997), “Security is the most important consideration in the administration of any museum” (p. 111). Security, in general, is important because it addresses an essential part of every museum’s mission statement: protection. Museums, first and foremost, protect a collection (Burcaw, 1997). And, security is one department responsible for doing so in addition to protecting visitors, staff, and the facility.
But protecting a collection is not the sole mission of a museum; the mission of a museum is also to exhibit the collection and interpret or educate. Thus, security is more complicated than locking up a museum’s collection in a vault. Security is challenged by the tension between protecting, exhibiting, and educating. Because of the tension between protecting, exhibiting, and educating, museums look to security guards to protect, among other things, the parts of the collection exhibited in the galleries.

In addition to protecting the collection, security guards are also important because they spend the most time with visitors, who are as essential to a museum as its collection. Given their presence in the galleries, security guards are a source of information for visitors. They are also the contact person in case of any type of emergency.

The proximity of security guards to visitors also provides important insight to educators and exhibit designers as security guards know what visitors do or don’t do in a gallery. While rarely used as informants, security guards can provide useful information (Davison, 1989). Yet, in at least one museum, the security guards have been asked to participate in reviewing exhibition labels since they know what visitors are likely to read or at least look at (Falk & Dierking, 1992).

Security Guards Overlooked

Often, however, the importance of security guards has been overlooked (Tillotson, 1977). Robert Tillotson (1977) states, “They [security guards] have been poorly paid and they have enjoyed little esteem and few opportunities for career advancement” (p. 16). They also have little influence on decisions made in the museum, whether it be regarding policies or visitor services (Falk & Sheppard, 2005).
Artist Fred Wilson explores the invisibility of security guards, simultaneously considering race, in *Guarded View*, 1991. In this installation, Wilson reflects on his experience as an art museum security guard. In *Guarded View*, four, headless mannequins dressed in the uniforms of security guards from four of New York City’s museums are displayed (Berger, 2001; Kanatani & Prabhu, 1996). Wilson chose headless mannequins to emphasize the “anonymity of these guards” (Berger, 2001, p. 15). Eve Wood (2004), who is an artist, writer, and former security guard, notes that Wilson’s *Guarded View* exemplifies “the way that a bureaucratic role can reduce an individual subject to one-dimensional figure” (p. 2).

![Figure 2. Fred Wilson, *Guarded View*, 1991 (Berger, 2001)](image)

While Wilson’s artwork stands as a testament to the disregard of security guards, his treatment at a New York City art museum is even more salient:

The Museum’s education department invited Wilson to give a gallery talk about the exhibition on view. After having lunch with the education staff and docents, some of whom he had known for many years, Wilson changed into a museum
guard uniform borrowed from the museum’s security department. When the staff members arrived in the gallery to start the tour, Wilson was there, but they no longer recognized him. (Berger, 2001, p. 154)

After some time, Wilson announced his presence and began his tour, still dressed in the security guard’s uniform.

Accounts continue to present security guards as sometimes invisible, other times unappreciated, and, I would venture, misunderstood. Speaking of security in general, Ernest Criscuoli (1988) writes that security in general was still struggling to be recognized as a profession at the end of the 1980s. But, is Criscuoli’s statement dated or not applicable to museum security?

Note that strides have been made to professionalize museum security. There are professional organizations such as the International Committee for Museum Security (ICMS) founded in 1974, and conferences such as the National Conference on Cultural Property Protection. There are also security consulting companies such as Cultural Property Protection Group whose clients include the Metropolitan Museum of Art, the National Gallery of Art, the J. Paul Getty Trust, and the Smithsonian Institution.

Additionally, security information sharing has forums such as the Museum Security Network, an online source established in 1996 that shares cultural crime. Yet, these organizations and sources cater to administrators and managers and not necessarily to security guards.

2.2.2. Responsibilities of Security Guards

Definition of Security

Before discussing security guards, it is important to understand the purpose of overall museum security. Museum security is responsible for the protection of the
museum’s building or facility, collection, equipment, staff, and visitors (Burcaw, 1997; Fennelly, 1983; Keck, Block, Chapman, Lawton, & Stolow, 1966; Lister, 1999; Liston, 1993; Tillotson, 1977).

In order to protect the museum’s building or facility, collection, equipment, staff, and visitors, museums use a variety of devices including electronic security systems, alarms, surveillance cameras, physical security devices or physical barriers, museum rules, and physical guarding (Fennelly, 1983; Liston, 1993; Tillotson, 1977). While technical and physical devices account for the majority of security devices, they are not able to replace physical guarding, the duty of security guards (Liston, 1993; Tillotson, 1977). Physical guarding is essential because it allows for immediate reaction to situations that threaten the security of visitors, staff, the facility, and collection.

**Physical Guarding**

A security guard’s primary responsibility, and that which security guards are most associated with, is physical guarding; physical guarding is often considered the root of museum security (Liston, 1993; Tillotson, 1977). Physical guarding requires that security guards stand, or sometime sit, in the galleries and watch over the museum’s collection and all visitors and staff. To protect both the museum’s collection and its visitors and staff, security guards must ensure that visitors and staff adhere to the museum’s rules (Liston, 1993; Tillotson, 1977). Rules may include no eating or drinking in the galleries and no touching works of art.

Physical guarding can be a grueling experience for security guards given the nature of the position. To effectively guard a gallery, security guards are trained to fully concentrate on the actions in the galleries, stay alert despite the monotony of the duty,
keep talk with visitors and staff to a minimum, and correct visitors and staff who have
violated a museum rule or who have endangered the collection, another visitor, or staff
member. Tillotson (1977) warns that security directors should be aware of the
psychological and physiological results of physical guarding. Tillotson (1977) also warns
that security guards feel a “frequent lack of motivation other than monetary compensation
for their services” (p. 18).

Rotation Schedule

A rotation schedule is one way that security staff may address the psychological
and physiological strains inherent to physical guarding. A rotation schedule ensures that
security guards do not guard the same gallery all day. The rotation schedule circulates
security guards through stations at regular intervals.

Stations, also called posts, are spaces that a security guard is assigned to monitor.
Stations can encompass the space of an entire gallery or multiple galleries or just parts of
a single gallery (Fennelly, 1983). The size of a station is determined by the number of
security guards, budget, number and types of objects in a space, exhibition of objects,
average number of visitors, and visibility in each gallery (Tillotson, 1977). In art
museums, the station assigned to each guard should be no more than 3,000 square feet
because of the value of the collections, while in science or natural history museums,
guards may patrol a space twice this size (Liston, 1993).

In addition to circulating security guards through the museum, the rotation
schedule also provides security guards breaks throughout the day. A general rule is that
security guards should be given a break from guarding every two hours or three times a
day (Liston, 1993). The length of the break is normally equivalent to the length of a rotation.

**Other Responsibilities**

While physical guarding is the primary responsibility of security guards, security guards also inspect bags entering and exiting the museum and man the staff entrance to the museum (Liston, 1993). After closing, some museum security guards work nightwatch, conducting regular inspections of the museum’s facilities.

**Misconceptions**

George Burcaw (1997) notes that security is often erroneously equated to law enforcement and museum guards are wrongly equated to policemen. The basic difference that Burcaw (1997) points out is that security guards do not have legal powers, and thus should rely on police when handling escalated situations, such as visitor intoxication and disorderly conduct, among other things (Fennelly, 1983). While museums are encouraged to rely on police in such escalated situations, I have been informed by museum practitioners that this is not always the case.

**2.2.3. In-house Versus Contract Security Guards**

All security guards are not alike. Some security guards are in-house while some are contract. In-house security guards are employed directly by the museum; contract security guards are hired from an agency (Liston, 1993). Contract security guards are used by a variety of industries. According to a survey conducted in 1979, about half of museum security guards were contracted (Fennelly, 1983, p. 592). But what is the difference between the two?
The difference most acknowledged between contract and in-house security guards is institution loyalty (Fennelly, 1983; Liston, 1993). Because they are employed by the museum, in-house guards are often more loyal than contract security guards (1) because they work solely for one museum and (2) because they are often provided higher pay and benefits (Fennelly, 1983; Liston, 1993). In addition, in-house security guards are more familiar with the museum and thus are able to provide better information to visitors (Fennelly, 1983).

Contract guards, by contrast, may only work for a museum irregularly or infrequently. Therefore, contract guards are less familiar with the specific facilities, collection, and staff, and thus are less able to answer questions from visitors (Fennelly, 1983). Contract security guards are also less likely to develop any type of relationship with their co-workers (Fennelly, 1983). However, contract guards are often less expensive than in-house guards.

While there are pros and cons to hiring both in-house security guards and contract security guards, it is recommended to hire in-house security guards when possible as it is a consideration of cost versus quality (Liston, 1993; Tillotson, 1977).

2.2.4. Who are Guards?

Qualifications

Museums have various qualification requirements for security guards. In general, security is a profession that does not have defined academic requirements nor does it require a certificate or license (Criscuoli, 1988). However, there are several museums—usually large institutions—that require security licensing and fire or safety certification.
Other qualifications include that security guards be in good physical condition and able to endure hours of standing (Tillotson, 1977). Furthermore, security guards should be able to act calmly when faced with an emergency or conflict (Tillotson, 1977). And last, but not least, security guards should be observant, detail-oriented, and vigilant (Liston, 1993).

**Personality**

While it is difficult to say what type of personality best suits a security guard, there are some preferred characteristics. First, security guards should be patient because they will be asked many repetitive questions (Tillotson, 1977). Second, security guards should not be temperamental because it is important that security guards handle conflict in a diplomatic fashion (Liston, 1993).

**Demographics and Other Characteristics**

Security guards can consist of a varied group of people. For example, artists like Dan Flavin, Sol LeWitt, Robert Mangold, Robert Ryman, and Fred Wilson, who was discussed earlier in this chapter, have all worked as a security guard (Wood, 2004). But artists constitute only a small portion of security guards.

Additionally, while I have not encountered a survey of security personnel’s demographics, I venture that a large number of security guards in urban environments are African-American, which Fred Wilson addresses in *Guarded View*. In this work and others, Wilson explores the irony in African-American security guards protecting mostly Eurocentric collections (Berger, 2001; Kanatani & Prabhu, 1996). As Kim Kanatani and Vas Prabhu (1996) conclude, “Guards represent the presence of difference in the museum setting” (p. 29).
2.2.5. Museum’s Mission and its Effect on Security Guards

The role of security guards is highly dependent upon the museum’s mission and brand, as well as the way the museum treats its visitors. In “Strangers, Guests, or Clients? Visitor Experiences in Museums,” Zahava Doering (1999) distinguishes three ways that museums treat their visitors: as strangers, guests, and clients. Doering (1999) reflects, “The history of museums might appear to suggest a sequential development from stranger to guest to client” (p. 74). Yet, all three attitudes still exist or sometimes even coexist (Doering, 1999). These three attitudes towards visitors significantly impact the way a security guard is trained to treat visitors. Therefore, it is important to investigate the three treatments.

Visitors as Strangers

“In this mode,” Doering (1999) explains, “the museum maintains that its primary responsibility is to the collection or some other aspect of the work and not the public” (p. 75). When visitors are treated like strangers, visitors feel unwelcome. In such a museum, one imagines overprotective guards, barking “Do not touch.” Since the collection is the priority of these museums, security guards are plentiful and their eyes are always fixed on the visitor. In this case, security guards engage in minimal conversation with visitors and staff so that they can remain ever watchful.

Visitors as Guests

According to Doering (1999), “In this posture, perhaps most common in our museums today, the museum assumes responsibility for visitors” (p. 75). Applicable is Weil’s (1999) description that museums went “from being about something to being for somebody” (p. 229). In these types of museums, visitors are made to feel welcome.
Security guards are very polite and courteous; they try to be discrete when asking visitors not to touch an artwork so as not to embarrass them.

Visitors as Clients

“In this attitude the museum believes that its primary responsibility is to be accountable to the visitor,” states Doering (1999, p. 75). These museums follow a business model; museums provide a service to their client, the visitors (Falk & Sheppard, 2005). These museums have recognized that museum-going is just one choice in a myriad of leisure time activities (Hood, 1989). Thus, museums have to think of creative new ways to engage the visitor. In these client oriented museums, security guards may take on responsibilities other than security functions. The museum may recruit artists, art, and art history students as security guards so that they can provide information about the art in addition to directions.

2.2.6. The Effect of a Museum’s Attitude Toward Visitors on Security Personnel

The above descriptions of the way a security guard may act in museums that treat their visitors as strangers, guests, or clients are presumptions; they are not the hard and fast rules. They are, however, suggestions to be considered in the following sections, which discuss the uniforms security guards wear, how security guards behave, and how much security guards are encouraged to talk with visitors.

What Uniforms Should Security Guards Wear?

David Liston (1993) states that uniforms should be determined “within the context of the community, its own security or protection requirements and the image it wants to project to the public and its own staff” (p. 71). Tillotson (1977) also echoes this
sentiment. Some museums may choose uniforms that are similar to that of law enforcement uniforms while other museums may choose casual dress.

While uniforms should be determined by each museum’s staff, it is recommended that security guards wear some sort of distinguishing dress so that the security guard is immediately visible amidst a crowd of visitors (Liston, 1993; Tillotson, 1977). It is also advisable that the security guard wear a badge with his or her name and the name of the institution at which the security guard works (Tillotson, 1977). While uniforms may seem like a frivolous concern, a study of visitor satisfaction found that “clean, well-dressed guards” were one of visitors’ greatest concerns (Falk & Dierking, 1992).

**How Should Security Guards Behave?**

"When Los Angeles collector Michael Gold asked me why I was standing somberly at the entrance to the Santa Monica Museum of Art… I deadpanned, ‘I’m security, Michael!’” (Wood, 2004, p. 2). In her experience as a security guard at several California museums, Eve Wood (2004), an artist, writer and former security guard, has found that “guards are encouraged to have as little visible personality as possible, a strange and unsettling paradox given that they are surrounded by so much evidence of human individuality, eccentricity and imagination” (p. 2). But, Wood (2004) notes that you don’t have to work as a security guard to realize this. She encourages you to walk into any local museum to run into any number of guards who are “alternately surly or apathetic” (p. 2). But sometimes security guards appear somber because of the toll physical guarding has on them (Tillotson, 1977). Intense concentration on observing visitors is monotonous and can be exhausting.
To Talk or Not to Talk?

Should security guards be permitted to talk to visitors? Some museums believe that if security guards talk to visitors, they will neglect their duty to guard the objects in the gallery in which they are stationed (Keck et al., 1966; Tillotson, 1977). Other museums believe that security guards are not knowledgeable enough to speak about the artworks in the museum so they are banned from doing so (Falk & Dierking, 1992). For example, when asked which work of art was his favorite, one security guard replied, “Sir, as a matter of policy, we don’t express our opinions on the art” (Lienhard, 1996). At another museum, Eve Wood (2004) claims she was actually “fired for attempting to explain the meaning of Claes Oldenburg’s works to a young couple from Detroit” (p. 2).

A New Type of Security Guard

The pressure for museums to cater to their visitors has greatly impacted the role of security guards. Museums have realized the importance of a social learning environment for visitors; the next step is to understand how to create and retain a social learning environment for all visitors (Falk & Dierking, 2000; Samis, 2007). To help ensure that a social learning environment is available, some museums have turned to security guards, an already present human element in the galleries (Samis, 2007).

Some museums are challenging the traditional role of the security guards. Most recently, there has been a trend for museums to employ hostesses, attendants, or guides to supplement security guards (Hooper-Greenhill, 1994; Samis, 2007). In some cases, museums have replaced the more traditional security guard with “hybrids” who act as security personnel, visitor services, and educators (Samis, 2007, p. 69).
Hybrids help introduce the human element back into museums; with all of the text, audio, videos, and computers used to convey information in exhibitions, conversation with other people can be refreshing (Samis, 2007). According to Falk and Dierking (1992), “Personal interaction increases the likelihood that a museum experience will be memorable” (p. 157). Additionally, personal interaction also proves significant for learning (Hooper-Greenhill, 1994).

Museums introducing new kinds of security personnel, supplementing security staff, and creating hybrid staff include the Phillips Collection, San Jose Museum of Art, Solomon R. Guggenheim Museum, Tate Modern, and Walker Art Center (Samis, 2007). But this is not a new concept; the Pompidou Center of Art and Culture in Paris had been hiring gallery attendants to supplement security guards since at least the 1980’s (Fennelly, 1983).

One concern, however, regarding hybrids is whether they can manage two different roles: to assist visitors and protect artworks and visitors. As Fennelly (1983) asks, “How does one act as a gracious host to millions while also maintaining the stance of an ever-alert ‘watchdog’”? While Fennelly (1983) does not discount the possibility of a security guard who can be both security and host, he cautions, “The role requires just the right mixture of tact and firmness” (Fennelly, 1983, p. 19).

2.3. Visitor Experience and Security Guards

Visitor experience and security guards intersect in two ways: (1) security guards can be part of all three contexts in the interactive experience model, and (2) visitors have expectations of security guards.
2.3.1. Security Guards and the Interactive Experience Model

Personal Context

As mentioned earlier, the personal context includes all experiences an individual has had. These experiences, which will in turn affect the current museum experience, may include previous experiences with security guards. These experiences entail having direct contact with a security guard, witnessing another visitor’s contact with a security guard, or hearing someone recall an experience with a security guard. The presence of the security guard alone may trigger certain attitudes or feelings. While it is possible that security guards bear no semblance to an experience with a guard in the visitor’s personal context, it is more likely that security guards are part of the personal context.

Social Context

As with the personal context, security guards may or may not impact the social context of a visitor. For a security guard to be part of the social context, a visitor would have to have social contact with a security guard or have discussed security guards with another visitor.

Physical Context

Security guards are always part of the physical context (Falk & Dierking, 1992). They along with architecture, lighting, and the museum's collection constitute elements of the physical context (Hooper-Greenhill, 1994).

2.3.2. Security Guards and Visitor Expectations

But while museums have certain ideas of the role of the security guards, visitors sometimes have different opinions. For example, visitors often see security guards as informants at their disposal (Tillotson, 1977). To the visitors, security guards can point
them in the direction of the nearest restroom, a good local restaurant, or even the famous sculpture they heard was in the collection (Falk & Dierking, 1992).

2.4. Visitors, Security Guards, Museums, and Power Relationships

The relationship between security guards and visitors does not exist in a bubble. There are external factors imposing on their relationship; a major factor is the museum or institution. The museum’s role will be the primary focus in the following section. Ideas of the museum will be approached from both a practical and theoretical point of view, beginning with the history of museums.

2.4.1. Changing Role of the Visitor in the History of Museums

Museums began as private collections during the Renaissance. At this time, patrons commissioned paintings for their personal collections. Art became a “collectible commodity” (McClellan, 2003, p. 3). But, patrons were not the only collectors, and paintings were not the only items being collected. Artists and scientists were also collecting, creating curiosity cabinets. These cabinets consisted of antiques, bones, and other artifacts.

It was not until almost the eighteenth century that private collections were put on public display. Edward P. Alexander and Mary Alexander (2008) point to the first university museum in Basel and the Ashmolean in Oxford, established in 1683, as some of the earliest public museums. During the mid to late eighteenth century, more and more private collections were being displayed publicly. There was the Salon in Paris, beginning in 1737, and the Royal Academy exhibitions in London in 1768. But while both the Salon and Royal Academy displayed works publicly, they were actually
intended for art patrons and not the public. Nevertheless, the salons drew crowds of both art patrons and non-patrons.

By the end of the eighteenth century, museums slowly began to embrace the general public as an audience. One of the earliest American museums, which opened in 1786 by Charles Wilson Peale, is considered the first museum for the general public. Following Peale’s museum, the Victoria and Albert, established in 1852, also paved the way for public museums.

Even given the efforts of Peale and the Victoria and Albert, not all nineteenth century museums wanted to be inclusive, public institutions. The museums’ stance on the inclusion and exclusion of the public was hypocritical. While museums said that the public was welcome, they really meant only the privileged public. Many museums charged fees “for the purpose of keeping unacceptable visitors out, as museums were not always considered appropriate places for the general public to visit” (Grinder & McCoy, 1985, p. 12). As Andrew McClellan (2003) points out, “Virtually all were welcome” in museums (p. 7). But, virtually is by no means all.

Gustav Waagen, director of the Berlin Museum, is one example of the internal hypocrisy of museums. In a testimonial to the British Parliament in 1853, Waagen states that “As [a] Gallery is erected at the Nation’s expense, it must of course be rendered as generally useful as possible, every one being admitted capable of deriving from it enjoyment or instruction” (as cited in McClellan, 2003, p. 7). While he indicates that all are welcome to visit museums, Waagen, centuries ago, is also quoted saying that those “whose dress is so dirty as to create a smell obnoxious to the other visitors” (as cited in McClellan, 2003, p. 7) should not be allowed into museums.
With the arrival of the twentieth century, debates continued over museums’ audiences. Art museum leaders began evaluating the purpose of the museum. How should the museum function? Who should visit museums? Two contrasting points of view emerged from Benjamin Ives Gilman, Secretary of the Boston Museum of Fine Arts from 1893 to 1925, and John Cotton Dana, founder and director of The Newark Museum from 1909 to 1929. Gilman saw art museums as a place “to experience beauty rather than to convey information” (Alexander & Alexander, 2008, p. 42). Dana, however, believed that museums should educate and inform. More to the point, in Gilman’s model of the museum, exposure to art is sufficient. The object will then speak to the visitor. In Dana’s belief, however, the object needs a person to educate and communicate with people. While Gilman’s theory is passive, Dana’s theory is proactive. Dana makes efforts to serve the general public.

Twentieth-century museums have gravitated toward Dana’s museum philosophy. Education and the museum public have continued to gain importance over the century. In the last half of the century, education has become as essential to the mission of museums as the collection and preservation of objects.

While education and the public have become greater concerns of the museum, museums still enforce policies that leave the visitor feeling like an outsider. These policies include banning photography, food, and drink. In addition to these ubiquitous policies are expectations museums have of visitors. For example, David Carrier (2006) notes, “In a traditional museum, you are expected to be reasonably well dressed and well mannered and not raise your voice” (p. 86). In some cases, proper attire and behavior are not explicit regulations, but rather expectations of both the museum staff and visitors.
2.4.2 Visitors’ Attitudes Toward Museums Today

Despite the different ways that museums treat visitors, some visitors still consider museums intimidating and not truly a place for the public (Doering, 1999). In researching leisure time activities, Marilyn Hood (1989) found that people who did not visit museums cited that museums restricted their activity and made them feel uncomfortable. Visitors also noted that museums were “formidable places that were physically and socially inaccessible to them” (Falk & Dierking, 1992, p. 16).

Security guards play a role in creating a restrictive and intimidating environment. Carol Duncan (1995) observes, “The modern visitor, always under security surveillance is not quite a guest” (p. 74). In addition, Eilean Hooper-Greenhill (1994) finds that museums understand that security guards are contributing to the image of formidable museums and quotes from Herbert's article “Inmates of a Beautiful Prison,” “Staff must stop being seen as human rottweilers hired to intimidate visitors” (as cited in Hooper-Greenhill, 1994, p. 97).

2.4.3. Architecture and Power Relationships

Architecture is another means of exerting authority. According to Foucault (2000), “Space is fundamental in any form of communal life; space is fundamental in any exercise of power” (p. 361). Space creates a place for normalization and functions of power (Foucault, 1979; 2000).

As an example, Foucault uses Jeremy Bentham's Panopticon. While prisons used to be dungeons, small, enclosed spaces that allowed little light, Bentham constructed a prison that was very open (Foucault, 1979). The Panopticon is a large open space with a security tower in the middle. Prisoners in the Panopticon, however, are not able to see
into the security tower. Therefore, whether there was or was not a guard in the security
tower, prisoners would behave because there was the possibility that they were being
watched.

Constant surveillance is mentally daunting. Thus, Foucault (1979) states,
"Visibility is a trap" (p. 200). “Hence the major effect of the Panopticon: to induce in the
inmate a state of conscious and permanent visibility that assures the automatic
functioning of power,” notes Foucault (1979, p. 201).

The model of the Panopticon and architecture of prisons has direct links to art
museums. The High Museum of Art in Atlanta, for example, was used as the high-
security prison in Manhunter, the 1986 Hannibal Lecter film (Storrie, 2006). The High
the building references Frank Lloyd Wright’s design for the Solomon R. Guggenheim
Museum, which has its own allusions to a prison. While Wright's design lacks a security
tower at the center, the openness of the rotunda allows for visibility and thus,
surveillance. Do note that while it may be inferred in his architectural design, Wright
never refers to visibility equating to surveillance; Wright's interest in open space
embodied his idea of an organic space (Stoller, 1999).

2.5. Security Guards and Gallery Guides at the Solomon R. Guggenheim Museum

The Solomon R. Guggenheim Museum employs two different types of security
guards: Security Guards and Gallery Guides. Security Guards and Gallery Guides have
some shared responsibilities as well as some unique responsibilities. Shared
responsibilities include guarding the galleries of the museum, in order to safeguard both
the works of art and the visitors in the museum. They also answer visitors’ general
questions about the museum’s hours, facilities, and services. The unique responsibilities and identifiers that distinguish them are discussed in the following section.

2.5.1. Security Guards

Demographics

Security guards at the Solomon R. Guggenheim Museum range in age from 20 to 60 years old. There are more male than female security guards, although the difference is not significant. Also, the museum employs an ethnically diverse group of security guards.

Duties

The responsibilities of security guards at the Solomon R. Guggenheim Museum match those general duties outlined in section 2.2, although it is important to note that Security Guards at the Guggenheim are responsible for the safety of visitors and staff, first and foremost, and then for the works of art.

Training

Security guards attend a two-day security training session, after which they receive their New York State security license. The museum facility and museum rules, regulations, and policies are described. In addition, security guards are instructed on how to handle disorderly visitors. At the end of the training, security guards are given a short test, which asks them to complete some multiple choice and true or false questions. Questions include: “If you see a visitor touching a work of art, you should: a) yell across the gallery to inform him/her that touching the art isn’t allowed; b) ignore the visitor; c) approach the visitor, ask him/her to stand back, explain that visitors are not allowed to touch the art; d) arrest the visitor.”  
(Solomon R. Guggenheim Museum, Security
Department, On the Job Training Course, Test #1). Every year, security guards must attend a day of training in order to have their NYS security licenses renewed.

**Uniforms**

Security Guards wear a more traditional uniform of a blazer and trousers with button down shirts. Ties have recently been required. They also wear an identification badge containing the “Solomon R. Guggenheim Museum” and the security guard’s name.

**2.5.2. Gallery Guides**

**Background**

The Solomon R. Guggenheim is one art museum that is employing what may be called “hybrid” security personnel (Samis, 2007). These “hybrids” are called Gallery Guides at the Guggenheim and carry out dual responsibilities in security and education. Described by Loos (2006), Gallery Guides are “hired by the museum to safeguard the art and to engage people in conversation about it, acting as a human audioguide who is at least one part Doberman” (p. 2.23). Admittedly, Loos’ similes are embellished. First, Gallery Guides do not bear close semblance to audioguides because they do not lecture at visitors, but employ inquiry-based educational strategies. Second, one part Doberman sounds very harsh. Gallery Guides are responsible for security, but the try to do so in the most tactful way. As described by the supervisor of Gallery Guides, “They are trained in techniques for turning the frequently negative security encounter into a positive learning experience about safety in the museum and the works of art on exhibit.”

Gallery Guides were introduced into the museum in 2004, the year after a Matthew Barney exhibition (Loos, 2006). Friends of a senior executive at the Guggenheim mentioned that they had left the Barney exhibition confused (Loos, 2006).
Thus, the education department thought it would be helpful to have people placed in the galleries to aid visitors in understanding the content, especially for more conceptual, or less accessible, exhibitions (Loos, 2006).

Demographics

Most of Gallery Guides employed have bachelor or masters degrees in art, art history, or education. Also, most Gallery Guides are approximately 20 to 30 years of age, and there are about the same number of male Gallery Guides as female. While there is some diversity, the majority of Gallery Guides are Caucasian, yet the Guggenheim is actively trying to diversify the Gallery Guide employee pool.

Duties

In addition to the security functions required of Security Guards, Gallery Guides talk to visitors about the art. In basic terms, conversation with visitors happens in two ways: Gallery Guides approach visitors or visitors approach Gallery Guides. The strategies that Gallery Guides use vary, however. For example, Gallery Guides are trained to “sidle up” to visitors who are looking at art, look with them, and then casually start up a conversation by saying something or asking a question like, “This work has always impressed me – what is it that has you so engaged?” In both cases when they approach visitors and when visitors approach them, Gallery Guides are encouraged to engage visitors using inquiry-based learning techniques.

Training

When hired, Gallery Guides go through a four day long training process where a large portion of time is dedicated to security responsibilities and another portion of time is dedicated to educational responsibilities as well as the intersection of education and
security. Gallery Guides are also given a reading binder to study. The binder contains fact sheets and essays about the history of the Guggenheim museum and family, the Frank Lloyd Wright building, the permanent collection, the museum experience, and approaches to inquiry-based education. These include “Teaching with Questions” and “Active Learning, Thinking Skills, and Audience Participation” by Alan Gartenhaus, “Involving Your Audience” by Linda Osmundson, and “What was the Question?” by Jackie Littleton, which were all published in *The Docent Educator*. Additionally, three of the main essays in the binder are, “The Art of Teaching in the Museum” by Rika Burnham and Elliott Kai-Kee, “Teaching Yourself to Teach with Objects” John Hennigar Shuh, and “Creating Museum Experiences for Casual Visitors” by John Falk and Lynn Dierking.

The initial four-day training is just the first step in an on-going training schedule focused on refining inquiry skills, learning new exhibition content and deepening understanding of modern and contemporary art. The Gallery Guides have training every month for 8 hours when new exhibitions are opening, and for 4 hours during the other months.

In addition, each time a new temporary exhibition is installed, Gallery Guides are given a catalogue and provided with extensive reading packets for each exhibition and also attend a curatorial overview and walkthrough. Another Gallery Guide Training Session is held at this time to address the temporary exhibition specifically although it is also an opportunity for Gallery Guides to share their successes and pitfalls and brainstorm ways to improve their interactions with visitors.
Uniforms

Gallery Guides do not wear a traditional uniform, but they do wear all black because the Guggenheim wanted the Gallery Guides to appear casual and approachable. They also wear a nametag and an orange button that says “Information.” Most recently, an addition has been made to their uniform, men wear a Kandinsky *Several Circles* tie and women wear a Kandinsky *Black Lines* scarf, which can be found in the Guggenheim’s gift shop.
CHAPTER 3
METHODOLOGY, CASE STUDY SETTING, DATA ANALYSIS
AND REPORTING

3.1. Methodology

The methodology of this study has been informed by literature on qualitative and quantitative research, museum research, and museum evaluation. Minda Borun and Randi Korn (1999), Judy Diamond (1999), Corrine Glesne (2006), George Hein (1998), and Arthur Melton (1935) were referenced in the process of selecting methods of data collection, designing instruments of measure, collecting data, and analyzing data.

Validity increases by using multiple methodologies (Diamond, 1999; Glesne, 2006). For this study, four methodologies, which collect both quantitative and qualitative data, and three groups of participants were used. The four methodologies are timing and tracking observations, free-form observations, observations of a Gallery Guide training session, and interviews with Security Guards and Gallery Guides. Quantitative data include some data collected from timing and tracking observations and data from free-form observations; qualitative data include data from timing and tracking observations, observations of the Gallery Guide training session, and in-depth interviews with Security Guards and Gallery Guides. All data were collected at the case study site: the Solomon R. Guggenheim Museum.

Each methodology is discussed below according to objective, implementation of methodology, participants involved, and the effect of my role as researcher on the methodology.
3.1.1. Timing and Tracking Observation

Timing and tracking observations are observations of visitors in the museum, and provide information about how long visitors spend in the gallery as well as information about how visitors move through the gallery (Diamond, 1999; Hein, 1998; Melton, 1935). Timing and tracking observations can provide qualitative data and quantitative data depending on the implementation.

Objective

In this study, timing and tracking observations were used to understand how security guards affect the amount of time visitors stay in the galleries and the way visitors move through the galleries. These observations looked at the visitor primarily and the security personnel secondarily since individual visitors were selected as participants and observations focused on their behavior. Security personnel were observed in relation to the visitor.

Implementation of Methodology

Between January 5 and January 8, I conducted timing and tracking observations.

Instrument of Measure: Timing and Tracking Observation Form

Timing and tracking observation forms were used to collect data (See Appendix A). The timing and tracking observation forms contained a map of the station observed, an area for freehand notes, blanks to note the observation start time and end time, and an area for demographic information. These areas were used as follows:

1) Map of the station observed – to mark where the visitor was in the actual station and chart the visitor’s movement.
2) Freehand notes – to describe the behaviors of the visitors, the behaviors of security personnel, and conversations overheard. This includes noting any interaction between security personnel and visitors including who approached whom and the nature of the encounter.

3) Blanks for start and stop time – to record the time a visitor entered and exited the station, which was used to calculate total time spent in station.

4) Demographic information – to record the number of visitors in the visiting group as well as the gender and approximate age of the visitor. I also recorded whether the visitor was wearing an Audioguide, but note that I was only able to distinguish whether a visitor was *wearing* an Audioguide, which means that the visitor had an Audioguide and wore the headphones, and not whether a visitor was *listening* to an Audioguide.

**Participant Selection**

Data collection began by selecting the participants. Certain criteria applied to participant selection. Participants had to be visitors at the Guggenheim not visiting with a tour group. In addition, participants had to be 18 years of age or older. Because visitors were not asked their age, I had to use my discretion to decide if a participant was 18 years of age or older. If there was any doubt whether a visitor was younger than 18 years of age, that visitor was not selected as a participant.

Furthermore, a random sampling method was implemented to select participants. I positioned myself in such a way that I could see the “entrance” to the station being observed. The “entrance” was something I designated before beginning observations, and it was designated as an “entrance” because it was the way in which I observed most
visitors entering a station. Once positioned in a place to observe the “entrance,” I counted visitors, selecting the third visitor as participant for observation. If two visitors entered at the same time, I chose the visitor closest to me for observation. After the third participant, the one being observed, exited the station, I finished taking notes and then directed attention back to the entrance of the station. I again counted participants, selecting the third participant for observation.

Data Collection Procedure

After a visitor was selected for observation, I recorded the start time, which is the time (hour, minute, and second) the participant entered the station. A digital watch was used throughout data collection to record times. Every thirty seconds that the participant remained in the station, a marker, or dot, was placed on a map of the station on the timing and tracking observation form indicating the location where the participant was standing or sitting in the gallery in real time. The marker for each visitor (V) was labeled V1 for the start time, V2 for the first thirty seconds after the start time, V3 for the second thirty seconds (one minute) after the start time, and so on.

Another marker was placed on the map to time and track the security personnel in the station. S1 or G1, depending on the presence of either a Security Guard (S) or Gallery Guide (G), was placed on the map to mark the location in the gallery at the start time, S2 or G2 for the location at the first thirty seconds after the start time, and S3 or G3 for location at the second thirty seconds (one minute) after the start time. Table 1 (next page) shows the relation between the markers and time increments.
Table 1. Markers and Time Increments

<table>
<thead>
<tr>
<th>Incremental Notation For Participant</th>
<th>Time in Gallery</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1, S1, or G1</td>
<td>Start time</td>
</tr>
<tr>
<td>V2, S2, or G2</td>
<td>Start time + 30 seconds</td>
</tr>
<tr>
<td>V3, S3, or G3</td>
<td>Start time + 1 minute</td>
</tr>
<tr>
<td>V4, S4, or G4</td>
<td>Start time + 1 minute and 30 seconds</td>
</tr>
</tbody>
</table>

When the participant exited the station, a stop time was recorded. Demographic information and freehand notes were also recorded before the observation ended or immediately following the observation.

*Influence of the Rotation Schedule*

Timing and tracking observation as well as free-form observations, which are discussed later, are intimately tied to the Security Guard and Gallery Guide rotation schedule, which regularly circulates security personnel through the museum. As at most museums, one Security Guard or Gallery Guide is normally assigned to patrol a station—one person per station. The station may include a portion of a gallery or the entrance to the museum, depending on security needs. Security Guards and Gallery Guides regularly move from station to station so that they are not observing one station all day, which helps to combat fatigue.

In my research, the rotation schedule creates control by allowing me to observe one station, while still allowing me to observe a variety of security personnel since they rotate through the station. For each of the four days of observation, I selected a different station to observe, meaning that I observed four stations in total. Thus, the station,
environment, and researcher remained constant each day, but the presence of either a Security Guard or Gallery Guide was variable.

Rotation schedules and stations identified may change depending on the exhibition. For example, during my research, the rotation schedule identified R5U (Ramp 5 Upper) and R5L (Ramp 5 Lower). During the Richard Prince: Spiritual America exhibition, these two stations hosted several Hood sculptures. Because of the size, placement, and value of these sculptures, the decision was made that they required extra physical protection. Thus Ramp 5, which may have been just one station if photographs were displayed, was broken in two stations, R5U (Ramp 5 Upper) and R5L (Ramp 5 Lower).

Stations Observed

Stations observed were: R5U (Ramp 5 Upper), T5 (Tower 5), HG (High Gallery), and T2 (Tower 2) (see Appendix B). Stations were selected because they met two criteria: (1) the exhibition spaces and collection displayed were representative of the variety of rotation stations, and (2) on the days of observation, the stations were guarded by an approximately equal number of Security Guards and Gallery Guides. Prior to observation, I selected potential stations to observe based on the variety of works of art and architectural space. Then, when I arrived at the museum each day, I consulted the rotation schedule and selected which gallery to observe based on which gallery allowed me to observe visitors in a station with approximately the same number of Gallery Guides and Security Guards; thus, ideally, I wanted to observe visitors in one station for eight rotations, in which a Gallery Guide was posted in the station for four rotations and a Security Guards was posted in a station for the other four rotations.
Data Collection Schedule

Each day, I conducted observations during the middle twenty minutes of eight rotations; this was done for several reasons. First and foremost, it is important that security personnel do not change in the middle of an observation. Observing the middle twenty minutes of a rotation is a preventative measure to ensure that I will not observe a visitor over the cusp of two rotations—two different types of security personnel—thus skewing the data. Second, the break between observations allowed me to take time to rest so that I could be most attentive during the twenty minutes of observation. The break between observations was also used to take general reflective notes on my observations, feelings, ideas, and limitations.

Observations were not conducted during the first rotation and final rotation since visitors were entering and exiting the museum at these times. Also, observations were not conducted during two rotations halfway through the day; this was to allow me a chance to rest and reflect on the observations. I was able to reassess what was going well or reconsider the methodology.

Relationship between Participants and the Researcher

Participants in this methodology include visitors at the Guggenheim who were in the rotation station being observed, Security Guards, and Gallery Guides. Because the timing and tracking observations were unobtrusive observations, informed consent was not required.

While I did not need to inform participants of the study, I often did inform security personnel that I was doing research and would be taking notes. Sometimes I specified that I was doing research on visitors, but I did not disclose that I was studying
the effect of security personnel on visitors because I did not want to influence the way that the security personnel normally interact with visitors. In a few instances, the Security Guard or Gallery Guide on post was occupied when I began observations, and thus I did not inform him or her of my research; often, however, the security personnel approached me to inquire about what I was doing. Security personnel may have been attracted to my presence because of the clipboard I carried or the “Guggenheim Guest” sticker I wore.

One situation worth noting is that after the first day of data collection, some security personnel were not clear of my role. By the second day of data collection, security personnel were more at ease with my presence, and I do not believe the data were affected.

3.1.2. Free-form Observations

Objective

The objective of these observations was to understand the overall impact that security personnel have on visitors. For these purposes, impact is defined as the number of times that security personnel interact with visitors and the nature of these interactions. These observations looked at security personnel primarily and visitors secondarily. In doing so, I observed the security personnel’s behavior and the interactions he or she had with visitors. I was able to observe a larger sample that can then be used to project the population impacted by security personnel.

Implementation of Methodology

I did not initially intend on conducting free-form observations. But, on January 9, there were only three Gallery Guides on the rotation schedule. Therefore, there was not one station in which I could observe an approximately equal number of Security Guards
and Gallery Guides. Thus, I decided to observe three different stations (R3, M4, and R6) twice during the middle twenty minutes of a rotation; one time each station was guarded by a Security Guard and one time each station was guarded by Gallery Guide.

At the beginning of an observation, I counted all individuals in the station. I then continued to count the number of participants to enter the station throughout the middle twenty minutes of a rotation. This provided a close approximation of the total number of visitors to move through the station in twenty minutes. I say close approximation of the total number of visitors to move through the station because to truly move through the station the visitor would have to enter and exit, while I only counted visitors who entered the station.

During the twenty minutes of observation, the researcher also recorded the number of times that a Security Guard or Gallery Guide interacted with visitors in the station, who approached whom, and the type of interaction that took place.

**Relationship between Participants and the Researcher**

As with timing and tracking observations, informed consent from participants was not required because the observations were unobtrusive observations.

**3.1.3. Observation of Gallery Guide Training Session**

**Objective**

The objective of this observation was to better understand how Gallery Guides differ from Security Guards and specifically how the Guggenheim differentiates the two positions.
Implementation of Methodology

On February 10, a Gallery Guide Training Session was held in preparation for the *Cai Guo-Qiang: I Want to Believe* exhibition that was being installed at the time. I conducted observations for the first four hours of the training session, which took place at the Solomon R. Guggenheim Museum. At the training session, Gallery Guides and the Education Manager of Adult Interpretive Programs (EMAIP) discussed the works of art, listed questions that they anticipated from visitors, and brainstormed ways to answer the anticipated questions. There was a second portion of the training session in which the Gallery Guides went to the Museum of Modern Art, which I did not observe.

The primary source of data was hand-written field notes, which I took during the training session. Other data included notes compiled by attendees to the Gallery Guide Training Session. When Gallery Guides split into groups for discussion, one group member acted as note-taker and shared these notes with other Gallery Guides and myself via e-mail after the Training Session. The notes addressed the big ideas raised.

**Relationship between Participants and the Researcher**

Participants included Gallery Guides and their supervisor (EMAIP), who facilitated the Gallery Guide Training Session. Before the Training Session began, I informed all participants of my research and requested their voluntary participation. Informed consent was obtained from all participants (see Appendix C). I retain on file the signed informed consent forms.

During the Training Session, I tried to be as unobtrusive as possible and tried not to influence participants in the Training Session. While I sat with participants, I only interacted with participants if I needed clarification of a point of discussion. These
occasions were minimal, and I only asked for clarification if I thought the information could be meaningful to the study.

3.1.4. In-depth Interviews with Security Guards and Gallery Guides

Objective

The objective of these interviews was to understand visitor experience with security personnel through the eyes of security personnel. Specifically, I wanted to understand how security personnel perceive their effect on visitor experience. As the eyes and ears of the museum, security personnel often have a wealth of information about visitor behaviors that is not utilized by the museum (Davison, 1989).

Implementation of Methodology

On May 23, two Security Guards and three Gallery Guides were interviewed on-site at the Solomon R. Guggenheim Museum. When arranging these interviews, I requested to speak with three Security Guards and three Gallery Guides who had worked for the Guggenheim the longest amount of time. I was only able to complete five of the six interviews because the Guggenheim was very crowded in the afternoon and the Museum would have had to make special arrangements for the sixth interview. The Guggenheim offered to accommodate this, but I declined so as not to strain their staff.

The interviews were semi-structured meaning that an interview guide was used to guide the interview; each question on the interview guide was asked and interviewees were probed about their answers as I felt necessary. The interview guide for the interviews is found in Appendix D. With participants’ permission, interviews were audio-recorded for analysis.
Relationship between Participants and the Researcher

Interviewees were informed of my research and voluntary participation was requested. All interviewees signed an informed consent form, which I retain on file (see Appendix E). Since these interviews were the fourth and final methodology used during the period of the study, most interviewees were familiar with me and seemed casual and honest in their responses.

3.2 Case Study Setting: The Solomon R. Guggenheim Museum

3.2.1 Background

The Solomon R. Guggenheim Museum is located on Fifth Avenue between 88th and 89th Street. The Guggenheim is part of the Solomon R. Guggenheim Foundation (Solomon R. Guggenheim Foundation, 1960). The Guggenheim’s collection and temporary exhibitions highlight modern and contemporary art (Barnett, 1984; Solomon R. Guggenheim Foundation, 1960).

The museum’s iconic building, completed in 1959, was designed by Frank Lloyd Wright (Solomon R. Guggenheim Foundation, 1960; Stoller, 1999). At the time of data collection, the building’s façade and rotunda structure were undergoing restoration. Since the museum continued to remain open during the restoration, there were minor inconveniences. For example, scaffolding hid the exterior of the building, and, on occasion, drilling was audible in the museum.

Richard Prince: Spiritual America; Foto: Modernity in Central Europe, 1918-1945; Solomon’s Gift: The Founding Collection of the Guggenheim, 1937-1949; and the permanent collection were on display during the pre-test, timing and tracking observations, and free-form observations.
3.2.2. Exhibitions on Display

Richard Prince: Spiritual America

Richard Prince: Spiritual America, referred to as Prince hereafter, was a temporary exhibition organized by the Solomon R. Guggenheim Museum. It was on display in the rotunda, Annex Level 5, and Annex Level 7 from September 28, 2007 through January 9, 2008. The Prince exhibition contained large-scale works in various mediums: joke paintings made of acrylic and silkscreen on canvas, cowboy photographs, girlfriend photographs, and Hood Sculptures made of fiberglass, polyester resin, acrylic, and wood (Spector, 2007). Everything was displayed against white walls. An Audioguide was available, and every work of art had a label, but not every work of art had explanatory text. The only benches in the exhibition space were located in Annex Level 7 and near the bathrooms of the rotunda.

Foto: Modernity in Central Europe, 1918-1945

Foto: Modernity in Central Europe, 1918-1945, referred to as Foto hereafter, was on display from October 12, 2007 through January 13, 2008 on Annex Level 4. The Foto exhibition displayed small photographs, measuring less than 35 centimeters by 35 centimeters. The photographs were hung on gray walls and vibrant blue wall partitions. Also in the exhibition were several cases containing works of art. The cases were normally located in a corner of the gallery or in small alcoves. Extensive wall text was available for the exhibition, meaning every work of art had a label, and almost every work of art had accompanying explanatory text. Audioguides were not available. Annex Level 4 had three benches.

Solomon’s Gift: The Founding Collection of the Guggenheim, 1937-1949 was on display through January 13, 2008 in Annex Level 2 and Annex Level 3. The exhibition displayed paintings and works on paper that were part of Solomon R. Guggenheim’s collection; these were some of the first works to enter the present day Solomon R. Guggenheim Museum. Paintings were hung in a linear fashion along the walls while smaller works on paper were displayed salon style. Everything was displayed against white walls. An Audioguide was available for some of the more renowned works such as the Marc Chagall; overall, there was little explanatory text aside from a few introductory panels. Both Annex Level 2 and Annex Level 3 have two benches.

Permanent Collection

The permanent collection was on display in the Thannhauser Gallery adjoining Annex Level 2. The permanent collection consisted of mostly painting and a few sculptures. Everything was displayed against white walls or on white pedestals. As in Solomon’s Gift, Audioguide was available for some of the more renowned works, and there was little explanatory text aside from a few introductory panels. The gallery had two benches.

Other Museum Conditions

On January 9, Annex Level 3 was closed. Also that day, there were numerous art handlers in the museum preparing to dismantle the Prince exhibition. Art handlers partitioned off sections of the museum as necessary. The stairs were inaccessible on many floors since art handlers had begun to move crates onto each floor; crates were also
lined up and partitioned off on the main floor of the rotunda. The museum continued to remain open.

3.3. Analysis of Data

3.3.1. Qualitative Data

I employed coding to analyze qualitative data. As I read through my notes after all data was collected, I coded the data, using keywords to describe main trends and themes. After coding all of the data, I looked back at the codes to see if there were any codes that were too specific or could be combined with another code. The prevalence of the codes determined the significance of the trend. Through coding, links between categories and the quantitative data were made.

I also kept a reflective log throughout the research, writing in the log after each twenty minutes of observation. The log was referenced throughout data analysis to ensure validity. Trends present in the reflective logs are interjected in Chapter 4 where they supplement other data.

3.3.2. Quantitative Data

Quantitative data were analyzed using SPSS 12.0.1 for Windows, a statistical package for personal computers. Analyses included both descriptive and inferential methods. Quantitative findings are displayed in tables and graphs. Percentages within tables may not always equal 100 owing to rounding.

Descriptive Statistics

Frequency distributions were calculated for the following variables:

1) Visitor time in the gallery from entrance to exit;
2) Gallery conditions (type of gallery and level of crowding);
3) Visitor characteristics (estimated age group, gender, visit group composition, and use of an audio guide);

4) Security personnel characteristics (type of security personnel, estimated age group, and gender); and,

5) Security personnel behaviors (placement of security person, security contact with observed visitor yes/no, security contact with any visitor yes/no).

For the variable “visitor time in the station” the following summary statistics were calculated: the range (minimum and maximum), mean (average), standard deviation (± spread of values about the mean) and median (50th percentile, the data point at which half the values fall above and half fall below). Although the mean time was calculated, note that the median time is the preferred single-point estimate of the center of a time distribution because time distributions are typically skewed, meaning that they do not have a “normal,” bell-shaped distribution. This finding is widely accepted in visitor studies and some researchers explain that visitors frequently spend either a short amount of time or a long amount of time in a station (Hein, 1998; Melton, 1935).

A survival curve was also generated for the variable “visitor time in the station.” Survival curves are used to portray time-to-event data (Hein, 1998; Menninger, 1990). In this study, the event of interest was the visitor exiting the station, so the survival curve expresses time-to-exit data. The survival curve is a graph of the survival function against time. The survival function gives the probability that the phenomenon under study (remaining in the station) is still ongoing at a certain point in time and the response event (exiting the station) has not yet occurred. The horizontal axis of the survival curve represents elapsed time. The vertical axis, usually expressed as a proportion or
percentage, represents the probability that the event (the visitor exiting the gallery) has not yet occurred. So, for any point in time on the horizontal axis, one can read up to the curve and over to the vertical axis to determine the percentage of visitors that can be expected to still be present in the gallery beyond that point in time. In contrast to a single point estimate, such as a mean time or median time, the survival curve gives a whole pattern image of “visitor time in the station.”

**Inferential Statistics**

Kruskal-Wallis (K-W) analysis was used to test for differences in the medians of two or more groups. For example, “median visitor time in the station” was compared by “visitor age group” to determine if time spent in the station is age-related.

The K-W test is a nonparametric statistical method for testing the equality of population medians of two or more groups. K-W was used because the test does not assume that the underlying distribution of a variable is “normal” with a symmetric bell-shape, so it is appropriate for testing variables with asymmetric distributions such as “visitor time in the station”.

For inferential tests, a significance level of $p \leq .05$ was employed. When the level of significance is set to $p = 0.05$, any finding that exists at a probability ($p$-value) $\leq 0.05$ is “significant.” When a finding has a $p$-value of 0.05, there is a 95 percent probability that the finding exists; that is, 95 out of 100 times, the finding is correct. Conversely, there is a 5 percent probability that the finding does not exist; in other words, 5 out of 100 times, the finding appears by chance.
3.4. Research Limitations

Despite careful construction of instruments of measure, there were some limitations encountered. Limitations are acknowledged in the following section. Limitations have also been considered in data analysis.

3.4.1. Visitors

Personal Context

It is important to acknowledge that visitors entered the Solomon R. Guggenheim Museum with what Falk and Dierking (2000) refer to as a “personal context.” The visitors observed came to the Guggenheim with past experiences with this museum, other museums, art, and security guards, among other things. These past experiences may have affected visitors’ experiences at the Guggenheim on the day I observed them. Yet, since I decided to unobtrusively observe visitors, I will not have data about visitors’ past experiences.

Expectations

Visitors also entered the Guggenheim with expectations of what they would see in the museum, what the atmosphere would be like, and what they would learn. The preconceived notion of what the visit would be like also affected visitor experience in the museum. For example, if a visitor came into the Guggenheim with the intention of a quiet and contemplative visit, they may have avoided conversing with a Gallery Guide. Again, because I decided to conduct unobtrusive observations of visitors, I will not collect data about visitors’ expectations.
**Listening in on Visitor Conversations**

Data collection included listening in on visitors’ conversations as they passed through the station being observed. These conversations were important to understand the thoughts and feelings of visitors. Typically, conversations were often ongoing narratives of an experience. I, however, only heard conversations that took place in a single station. Therefore, I only heard isolated portions of what may have been a larger thought or development of ideas. I was not able to track the trajectory of conversation of the visitor throughout the entire museum experience.

**3.4.2. Security Personnel**

Security Guards and Gallery Guides, like visitors, have various experiences that will affect the way they interact with visitors. They also have varying levels of experiences. For example, I observed some Gallery Guides who had worked at the Guggenheim for three years; I also observed Gallery Guides who had only worked at the Guggenheim for three months. This difference likely affected the skill with which they interacted with visitors.

**A Familiar Face**

After spending just one day in the galleries, Security Guards and Gallery Guides recognized the researcher as a familiar face. The researcher’s continuous presence in the gallery probably altered the behavior of Security Guards and Gallery Guides. For example, some Security Guards or Gallery Guides, who noticed that I wore a “Guggenheim Guest” sticker, came over to make genial conversation. In this case, the guest sticker made me a “friend,” somehow affiliated as an “insider” at the museum. As indicated by my sticker, I was treated as a guest. In another case, a few Gallery Guides
had the misconception that I was there to evaluate their behavior. Under what they considered “evaluation,” these Gallery Guides may have altered their performance to make a positive impression on the “evaluator.”

3.4.3. Timing of the Study

Pre-observation for the study was conducted on October 3, 2007 and January 2, 2008, and data collection was conducted January 5 to 9, 2008. These dates are significant for two reasons: visitor attendance and the closing of the *Prince* exhibition

**Visitor Attendance.**

Because observations were conducted so close to the winter holidays, the museum was more crowded than on an average week. Average visitor attendance between January 2 and January 9 was approximately 3500 visitors per day. Highest attendance was 6285 visitors on January 4, and lowest attendance was 1096 visitors on January 9.

**Closing of Exhibitions.**

January 9 was the closing date for the *Prince* exhibition, which was shortly followed by the closing of *Foto* and *Kandinsky*. The closing of exhibitions is a variable that may affect visitor attendance as attendance sometimes rises towards the end of an exhibition. Also, Security Guards and Gallery Guides may have been less excited and enthusiastic about the exhibitions near their closing than they might have been near the opening of exhibitions, which in turn, may have affected visitors’ experiences.

**Sample Size**

The sample size was limited by time and finances. Because the sample is small, it is less reliable than analysis produced from a larger data set. A larger data set would be useful in running more statistics.
CHAPTER 4

STUDY FINDINGS AND ANALYSIS

Findings are discussed in four sections: 4.1. Findings from the Gallery Guide Training Session, 4.2 Findings from Interviews with Security Guards and Gallery Guides, 4.3 Findings from Timing and Tracking Observations, and 4.4 Findings from Free-form Observations. Findings under each section will be used to inform discussion of findings in the later section(s). Where pertinent, I have inserted comments from my field notes and written reflections.

4.1. Findings from Gallery Guide Training Session

A Gallery Guide Training Session was held at the Solomon R. Guggenheim Museum in a classroom in the education office and in the galleries. Another portion of the training session took place at the Museum of Modern Art, but I was unable to attend. The purpose of the Training Session was to prepare Gallery Guides for the new exhibition *Cai Guo-Qiang: I Want to Believe*, referred to hereafter as *Cai*, as well as to review inquiry-based learning strategies.

The Education Manager for Adult Interpretive Programs (EMAIP) at the Guggenheim ran the Training Session. The EMAIP began by reminding Gallery Guides of the main purpose of the Training Session: to brainstorm ways to interact with visitors, specifically in the new exhibition. The EMAIP also reminded Gallery Guides that their purpose is not to tell visitors answers, but “to help audience members construct ideas” and “to help [visitors] think.”
The EMAIP then asked Gallery Guides to split into small groups of approximately four. Each group was given a few reproductions of the works of art in the Cai exhibition. Gallery Guides were instructed to think about questions visitors will ask, or, since parts of the exhibition had opened before the Training Session, questions visitors had already asked about the Cai exhibition. Gallery Guides were also asked to discuss responses to these questions while using inquiry-based education methods, to which Gallery Guides had been introduced in other training sessions and in the Gallery Guide reading binder. Following the small group discussions, all of the Gallery Guides discussed together the key ideas or questions that emerged. Certain themes permeated the Training Session: making art accessible, addressing challenges specific to the exhibition, addressing challenges not specific to the exhibition, and reinforcing the purpose of the Gallery Guide.

4.1.1. Making Art Accessible

Through inquiry-based education, a strategy that employs questioning to encourage visitors to think and arrive at their own answers, Gallery Guides strive to make art accessible. In the Training Session, Gallery Guides shared inquiry-based education strategies they had adapted and used with the Cai exhibition or other exhibitions. Additionally, the Gallery Guides practiced talking about the Cai exhibition conversationally in the small group discussion.

In general, it seems that Gallery Guides strive to make art accessible to a range of visitors. For example, one Gallery Guide noted that “How do you feel about such a destructive medium?” would be a good question to ask visitors about the gunpowder paintings, named for the ignited gunpowder used to make the images. Another Gallery
Guide chimed in, saying that the question assumes that visitors know how the gunpowder paintings were made. In this case, the Gallery Guide is being conscious that visitors’ knowledge ranges.

4.1.2. Addressing Challenges Specific to the Exhibition

The session also addressed challenges specific to the exhibition. For example, one challenge in the Cai exhibition is dealing with the “giggle moment” when visitors see the wolf genitals in one work of art. Suggestions from Gallery Guides included asking a question directly about the wolf genitals in order to transition the “giggle moment” to a serious discussion or simply drawing visitors’ attention to another aspect of the work of art through questioning.

Gallery Guides also discussed how to encourage inquiry with the gunpowder paintings. Gallery Guides explained that the gunpowder paintings are visually much more “subdued” than more dynamic works of art in the rest of the exhibition, and thus, Gallery Guides said they are asked fewer questions about these works of art. Suggestions to address this problem include making connections between the gunpowder paintings and other more dynamic works of art in the exhibition.

4.1.3. Addressing Overarching Challenges

In the Training Session, other recurring challenges—those not specific to the exhibition—were discussed. Challenges include visitors asking for a quick answer before taking time to observe and consider the work themselves. Since a primary goal of inquiry is to encourage visitors to look, think and articulate their ideas, it is the work of the Gallery Guide to provide such an opportunity. Thus, one Gallery Guide suggested politely recommending that visitors spend a few minutes—or a few more minutes—
viewing the work before engaging in discussion. Another technique mentioned is to casually ask visitors what they think it is.

Another challenge addressed was that of visitors who strongly challenge the Gallery Guides. For example, especially when confronting contemporary art, visitors may verge on argumentative when asking, “How is this art?” To this, the EMAIP encouraged using the same inquiry tools to instigate discussion, asking the visitor how he or she thinks it is, or isn’t, art.

Additionally, Gallery Guides mentioned the mental wear of an exhibition—which was also mentioned in the interviews with the Gallery Guides. Not surprisingly, Gallery Guides reported that near the close of an exhibition they are less enthusiastic than they were at the beginning. Gallery Guides explained that it is not just the exhibition but also visitors’ comments about the exhibition that become tiring. Yet, Gallery Guides reported that in order to provide visitors quality experiences, they must work to remain as fresh and enthusiastic as possible, even towards the end of an exhibition. During the training, Gallery Guides shared some strategies for remaining upbeat and engaged in the exhibition. For example, in regard to a work by Cai Guo-Qiang, one Gallery Guide noted that he frequently heard the clever yet unoriginal statement, “It’s a wolf in sheep’s clothing,” and believed that he would quickly tire of the statement. In response, another Gallery Guide suggested pretending that they had never heard that statement before, asking the visitor, “What do you mean?” or “I have never heard that before, could you tell me more?” One Gallery Guide who had used this strategy reported that it obliged the visitor to engage in more substantial and original thinking.
4.1.4. Reinforcing the Purpose of Gallery Guides

The purpose of Gallery Guides is to engage visitors in discourse around works of art by using inquiry-based techniques to enhance visitors’ experience at the Guggenheim. Throughout the Training Session, these ideas were reinforced. For example, in leading the Training Session, the EMAIP emphasized the importance to be conscious that visitors’ experiences and familiarity with art range. The EMAIP reminded Gallery Guides to draw on the visitor’s personal experience whenever possible since good inquiry weaves, through interactive discussion, the personal experience of the visitor with the knowledge that the Gallery Guides bring to the discussion through their study of the art. She also reiterated that in inquiry there are no “wrong answers” and it useful to tell visitors this as it creates a zone of comfort, which may encourage visitors to participate in discussion.

4.2 Findings from Interviews with Security Guards and Gallery Guides

The objective of the interviews with security personnel was to understand how security personnel perceive their relationship with museum visitors as well as, to a small degree, understand visitors’ actual experience. In this section, I will compare and contrast the responses of Security Guards and Gallery Guides in order to address my objectives. However, please note that while the interview data provides insight into how security personnel perceive their role, the small sample size restricts me from making broad generalizations.

4.2.1. Security Personnel’s Interaction with Visitors

Security Guards and Gallery Guides were each asked to speak about how they interact with visitors. Security Guards were cautious in their responses, often prefacing
that they did their best to be nice to visitors, interjecting similar sentiments throughout the interview. These interjections possibly identify awareness of a tension surrounding interactions between Security Guards and visitors. Furthermore, Security Guards suggest that they are sometimes accused of being overbearing and causing conflict:

Basically my job is—if you see somebody getting close to the painting, it is [planning] how you are going to approach the person so there is not confrontation. Because some of the visitors, when they call downstairs to make a complaint, they always tell their side of the story and they don’t tell the Guard’s story.

These interjections, however, also may be attributed to Security Guards’ discomfort with me. As the EMAIP brought to my attention, outsiders had not previously taken interest in Security Guards and security personnel had not previously been asked about their interactions with visitors.

Security Guards could not quantify the number of visitors with whom they interact, and they simply stated that it was a lot. Security Guards also agreed that the works of art in the station they are guarding—and the exhibition of the works of art—impact the amount of interaction they have with visitors. For example, when there are free-standing sculptures that are displayed away from the wall or in the center of the gallery, Security Guards often have to interact with visitors more because they have to warn them about getting too close or touching the works of art.

By contrast, Gallery Guides were extremely candid when explaining how they interact with visitors. Gallery Guides noted that they are responsible for security regardless of their other responsibilities. One Gallery Guide remarked, “First of all, I look to see if everything is under control security-wise; then I decide if there is an opportunity for education.”
Gallery Guides normally proceeded to explain how they interact with visitors on an educational level, bringing attention to their unique responsibilities as Gallery Guides. Many Gallery Guides described how they decide to approach a visitor, noting that a large part of their job is “reading people.” Gallery Guides said they look at the body language and facial expressions of visitors to decide whom to approach. Gallery Guides also explained that often they wait for visitors to approach them. Gallery Guides explained that if a visitor approaches them they know that the visitor is vested in the encounter. This is in keeping with what was observed during timing and tracking observations as I often noticed Gallery Guides waiting to be approached. Furthermore, I also noticed that interactions that result from Gallery Guides approaching visitors were sometimes less fluid since visitors were not expecting the interaction. This was evident by visitors’ facial expressions and body language; additionally, the resulting conversations were sometimes shorter.

Gallery Guides also said that they could not determine how many visitors they talk to in an average rotation although they also said it was a lot. Like Security Guards, Gallery Guides said the works of art in a station dictate the amount of interaction they have with visitors. For example, one Gallery Guide mentioned that on Ramp 4, interactions are very few because the works of art currently there are less engaging—at least from Gallery Guides’ perspective—than works of art in the rest of the Museum.

My observations were mostly in keeping with security personnel’s accounts of how they interact with visitors. One discrepancy, however, was in the amount of the number of visitors with whom security personnel interact. Both Security Guards and Gallery Guides said that they interact with a lot of visitors although observation findings
show that Security Guards interact with more people than Gallery Guides although Gallery Guides are engaged in interaction with visitors for a longer time than Security Guards.

4.2.2. Frequently Asked Questions

Overall, both Security Guards and Gallery Guides affirmed that one of the most frequently asked questions is “Where is the bathroom?” Both Security Guards and Gallery Guides also mentioned that visitors frequently ask for assistance in operating the Audioguide. One Gallery Guide noted that the current exhibition has several Audioguide stops so questions about Audioguides are more prevalent.

Security Guards most frequently mentioned that visitors ask directional questions. As one security guard noted, “This building confuses people.” Visitors are often asking for directions to the museum café, a specific exhibition, or, as mentioned previously, the bathroom.

When asked what questions visitors frequently ask, Gallery Guides mentioned art-related questions. These questions include “What does this mean?” and other very broad questions. When probed further, however, Gallery Guides responded in a way similar to Security Guards, mentioning that visitors also ask directional questions. Because Gallery Guides responded first with questions about art content, it makes me think that Gallery Guides primarily regard themselves as educators.

Security Guards also noted that Gallery Guides are an asset because they are educators. One Security Guard said that their presence actually makes it easier for Security Guards:
Any question [visitors] ask me and I feel like I cannot respond, I send them to the information desk. And right now we have the Gallery Guides so it makes it easier for the [Security] Guards because if someone asks me a question, and I cannot answer, I send them to the Gallery Guide.

4.2.3. Positive Visitor Experience

I asked both Security Guards and Gallery Guides, “Can you think of a specific example of an interaction that you had with a visitor that may have resulted in a positive visitor experience?” “Positive visitor experience” was not defined but open to security personnel’s interpretation. Security personnel were asked to be specific in their description of the interaction and results so as to provide a sense of their definition of “positive visitor experience.”

Security Guards struggled to think of an occasion where an interaction with a visitor resulted in a positive visitor experience and did not provide any specific examples. While I tried to encourage them to consider why they could not think of an example of an interaction that resulted in a positive experience, Security Guards did not respond. Possibly, Security Guards could not provide a specific example or they had not been previously challenged to think about their role in such a way.

Gallery Guides, however, asserted that interactions with visitors often resulted in positive visitor experiences, and one Gallery Guide noted that one or two interactions a day result in an extremely positive visitor experience—where the visitor profusely thanks the Gallery Guide for his or her time.

All of the interactions that Gallery Guides mentioned involved conversation about the works of art. Gallery Guides noted that in these occasions it was often the visitor who approached them. Most Gallery Guides explained that when a visitor is very curious and
invested in learning, they will approach a Gallery Guide, thus making it easier to have a positive experience since the visitor is already intrinsically motivated to learn.

Gallery Guides also noted that positive experience was inherently linked to the Gallery Guide’s personal experience, given the “organic” nature of inquiry-based education, meaning that visitors’ experiences are reliant upon the educators’ experiences and vice versa. To clarify, when Gallery Guides have positive experiences it rubs off on visitors—and the reverse is true too. As described by one Gallery Guide, the “organic” nature of inquiry-based education is a “selfish aspect” of the job because the Gallery Guide receives as much pleasure from a good conversation as the visitor does. Gallery Guides found that when they were personally engaged in a conversation or challenged by a conversation, the experience was positive for the visitor and for the Gallery Guide. One Gallery Guided recalled:

One that stuck with me was not necessarily positive but it was challenging. The people had an idea about what art should accomplish and were of the school of thought that art is beautiful and should have this redeeming uplifting quality to it and if it doesn’t satisfy that condition then it isn’t really art. And I was able to very gently open up the ideas around that and had [the visitors] discuss exceptions to that rule. It ended up that they were not convinced, but I could tell that we were both considering the boundaries of a fundamental of art education: what constitutes art. That was a good ten minute conversation. They were from out of town, very casual about it, and not regular museum-goers. But it was good because they wanted the minute blurb, and it turned into a ten minute pretty in-depth thing.

Regarding positive visitor experiences, one Gallery Guides said, “Generally, they happen when we are able to take in the whole retrospective in its sum—what does it mean as a whole.” According to another Gallery Guide, positive visitor experiences
normally ended with visitors declaring, “I usually don’t get something like this in a museum” or “I am so glad I ran into you.”

4.2.4. Negative Visitor Experience

In addition to positive visitor experiences, I also asked Security Guards and Gallery Guides to think of a specific interaction they had with a visitor which resulted in a negative visitor experience. Again, “negative experience” was left to be interpreted by the security personnel being interviewed.

When describing an interaction that resulted in a negative visitor experience, Security Guards discussed the source of the negative visitor experience as a shared dynamic, faulting both themselves and the visitors. For example, one Security Guard said,

If you tell somebody not to touch this piece and you are standing there like a soldier looking at her or him—that starts a whole negative experience.

In this case, the Security Guard described how the demeanor of the Security Guard may cause a negative visitor experience. By contrast, another Security Guard said that the visitors’ common lack of understanding of the role of the Security Guard can cause a negative visitor experience:

A negative experience, most of the time, [happens] when you approach somebody, and because they don’t understand your job, they don’t know [that] it is not you making the rules.

In this instance, the Security Guard explained that the visitor does not understand that Security Guards enforce but do not make the museum rules. Security Guards said that visitors sometimes expect security personnel to change or bend the rules while they do not have the authority to do so.
All Gallery Guides reported that security aspects of their job normally created negative experiences, and one Gallery Guide said that a negative visitor experience “always has to do with some security aspect.” Gallery Guides expounded that a negative visitor experience happens when they ask a visitor not to do something, noting a number of problems. For instance, one Gallery Guide explained that as a young person in her 20s, it can be difficult to ask a visitor older than herself not to do something: “They think they’re adults, they know what they are doing, and you should not approach them, especially as a young person.”

Additionally, Gallery Guides explained that asking a visitor not to do something, regardless of the visitors’ or their own age, can cause the visitor discomfort. For example, in one relatively extreme example, a Gallery Guide described that while it is necessary to correct visitors when they break a museum rule, the interaction sometimes has a significant, sometimes visible, impact on the visitor:

If you come down on somebody for doing something that is just unacceptable—if someone grabs something in a way that could be damaging—you have to come down on them relatively hard and say, “Sir you cannot touch.” For a lot of people, they are going to run out of the gallery. They pretend that they are not; they say “sorry” and look at something else briefly. But, then you see them make a bee line for the door because they are so uncomfortable with their transgression and they get upset about it, which is sad. I always want to chase after them and say, “No, No, it is alright. It’s fine. You didn’t do any damage. I’d like you to see the rest of the work please.”

In this excerpt, it is notable that in addition to affecting the visitor, these types of interactions affect the security personnel. It is never easy to tell people enjoying themselves in a museum that there are certain actions that are not appropriate. While
Gallery Guide training includes techniques for making more difficult confrontations as benign as possible for the visitor as well as the Gallery Guide, it is still a difficult task.

A couple of Gallery Guides mentioned that negative visitor experiences can also happen from conversational encounters with visitors about art. For example, a couple Gallery Guides described that while it is a very effective educational strategy, inquiry is sometimes challenging for visitors. For example, some visitors are unfamiliar with inquiry, are not comfortable expressing their opinion, or are looking for factual answers.

**4.2.5. Physical Presence of Security Personnel**

When asked whether they thought their physical presence affected visitors, Security Guards answered affirmatively. One Security Guard said that appearance is very important. He stated that if you have good appearance, wear your uniform neatly, and take care of yourself, you are normally acknowledged and treated with respect. This Security Guard reported the opposite outcome occurs when you do not dress appropriately.

Gallery Guides also concurred that their presence affected visitors. A couple Gallery Guides called attention to their youth. One Gallery Guide explained, “It is very unusual to see young people in the museum, and that’s why the visitor will come and ask if you are a volunteer or an intern.” This Gallery Guide continued to explain that such interactions were a catalyst for conversations about the works of art.

Additionally, one Gallery Guide reflected not on her job but on her experience visiting museums, saying that she is most affected if there is no security guard present in the museum:
When I go to a museum and there is not a security guard that I can see immediately, it feels strange, and this was before I even started working in museums…. That [security] is a presence you are used to.

Another Gallery Guide referenced the negative effect the physical presence of security personnel has on visitors, explaining that the presence of security personnel distracts visitors from the works of art:

Most people say, “Oh, that guy standing there is all in black; I need to be on my toes.” That is unfortunate. You see them constrict. They are just as concerned about you looking at them as they are looking at the work

4.2.6. Attitudes Toward Security Personnel

Security personnel described two types of visitors when discussing visitors’ attitudes toward security personnel: visitors that are aware of security personnel but show them little respect and visitors that are not aware of security personnel. Note, however, that security personnel provided more examples of visitors being unaware of security personnel and their job duties than of visitors who are aware of security personnel but do not show them respect.

Visitors Aware of Security Personnel

Both Security Guards and Gallery Guides said that visitors often do not respect security personnel. For example, one Security Guard explained, “A lot of people put security guard[s] at the bottom of the list. In reality when they see you as a guard, they don’t give you fully 100%.” Security personnel did not expound on this idea.

Visitors Unaware of Security Personnel or their Job Duties

Both Security Guards and Gallery Guides said that visitors are unaware of security personnel’s job duties. As previously mentioned, one Security Guard said that visitors do not understand that security personnel do not make the rules nor can they bend
them. Moreover, some visitors do not understand that there are rules that security personnel are to enforce. For example, one Gallery Guide explained,

"It is funny sometimes [visitors] don’t [understand what security personnel do], and we get frustrated that they don’t. I [say to myself], “I am standing right here! Don’t slap that! Don’t you understand that there is certain etiquette?” . . . It requires more energy from us when people don’t understand the understood etiquette.

As an aside, it is noteworthy that this Gallery Guide used the word “etiquette” instead of “rules,” although rules seems to be most applicable given that the Gallery Guide refers to visitors touching works of art. Etiquette implies that there is an unspoken agreement that certain behaviors are required. Possibly, the Gallery Guide’s word choice suggests that the museum rules are not fully disclosed to visitors or as transparent as they could be.

Another issue that one Gallery Guide noticed is that some visitors automatically assume that security personnel cannot answer questions, whether this is because they do not know the answer or are not permitted to answer questions. This Gallery Guide noted that many visitors have asked her “Are you able to answer questions?” Further pondering this query:

And it was interesting to me because I thought about it. I have a mouth. I have ears. I speak English. And she was presuming on average the guard is not able to answer questions. It is presupposing that I may say, “No, I am just standing here.”

This Gallery Guide continued, “I know a lot of the guards find themselves asked certain questions over again so they take it upon themselves to learn information about it.”

Acknowledgement of the Differences between Security Guards and Gallery Guides

From conversations with security personnel, my perception is that it is evident that there is a significant difference between Security Guards and Gallery Guides. But do the visitors know this and see a difference between these two types of security personnel?
Security Guards and Gallery Guides both seem to think that visitors recognize the
differences between the two types of security personnel. But my observations seem to
show that many visitors do not notice the difference. This hypothesis is based on
observations of visitors being surprised when Gallery Guides approach them.

Yet, Gallery Guides note that visitors who interact with Gallery Guides are aware
of the difference between the two types of security personnel. As previously mentioned,
Gallery Guides said that visitors often thank them for their time. In addition, one Gallery
Guide recalled that the museum recently received an e-mail from a visitor who decided to
become a member of the Guggenheim and not renew membership at another museum
because the Guggenheim provides Gallery Guides. While I have no evidence of this
account aside from personal testament, it is encouraging that visitors recognize the
Guggenheim’s efforts to enhance visitor experience by bringing Gallery Guides into the
Museum as another interpretive device.

4.3. Findings from Timing and Tracking Observations

Only the most pertinent statistics are presented in this section. See Appendix F for
supplemental statistics, reported in tables, and a complete list of analyses run.

4.3.1. Background Information

In this section, I describe the conditions under which the 105 observations were
conducted. The conditions are presented in this section and are later tested to determine
whether they bear any statistical significance. For example, time is compared by the
variable station to determine whether the station in which the observations were
conducted affected the time visitors spent in the station.
Station Types

Observations were conducted in four stations: Ramp 5 Upper, Tower 5, High Gallery, and Tower 2. Approximately one-third of observations were conducted in Ramp 5 Upper (30 percent), one-third in High Gallery (28 percent), one-quarter in Tower 2 (22 percent), and one-fifth in Tower 5 (18 percent) (see Table 2).

Table 2. Observations by Station

<table>
<thead>
<tr>
<th>Station</th>
<th>Percent of Observations (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp 5 Upper</td>
<td>31 %</td>
</tr>
<tr>
<td>High Gallery</td>
<td>30 %</td>
</tr>
<tr>
<td>Tower 2</td>
<td>22 %</td>
</tr>
<tr>
<td>Tower 5</td>
<td>18 %</td>
</tr>
</tbody>
</table>

For analysis, stations were also categorized as open—meaning they were stations that bordered the rotunda—or enclosed—meaning they were enclosed, boxlike gallery stations. Ramp 5 Upper and High Gallery are open stations, while Tower 2 and Tower 5 are enclosed stations. Of the 105 observations, 60 percent were conducted in open stations and 40 percent were in enclosed stations (see Table 3).

Table 3. Observations by Station Type

<table>
<thead>
<tr>
<th>Station Type</th>
<th>Percent of Observations (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>60 %</td>
</tr>
<tr>
<td>Enclosed</td>
<td>40 %</td>
</tr>
</tbody>
</table>
Visitor Demographics and Visit Characteristics

Of the 105 observed visitors, approximately one-half (51 percent) were male and one-half (50 percent) were female. More than one-half of observed visitors were 30 years and older (56 percent), while almost one-half of observed visitors were younger than 30 years old (44 percent).

Approximately one-half (51 percent) of visitors were visiting the stations observed alone, while the other one-half (49 percent) visited in groups of two people or more. Approximately one-half (52 percent) of participants wore an Audioguide, while another one-half (49 percent) did not. Again, please note that whether a visitor wore an Audioguide, does not mean that the Audioguide was used.

Security Personnel Demographics and Characteristics

Of the 105 observations, 63 were conducted in stations when a Security Guard was present (60 percent), and 42 were conducted in stations when a Gallery Guide was present (40 percent). For most stations, approximately one-half of observations were conducted when a Security Guard was posted in the station and one-half when a Gallery Guide was posted in the station, with the exception of High Gallery, where 81 percent of observations were conducted when a Security Guard was present. This discrepancy is due to changes in the rotation schedule after the observations began.

Additionally, 79 percent of the observations were conducted when a male Security Guard or Gallery Guide was in the station, and 21 percent of observations were conducted when a female Security Guard or Gallery Guide was in the station. Note that percentages are of observations conducted, and they do not represent the gender ratio of security personnel at the Guggenheim. In addition, gender differences amongst Security
Guards and Gallery Guides are statistically similar, meaning that any differences in percent are due to chance variance; thus, the gender of security personnel does not affect the statistics run.

One-half (52 percent) of observations were conducted when a Security Guard or Gallery Guide between the ages of 22 and 29 years was in the station. The other one-half of observations were conducted when a Security Guard or Gallery Guide 30 years or older was in the station. As with age of security personnel, note that percentages are of observations conducted, and they do not represent the age ratio of security personnel at the Guggenheim.

In addition, during observations, I recorded where a Security Guard or Gallery Guide was standing every 30 seconds that an observed visitor stayed in the station. The majority of security personnel stayed in one place during the entire rotation, and a few moved frequently. Thus, for each observation I came up with five categories to describe where security personnel positioned themselves in the station. The categories are as follows:

1) Doorway/Entrance – personnel stood near the station’s entrance or in a doorway;
2) Works of art – personnel stood along a wall with works of art;
3) Rotunda – personnel stood along the rotunda wall, the half-wall of the ramp (only for observations of Ramp 5 Upper and High Gallery);
4) Middle – personnel stood in the middle of a room, not near walls or entrances;
5) Moves – personnel moved frequently, and one position could not be used to describe the position of the security personnel.
More Security Guards (49 percent) positioned themselves near a doorway or entrance than Gallery Guides (29 percent), and more Gallery Guides (41 percent) positioned themselves near works of art than Security Guards (21 percent). No Security Guards positioned themselves in the middle of a station, while 5 percent of Gallery Guides did. While the position of security personnel is not used in further statistical analysis, it is significant to consider this characteristic difference in the two types of security personnel, especially when considering future research.

**Security Personnel and Contact with Visitors**

I recorded when a Security Guard or Gallery Guide had contact with the observed visitor. Contact includes both occasions when security personnel approach visitors and when visitors approach security personnel. Most Security Guards (97 percent) and Gallery Guides (95 percent) did not have contact with the visitor I was observing (see Table 4, next page). Note that this statistic is confounded by time because visitors spent different amounts of time in the station. Therefore, security personnel had more time to have contact with the observed visitor who spent more time in the station compared to visitors who spent less time. For instance, of the few observed visitors who had contact with security personnel, all remained in the station for more time—time spent between 5 minutes, 14 seconds and 10 minutes, 52 seconds—than both the median and mean total time spent in a station (3 minutes, 36 seconds and 4 minutes, 25 seconds, respectively).
Table 4. Security Personnel and Contact with Observed Visitor (In Percent)

<table>
<thead>
<tr>
<th>SECURITY PERSONNEL HAD CONTACT WITH OBSERVED VISITOR</th>
<th>PERCENT OF OBSERVATIONS BY TYPE OF SECURITY PERSONNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>97 %</td>
</tr>
<tr>
<td></td>
<td>95 %</td>
</tr>
<tr>
<td>Yes</td>
<td>3 %</td>
</tr>
<tr>
<td></td>
<td>5 %</td>
</tr>
</tbody>
</table>

$\chi^2 = .173; df = 1; p = > .05$

I also recorded whether security personnel had contact with any visitor during the observations. More Gallery Guides (57 percent) had contact with visitors than did Security Guards (32 percent); this is statistically significant (see Table 5).

Table 5. Security Personnel and Contact with Any Visitor (In Percent)

<table>
<thead>
<tr>
<th>SECURITY PERSONNEL HAD CONTACT WITH ANY VISITOR</th>
<th>PERCENT OF OBSERVATIONS BY TYPE OF SECURITY PERSONNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>68 %</td>
</tr>
<tr>
<td></td>
<td>43 %</td>
</tr>
<tr>
<td>Yes</td>
<td>32 %</td>
</tr>
<tr>
<td></td>
<td>57 %</td>
</tr>
</tbody>
</table>

$\chi^2 = 6.677; df = 1; p = .01$

4.3.2. Visitors’ Time Spent in the Stations

Visitors’ Total Time in All Stations

Almost one-half of visitors (43 percent) spent between 1 and 4 minutes in the station, and one-quarter (27 percent) spent between 4 and 7 minutes (see Table 6, next page). Another 12 percent spent less than a minute in the station, 12 percent spent
between 7 and 10 minutes, and 7 percent spent 10 minutes or more. The median time spent in the station was 3 minutes and 36 seconds.

Table 6. Visitors’ Total Time in All Stations

<table>
<thead>
<tr>
<th>Time (Minutes)</th>
<th>Percent of Observed Visitors (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1:00</td>
<td>12 %</td>
</tr>
<tr>
<td>1:00 – 3:59</td>
<td>43%</td>
</tr>
<tr>
<td>4:00 – 6:59</td>
<td>27 %</td>
</tr>
<tr>
<td>7:00 – 9:59</td>
<td>12 %</td>
</tr>
<tr>
<td>10:00 or more</td>
<td>7 %</td>
</tr>
</tbody>
</table>

Summary Statistics

<table>
<thead>
<tr>
<th>Minuses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>0:15 – 14:30</td>
</tr>
<tr>
<td>Median Time</td>
<td>3:36</td>
</tr>
<tr>
<td>Mean Time</td>
<td>4:25</td>
</tr>
<tr>
<td>Standard Deviation (±)</td>
<td>±:10</td>
</tr>
</tbody>
</table>

**Time Distribution**

Figure 3 (next page) shows the distribution of visitors’ total time in the gallery. The time distribution has a considerable skew, meaning the bar graphs do not follow the bell curve or normal distribution. This is not unusual; time data is normally skewed because there are normally a concentration of visitors that spend very little time in the station and a concentration of visitors who spend a lot of time in the station (Hein, 1998; Melton, 1935). In the bar graph depicting total time visitors’ spent in a station, however, you see that the bar graphs to the left of the parabola’s peak are taller than those
anywhere else, meaning most visitors spent less time than the mean time spent (4 minutes, 25 seconds). Thus, because the distribution is not normal, medians are a better estimate of central tendency than the mean and will be used in further analysis.

Figure 3. Visitors’ Total Time (Time Distribution)

![Histogram of Visitors' Total Time](image)

**Visitors’ Time Spent by Station and Station Type**

Visitors’ time spent was compared by station type. Visitors’ median time in Tower 2 (median = 5 minutes and 24 seconds) and Tower 5 (median = 6 minutes) was greater than visitors’ time in Ramp 5 Upper (median = 1 minute and 48 seconds) and High Gallery (median = 2 minutes and 48 seconds) (see Table 7, next page). Since both Tower 2 and Tower 5 are enclosed galleries, I further explored how station type (open or enclosed) affects visitors’ total time spent in the station.
Table 7. Time Spent by Station

<table>
<thead>
<tr>
<th>Station</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp 5 Upper (n = 32 Observations)</td>
<td>1:48</td>
<td>2:51</td>
<td>± 2:06</td>
</tr>
<tr>
<td>Tower 5 (n = 19 Observations)</td>
<td>6:00</td>
<td>6:45</td>
<td>± 3:14</td>
</tr>
<tr>
<td>High Gallery (n= 31 Observations)</td>
<td>2:48</td>
<td>3:35</td>
<td>± 2:21</td>
</tr>
<tr>
<td>Tower 2 (n = 23 Observations)</td>
<td>5:24</td>
<td>5:50</td>
<td>± 3:39</td>
</tr>
<tr>
<td>Total (n = 105 Observations)</td>
<td>3:36</td>
<td>4:25</td>
<td>± 3:10</td>
</tr>
</tbody>
</table>

χ² = 23.842; df = 3; p = .000

Comparing stations types as open or enclosed gallery spaces, I found that visitors spent significantly more time in enclosed stations (median time = 5 minutes and 49 seconds) than in open stations (median time = 2 minutes and 27 seconds) (see Table 8).

Table 8. Time Spent by Station Type

<table>
<thead>
<tr>
<th>Station Type</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open (n = 32 Observations)</td>
<td>2:27</td>
<td>3:12</td>
<td>± 2:15</td>
</tr>
<tr>
<td>Enclosed (n = 42 Observations)</td>
<td>5:49</td>
<td>6:15</td>
<td>± 3:28</td>
</tr>
<tr>
<td>Total (n = 105 Observations)</td>
<td>3:36</td>
<td>4:25</td>
<td>± 3:10</td>
</tr>
</tbody>
</table>

χ² = 23.842; df = 3; p = .000
Figure 4 depicts the results of Table 8 in a survival curve. The blue curve represents visitors’ time spent in an open station; the green line represents visitors’ time spent in an enclosed station. Both lines were plotted using the exact amount of time each visitor spent in the station. The two curves slope downward because they calculate the visitors’ “survival.” In a survival curve, time spent in the station is analogous to “life” and the moment a visitor exits the station is analogous to “death.” Every visitor will eventually exit the station so by analogy, everyone will eventually “die.” Survival curves plot how quickly visitors “die off” or exit the station (Hein, 1998; Menninger, 1990).

Figure 4. Survival Curve Showing Time Spent by Station Type

![Survival Curve](image)
Results displayed in Table 8 and Figure 4 indicate that there is a significant difference in the time visitors’ spent in open and enclosed stations. I hypothesize that visitors spent less time in open stations because these stations are on a ramp, whose slanted floors encourage movement. Additionally, open stations border the rotunda, and visitors can see other visitors entering the Museum and moving up the ramp. By contrast, enclosed stations are static, the floor is level, and the only movement the visitor is aware of is that of other visitors in the station.

**Visitors’ Time Spent by Type of Security Personnel**

There was no significant difference between the amount of time visitors spent in a station when a Security Guard was on post (median time = 3 minutes and 49 seconds) as compared to when a Gallery Guide was on post (median time = 3 minutes and 33 seconds) (see Table 9).

<table>
<thead>
<tr>
<th>Security Personnel</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Guard (n = 63 Observations)</td>
<td>3:49</td>
<td>4:36</td>
<td>± 3:20</td>
</tr>
<tr>
<td>Gallery Guide (n = 42 Observations)</td>
<td>3:33</td>
<td>4:09</td>
<td>± 3:54</td>
</tr>
<tr>
<td>Total (n = 105 Observations)</td>
<td>3:36</td>
<td>4:25</td>
<td>± 3:10</td>
</tr>
</tbody>
</table>

χ² = .270; df = 1; p = > .05
Figure 5 also shows the relationship between type of security personnel and time spent. In Figure 5, the blue curve represents visitors’ time spent when a Security Guard was present and the green line represents visitors’ time spent when a Gallery Guide was present. The two survival curves (blue and green line) are similar and close together although visitors spent slightly more time in the station when a Security Guard was present (blue line is to the right or above the green line).

Figure 5. Survival Curve Showing Time Spent by Type of Security Personnel
Visitors’ Time Spent by Gender of Security Personnel

The amount of time visitors spent in a station was compared by the gender of the security personnel. Visitors spent more time in a station when male security personnel were posted in the station (median = 3 minutes and 50 seconds) than when female security personnel were posted in the station (median = 2 minutes and 15 seconds) (see Table 10). While the difference in median time is greater than one minute, the difference is not statistically significant meaning that, overall, the time visitors spent is not affected by the gender of security personnel is present.

Table 10. Time Spent by Gender of Security Personnel

<table>
<thead>
<tr>
<th>Gender of Security Personnel</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3:50</td>
<td>4:45</td>
<td>± 3:18</td>
</tr>
<tr>
<td>(n = 83 Observations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2:15</td>
<td>3:11</td>
<td>± 2:12</td>
</tr>
<tr>
<td>(n = 22 Observations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3:36</td>
<td>4:25</td>
<td>± 3:10</td>
</tr>
<tr>
<td>(n = 105 Observations)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

χ² = 4.321; df = 1; p = > .05
See Figure 6 for the survival curve showing time visitors spent in the station by gender of security personnel. The gender of the security personnel, either male (blue line) or female (green line), did not affect the amount of time a visitor spent in a station (blue line and green line are similar and close together).

Figure 6. Survival Curve Showing Time Spent by Gender of Security Personnel

Gender of Security Personnel
- Male
- Female

Proportion of the Population
Time in Seconds that Visitors Spent in Station
Visitors’ Time Spent by Age of Security Personnel

Visitors’ time spent was compared by the age of the security personnel posted in the station. Visitors spent more time in the station when the security personnel posted in the station was older than 40 years (median time = 5 minutes and 17 seconds) versus when the security personnel posted in the station was under 40 years (median time = 3 minutes and 15 seconds) (see Table 11). While the difference in time is about two minutes, this difference is not a statistically significant difference, meaning that the age of the security personnel on post does not affect the time visitors’ spent in a station.

Table 11. Time Spent by Age of Security Personnel

<table>
<thead>
<tr>
<th>Age of Security Personnel</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 40 (n = 67 Observations)</td>
<td>3:15</td>
<td>4:06</td>
<td>± 2:59</td>
</tr>
<tr>
<td>40+ (n = 42 Observations)</td>
<td>5:17</td>
<td>5:00</td>
<td>± 3:24</td>
</tr>
<tr>
<td>Total (n = 105 Observations)</td>
<td>3:36</td>
<td>4:25</td>
<td>± 3:10</td>
</tr>
</tbody>
</table>

$\chi^2 = 1.622; df = 1; p = > .05$
Figure 7 also depicts the effects of age on time spent. While visitors spent more time in the station when a security personnel 40 years of age and older was on post, there was not a statistically significant relationship between the time visitors spent in the station and the age of the security personnel (the blue and green line are close together).

Figure 7. Survival Curve Showing Time Spent by Age of Security Personnel
Visitors’ Time Spent by Audioguide Use

The amount of time visitors spent was also compared by whether the visitor was wearing an Audioguide headset. As might be expected, visitors spent more time in the station when they had an Audioguide (median time = 5 minutes and 20 seconds) than when they did not (median time = 2 minutes and 43 seconds) (see Table 12).

Table 12. Time Spent by Audioguide Use

<table>
<thead>
<tr>
<th>Audioguide</th>
<th>Median Time</th>
<th>Mean Time</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (n = 53 Observations)</td>
<td>2:43</td>
<td>3:39</td>
<td>± 2:51</td>
</tr>
<tr>
<td>Yes (n = 50 Observations)</td>
<td>5:20</td>
<td>5:15</td>
<td>± 3:19</td>
</tr>
<tr>
<td>Total (n = 103 Observations)</td>
<td>3:36</td>
<td>4:26</td>
<td>± 3:10</td>
</tr>
</tbody>
</table>

$\chi^2 = 6.454; df = 1; p = .011$
Figure 8 depicts the amount of time visitors spent in the station by whether the visitor wore an Audioguide (green line) or did not wear an Audioguide (blue line). The two curves are (green and blue) are not close together, showing that there is a difference in time spent by whether visitors wore an Audioguide.

Figure 8. Survival Curve Showing Time Spent by Audioguide Use
4.4. Free-form Observations

In conducting free-form observations, I observed three stations for twenty minutes, once when a Security Guard was on post and once when a Gallery Guide was on post. The number of visitors to pass through the station was counted as was the number of visitors with whom the security personnel on duty had contact.

Overall, the Security Guards had more contact with visitors than the Gallery Guides. Security Guards had contact with 5 percent of visitors, while Gallery Guides had contact with 3 percent of visitors (see Table 13 and Table 14, next page).

Both types of security personnel had more encounters with visitors in open stations (Ramp 3 and Ramp 6) than in enclosed stations (Monitor 4). In timing and tracking observations, I observed that visitors spent significantly more time in enclosed stations than open stations. Thus, it seems while visitors have more contact with security personnel in open stations they spend less time in these stations.

Table 13. Security Guards’ Contacts with Visitors

<table>
<thead>
<tr>
<th>Station</th>
<th>Number of Visitors in Station</th>
<th>Number of Visitors in Contact with Security Guard</th>
<th>Percentage of Visitors Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp 3</td>
<td>81</td>
<td>3</td>
<td>4 %</td>
</tr>
<tr>
<td>Monitor 4</td>
<td>132</td>
<td>1</td>
<td>1 %</td>
</tr>
<tr>
<td>Ramp 6</td>
<td>84</td>
<td>9</td>
<td>11 %</td>
</tr>
<tr>
<td>All Stations</td>
<td>297</td>
<td>13</td>
<td>5 %</td>
</tr>
</tbody>
</table>
### Table 14. Gallery Guides’ Contacts with Visitors

<table>
<thead>
<tr>
<th>Station</th>
<th>Number of Visitors in Station</th>
<th>Number of Visitors in Contact with Gallery Guide</th>
<th>Percent of Visitors Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp 3</td>
<td>76</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Monitor 4</td>
<td>82</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Ramp 6</td>
<td>88</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>All Stations</td>
<td>246</td>
<td>7</td>
<td>3%</td>
</tr>
</tbody>
</table>

In considering why security personnel are having more contact with visitors in open stations, it is important to understand what type of contact is happening, meaning does the contact involve conversations about art, security issues, etc. As noted in interviews with security personnel, visitors seem to have negative experiences when contact is about security issues and positive experiences when contact is about art.

During observations, I made free-hand descriptions of the type of encounter. During analysis, I coded these encounters into four categories: art, photography, Audioguide, and unknown.

1. **Art** – Security personnel spoke with visitors about the art on display;
2. **Photography** – Security personnel asked visitors not to take photographs;
3. **Audioguide** – Security personnel helped visitors with Audioguide troubles; and,
4. **Unknown** – I did not hear enough of the encounter to describe it.
Of the encounters with security personnel, most were about art, and most of these encounters were with Gallery Guides (see Table 15). Other encounters regarded photography in the museum (which is prohibited) and Audioguide usage. I was not able to overhear one conversation, thus it is classified as unknown.

Table 15. Types of Encounters with Security Personnel

<table>
<thead>
<tr>
<th>Type of Encounter</th>
<th>Encounter with Security Guard</th>
<th>Encounter with Gallery Guide</th>
<th>Total Number of Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Photography</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Audioguide</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

While there is not enough data to run statistics, based on personal reflections written during data collection, I can hypothesize as to why security personnel have more contact with visitors in open stations than in enclosed stations although visitors spent less time in these stations.

Hypothesis 1: As I found, in open stations, visitors are moving more quickly than in enclosed stations. Possibly, since visitors are spending less time in open stations and are inclined to move while there, Gallery Guides are having more difficulty engaging visitors in conversations about art because (a) it is difficult to get visitors who are moving quickly through a station to stop and talk about art and (b) when visitors move quickly through a station, they are taking less time to observe art and/or observe and approach the art.
Gallery Guides. Therefore, Gallery Guides are making more attempts to engage visitors in conversations than in other stations.

Hypothesis 2: In open stations, visitors are more inclined to break a museum rule. For example, more visitors tried to take photographs in open stations given the architecture of the rotunda than in enclosed stations. Thus, both Security Guards and Gallery Guides had to ask visitors not to take photographs.

Hypothesis 3: The exhibition in the open stations observed offered Audioguide opportunities, while the enclosed station observed did not. Therefore, visitors were approaching security personnel with questions about the Audioguide in open stations.
CHAPTER 5

LIMITATIONS, DISCUSSION, AND SUGGESTIONS FOR FUTURE RESEARCH

5.1. Limitations

Before discussing the findings of the study, it is important to recognize the limitations of the study. First and foremost, this study focused on time as the measure of visitor experience, a measure traditionally used by museum researchers and evaluators (Burcaw, 1997; Hein, 1998). While a traditional measure, it does have its limitations. Specifically, time data presents one observable aspect of what happened, but not the subjective experience or why it happened (Borun & Korn, 1999; Diamond, 1999). Therefore, I can make conjectures based on my observations and on some conversations overheard in the galleries, but visitors’ accounts are needed to further surmise why visitors’ time spent in stations with Security Guards and Gallery Guides does not differ.

Additionally, while I believe my sample size is adequate, I would be interested to conduct this study again, collecting more data in order to investigate additional relationships. For example, I am interested in whether the way security personnel positioned themselves in the gallery affected visitor experience (e.g., security personnel stood against a wall versus in the middle of the room); however, in my study, I did not have enough data to look for the statistical significance of this variable.

5.2. Discussion

Going into this research, my assumption was that visitors would spend more time in a station when a Gallery Guide was present as compared to when a Security Guard was present. This was based upon my experiences visiting museums and my experience in a
security role, discussed in Chapter 1. In addition, given the educational role of Gallery Guides, I believed that visitors would spend time speaking with Gallery Guides.

Contrary to my hypothesis, however, I found that the amount of time visitors spent in a station did not differ by whether a Security Guard or Gallery Guide was posted in the station. Furthermore, the age and gender of the security personnel posted in the station also did not affect the visitors’ time spent. These findings have perplexed me. Yet, finding that type of security personnel does not affect visitors’ time spent seems to indicate two possibilities regarding the effect of security personnel on visitor experience: (1) Security Guards and Gallery Guides have the same effect on visitors or (2) Security Guards and Gallery Guides do not have an effect on visitors. But, what does this mean? What are the implications?

5.2.1. Possibility 1: Security Guards and Gallery Guides Have the Same Effect on Visitors

Given that there was no statistically significant difference in time spent, one hypothesis is that Security Guards and Gallery Guides have the same effect on visitors. This suggestion makes me consider whether visitors see a difference between Security Guards and Gallery Guides. While their uniforms, age, some responsibilities and, to great extent, the way in which they interact with visitors differs, Security Guards and Gallery Guides may still appear similar to visitors. For example, the frequency which Security Guards and Gallery Guides have contact with visitors is similar, while the content of these conversations often, but doesn’t always differ.

Consider then, would a visitor decipher these minute details, noticing that this security personnel is sometimes talking with visitors about art while that security
personnel is most often asking visitors not to touch the works of art? Also consider, are Security Guards and Gallery Guides performing as they have been instructed, meaning, are they practicing as they have been trained.

Moreover, in essence, Security Guards and Gallery Guides are both museum authorities stationed in the galleries regardless of the nuances of the positions. This baseline description—Security Guards and Gallery Guides as authorities—may be all that visitors decipher. I again reflect on Fred Wilson’s depiction of security. Wilson depicts the body of the uniformed guard—what I interpret as the presence of the guard—but does not depict the face—details only deciphered through more thorough observation (Berger, 2001). Considering this in relation to the question of whether visitors distinguish between Security Guards and Gallery Guides, I propose that the visitors acknowledge the presence of security personnel but not the distinction between Security Guards and Gallery Guides.

So if in fact visitors do not distinguish the differences between Security Guards and Gallery Guides, should I be surprised? Furthermore, should museum professionals expect visitors to understand the differences between Security Guards and Gallery Guides? A question for another investigation perhaps.

5.2.2. Possibility 2: Security Guards and Gallery Guides Have No Effect on Visitors

Alternatively, given that there was no statistically significant difference in time spent, another hypothesis is that neither Security Guards nor Gallery Guides have an effect on visitor experience. To me, this hypothesis seems unfathomable for several reasons: (1) personal experiences at art museums, (2) research and attention from museum practitioners and artists, and (3) visitors’ accounts of experiences with security guards. While I have discussed some of these things in previous chapters, I would like to
expound further on these topics, drawing from experiences I have had since writing the earlier chapters.

**Personal Experiences at Art Museums**

My personal experiences as a security guard and as a museum visitor spurred my interest in this topic. It is also something that continues to drive my interest in this topic. With every museum visit, I continue to witness ways in which security have positive and negative effects on visitors. For example, at a New York museum, I witnessed a guard escorting a visitor to the coatroom, demanding that the young woman check her bag. The young women protested—pleading that she be able to keep her bag claiming that she would be careful and was reluctant to leave her passport or wallet in the coatroom. To my embarrassment and dismay, the security guard responded “Well, you don’t really need all that stuff anyway.”

But, for every “negative” encounter, I come across a positive encounter. While in Dallas, for example, I spoke with a guard who noticed a woman standing and drawing in the galleries. There were no benches in the gallery so he wanted to offer the woman a temporary stool to use as she had been drawing for nearly 30 minutes and he wanted her to enjoy her visit. As he was not able to leave his post nor did he know where to retrieve a temporary stool, he asked a coworker whether they could retrieve a stool for the visitor.

**Research and Attention from Museum Practitioners and Artists**

Over the last year, I have been increasingly attuned to references to security guards whether it be in a newspaper article or a podcast, or from museum practitioners themselves. While I will not share all references, I will describe a couple encounters which most resonate with me.
First, in a *Seattle Post-Intelligencer* article, the journalist describes the Seattle Museum of Art’s efforts to attract young adults, 18 to 34 years of age (Hackett, 2008). The author discusses current barriers to attracting young visitors, noting the museum’s strict rules and regulations. In doing so, the author describes the encounter of a young woman and a guard:

Last year at Seattle Asian Art Museum, I saw a woman in her early 20s snap a photo of a wood-carved Buddha on her cell phone. A guard rushed over to chastise her for breaking the museum’s rules. He forced her to delete the picture while he stood over her to check. His voice was loud, and her posture was one of humiliation. I can’t be sure, but I’m willing to wager she has not become a museum regular (Hackett, 2008, p. 2).

Secondly, I would like to note that while research, per se, on relations between security guards and visitors does not exist, museum practitioners are actively addressing the issue, and artists seem to be leading the way, challenging paradigms and exploring this issue. For example, John Baldessari incorporated security guards into his installation of a Magritte exhibition at the Los Angeles County Museum of Art. Baldessari requested that the guards be dressed in a suit and bowler hat to resemble the man in Magritte’s 1964 painting, *The Son of Man*, making guards part of the installation (see Figure 9) (Baldessari & Barron, 2006). According to Baldessari and curator Stephanie Barron, security guards took pride in their role in the installation.

Figure 9. Los Angeles County Museum of Art Security Guards (Baldessari & Barron, 2006).
Additionally, I recently was introduced to Tania Bruguera’s *Tatlin’s Whisper #5*, a performance piece installed at the Tate Modern on January 26 and 27, 2008 (Bruguera, 2008). In the performance, two mounted police in uniform directed crowds gathering on the first floor of the Tate (see Figure 10). The work is about power relations and control. In the artist’s words,

> People do not have to know that it is art. And for me this is very important because once you know it is art, you can do other associations that are not exactly what you would do in everyday life. So the fact that they are using…and having the same reaction they have in real life when they see police controlling them. (Bruguera, 2008)

This piece was specifically intriguing in that this investigation of control and authority was being explored in a museum installation, while these same, very real feelings may be evoked elsewhere in the Museum through encounters with security.

Figure 10. A Still from the TateShots Podcast of Tania Bruguera’s *Tatlin’s Whisper #5*, (Bruguera, 2008).
Visitors’ Accounts of Experiences with Security Guards

My belief that the effect of security guards on visitors warrants more attention has been further propelled by visitors’ personal accounts of museum security personnel. For example, since beginning my research I have begun working for Randi Korn & Associates, Inc., where I have had the opportunity to interview museum visitors (or read interview transcripts from visitor interviews) as part of evaluations for art museums nationwide. I was struck that in every sample, at least one interviewee mentioned security guards, although the topic was never prompted (see the quotations below from various interviews):

[What do you remember most about your experience at the teacher’s seminar?] Well first let me address the issue of the staff. I think that sometimes as teachers we feel tremendously undervalued, and I felt the highlight of coming every day, was how genuinely pleased the staff—and when I say the staff, I mean from the very top all the way through to just the security personnel who checked us in every day—seemed so glad to see us. They were very welcoming. I felt like they went more than the distance, in their effort to accommodate us.

[So has this environment affected the way that you’ve been experiencing the art?] I think so, especially when we went into the room, and the security guard was sharing like different unique things about the room. I thought that was really amazing and it was really nice to have kind of an insider’s view to the museum that I would get normally.

A security guard yelled at us for having our little stools up on the third floor. So there was some yelling.

[What do you like least about the exhibition?] I know that the [security guards] are doing their jobs, but the lady staring. . . doing their jobs though.

To me, these top-of-mind, unprompted responses affirm that relations between security and art museum visitors is a pertinent topic that requires more attention and research.
5.3. Suggestions for Future Research

With this research complete, I am left with many more questions about the effect of security guards in art museum visitors, which are as follows:

1) How aware are visitors of security personnel?

2) What are visitors’ attitudes toward security personnel? How have these attitudes been shaped?

3) What are the psychological effects of security personnel on visitor experience? If so, do these effects alter visitors’ experiences at the museum? And, to what extent?

4) Are effects of Security Guards the same at other at museums?

To investigate some of these questions, I recommend interviewing art museum visitors about their affective experiences and attitudes toward security personnel. From visitors’ first-hand accounts, trends and patterns in the data can be identified. Within the constraints of available resources, it would be most useful to survey visitors at multiple museums to understand whether visitors are having similar experiences with security in a variety of art museums. Depending on the findings, these data could be used to develop a questionnaire with which a large sample of visitors could be surveyed expediently and trends could be identified.

Additionally, if further research were conducted at the Guggenheim, some questions to consider are:

1) How aware are visitors of security personnel at the Guggenheim?

2) Do visitors notice a difference between Security Guards and Gallery Guides?
3) What are the psychological effects of security personnel on visitor experience? If so, do the effects alter visitors’ experiences at the museum? And, to what extent? Do Security Guards and Gallery Guides have different effects on visitors?

4) Are Security Guards and Gallery Guides performing as they have been trained?

5) How, if at all, does interaction with Security Guards and Gallery Guides impact visitors’ experiences?

To investigate these questions, I also recommend interviewing a random selection of visitors about their experiences with security personnel during their museum visit, which include whether visitors were aware of the presence of security, what their attitudes are toward the presence of security at the Guggenheim as compared to other museums, as well as whether visitors acknowledge the difference between Security Guards and Gallery Guides. Additionally, the Guggenheim may want to interview only those visitors who had contact with Security Guards and Gallery Guides, focusing primarily on the impact of the interaction with security personnel on the visitors’ experiences.
REFERENCES


*Museum News*. 61(4), 51-57


APPENDIX A: Timing and Tracking Form

Date:

Enter: 

Exit: 

Circle: Individual or Group of 2 3 4 5 other_______

Description of individual or group:

Description of behavior and/or conversation:
APPENDIX B: Map of the Solomon R. Guggenheim Museum with Stations Labeled
APPENDIX C: Informed Consent Form for Gallery Guide Training Session Participants

Informed Consent Form for Social Science Research
The Pennsylvania State University

Title of Project: The Effects of Security Guards and Gallery Guides on Visitor Experience at the Solomon R. Guggenheim Museum

Principal Investigator: Amanda Krantz, Graduate Student
207 Arts Cottage
University Park, PA 16802
(443) 655-2377, ajk291@psu.edu

Advisor: Dr. David Buzi
212 Arts Cottage
University Park, PA 16802
(814) 863-1004, dbuzi@psu.edu

1. Purpose of the Study: The purpose of this research study is to explore how Security Guards and Gallery Guides affect visitor experience at the Solomon R. Guggenheim Museum in New York City. The larger goal of this case study is to understand the effects of security personnel on visitor experience at various museums.

2. Procedures to be followed: You will be asked to participate in the Gallery Guide training sessions as normal. Amanda Krantz will be observing the training sessions and taking handwritten notes. The session will not be audio or video recorded.

3. Discomforts and Risks: There are no risks in participating in this research beyond those experienced in everyday life.

Benefits: This research might provide a better understanding of the relationship between security personnel and visitors. This information can be used to create a better environment for visitors and staff at the museum.

4. Duration: The observation will last the duration of the Gallery Guide training session.

5. Statement of Confidentiality: Your participation in this research is confidential. The data will be stored and secured on Amanda Krantz’s computer in a password-protected file. Penn State’s Office for Research Protections, the Social Science Institutional Review Board, and the Office for Human Research Protections in the Department of Health and Human Services may review records related to this research study. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared.

Page 1 of 2
6. **Right to Ask Questions:** Please contact Amanda Krantz at (443) 655-2377 with questions, complaints or concerns about this research. You can also call this number if you feel this study has harmed you. Questions about your rights as a research participant may be directed to Penn State University’s Office for Research Protections at (814) 865-1775.

7. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

You must be 18 years of age or older to take part in this research study.

If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.

You will be given a copy of this consent form for your records.

Participant Signature ____________________________________________________________________

Date ________________________________________________________________________________

Person Obtaining Consent __________________________________________________________________

Date ________________________________________________________________________________

Page 2 of 2
APPENDIX D: Interview Guide for Security Personnel

1) How do you interact with visitors?

2) What questions are you frequently asked by visitors?

3) Can you think of a specific example of an interaction that you had with a visitor that may have resulted in a *positive* visitor experience? Can you tell me about it?

4) Can you think of a specific example of an interaction that you had with a visitor that may have resulted in a *negative* visitor experience? Can you tell me about it?

5) Do you think that your physical presence, not including interaction, affects visitors? How?

6) Do you think visitors have certain attitudes toward you [Gallery Guide or Security Guard]?

7) Is there anything else you would like to say about your relationship to visitors?
APPENDIX E: Informed Consent Form for Security Personnel Interview Participants

Title of Project: The Effects of Security Guards and Gallery Guides on Visitor Experience at the Solomon R. Guggenheim Museum.

Principal Investigator: Amanda Kratz, Graduate Student
307 Arts Cottage
University Park, PA 16802
(412) 655-2377, ajk231@psu.edu

Advisor: Dr. David Ebitz
212 Arts Cottage
University Park, PA 16802
(814) 863-1001, dme10@psu.edu

1. Purpose of the Study: The purpose of this study is to explore how Security Guards and Gallery Guides affect visitor experience at the Solomon R. Guggenheim Museum in New York City. The larger goal of this study is to achieve an understanding of how security personnel affect visitor experience at various museums.

   Procedures to be followed: You will be asked to answer approximately 8 interview questions. Given your permission, the interview will be recorded using an audio recorder. Audio files will be kept on Amanda Kratz’s computer in a password protected file. Your decision to audio record the interview is voluntary. You can choose to participate in the interview without it being recorded.

   You may also be asked to be photographed. Photographs will be used to document the uniform of Security Guards and Gallery Guides. The photographs will be cropped to show only the uniform. No facial features will be visible. Photographs will be kept on Amanda Kratz’s computer in a password protected file. Your decision to be photographed is also voluntary.

   Amanda Kratz, Dr. David Ebitz, Penn State’s Office for Research Protections, the Social Science Institutional Review Board and the Office for Human Research Protections in the Department of Health and Human Services may access the audio recordings and photographs. Three years after completing the study, the audio recordings and photographs will be destroyed.

2. Discomforts and Risks: There are no risks in participating in this research beyond those experienced in everyday life.

3. Benefits: By participating in this study, you may gain awareness about your position at the Solomon R. Guggenheim Museum. This may improve your performance at work.

   In addition, this research might provide a better understanding of the relationship between security personnel and visitors. This information can be used to create a better environment for visitors and staff at the museum.

4. Duration: There will be only one interview, which will take no longer than 45 minutes.
5. **Statement of Confidentiality:** Your participation in this research is confidential. The data will be stored and secured on Amanda Krantz’s computer in a password protected file. Penn State’s Office for Research Protections, the Social Science Institutional Review Board and the Office of Human Research Protections in the Department of Health and Human Services may review records related to this research study. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared.

6. **Right to Ask Questions:** Please contact Amanda Krantz at (443) 655-2377 with questions, complaints or concerns about this research. You can also call this number if you feel this study has harmed you. Questions about your rights as a research participant may be directed to Penn State University’s Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.

7. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

You must be 18 years of age or older to take part in this research study.

If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.

You will be given a copy of this consent form for your records.

_________________________________________________________________________________

Participant Signature __________________________________________________________________
Date _______________________________________________________________________

_________________________________________________________________________________

Person Obtaining Consent __________________________________________________________________
Date _______________________________________________________________________

Page 2 of 2
APPENDIX F: Supplementary Tables

Station Conditions

Table 16. Level of Crowding by Station

<table>
<thead>
<tr>
<th>LEVEL OF CROWDING</th>
<th>STATION</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ramp 5 Upper (n = 32</td>
<td>Tower 5</td>
<td>High Gallery</td>
<td>Tower 2</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Observations)</td>
<td>(n = 19</td>
<td>(n = 29</td>
<td>(n = 23</td>
<td>(n = 103</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observations)</td>
<td>Observations)</td>
<td>Observations)</td>
<td>Observations)</td>
</tr>
<tr>
<td>Low to Moderate</td>
<td>22 %</td>
<td>32 %</td>
<td>79 %</td>
<td>91 %</td>
<td>55 %</td>
</tr>
<tr>
<td>High</td>
<td>78 %</td>
<td>68 %</td>
<td>21 %</td>
<td>9 %</td>
<td>45 %</td>
</tr>
</tbody>
</table>

$\chi^2 = 37.619; df = 3; p = .000$

Table 17. Level of Crowding by Station Type (Open or Enclosed)

<table>
<thead>
<tr>
<th>LEVEL OF CROWDING</th>
<th>STATION TYPE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open (n = 61</td>
<td>Enclosed</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observations)</td>
<td>(n = 42</td>
<td>(n = 103</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observations)</td>
<td>Observations)</td>
<td></td>
</tr>
<tr>
<td>Low to Moderate</td>
<td>49 %</td>
<td>64 %</td>
<td>55 %</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>51 %</td>
<td>36 %</td>
<td>45 %</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 2.296; df = 1; p > .05$

Visitor Demographics and Visit Characteristics

Table 18. Gender of Observed Visitors

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percent of Visitors (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51 %</td>
</tr>
<tr>
<td>Female</td>
<td>50 %</td>
</tr>
</tbody>
</table>
Table 19. Age of Visitors

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent of Visitors (n=84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 22 years</td>
<td>7 %</td>
</tr>
<tr>
<td>23 – 29 years</td>
<td>37 %</td>
</tr>
<tr>
<td>30 – 39 years</td>
<td>16 %</td>
</tr>
<tr>
<td>40 – 49 years</td>
<td>18 %</td>
</tr>
<tr>
<td>50 – 59 years</td>
<td>18 %</td>
</tr>
<tr>
<td>60 – 69 years</td>
<td>4 %</td>
</tr>
<tr>
<td>70 + years</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Table 20. Visitors’ Group Size

<table>
<thead>
<tr>
<th>Group Size</th>
<th>Percent of Visitors (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>51 %</td>
</tr>
<tr>
<td>2</td>
<td>43 %</td>
</tr>
<tr>
<td>3</td>
<td>5 %</td>
</tr>
<tr>
<td>4</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Table 21. Visitors with Audioguides

<table>
<thead>
<tr>
<th>Audioguide</th>
<th>Percent of Visitors (n=103)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>52 %</td>
</tr>
<tr>
<td>Yes</td>
<td>49 %</td>
</tr>
</tbody>
</table>
### Security Personnel Demographics and Characteristics

#### Table 22. Position of Security Personnel in Station

<table>
<thead>
<tr>
<th>POSITION OF SECURITY PERSONNEL</th>
<th>TYPE OF SECURITY PERSONNEL</th>
<th>Percent of Security Guard Observations (n=63)</th>
<th>Percent of Gallery Guide Observations (n=42)</th>
<th>Percent of All Security Personnel (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doorway/Entrance</td>
<td></td>
<td>49 %</td>
<td>29 %</td>
<td>41 %</td>
</tr>
<tr>
<td>Works of Art</td>
<td></td>
<td>21 %</td>
<td>41 %</td>
<td>29 %</td>
</tr>
<tr>
<td>Moves</td>
<td></td>
<td>22 %</td>
<td>24 %</td>
<td>23 %</td>
</tr>
<tr>
<td>Rotunda</td>
<td></td>
<td>8 %</td>
<td>2 %</td>
<td>6 %</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td>0 %</td>
<td>5 %</td>
<td>2 %</td>
</tr>
</tbody>
</table>

#### Table 23. Observations Conducted by Type of Security Personnel

<table>
<thead>
<tr>
<th>Type of Security Personnel</th>
<th>Percent of Observations (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Guard</td>
<td>60 %</td>
</tr>
<tr>
<td>Gallery Guide</td>
<td>40 %</td>
</tr>
</tbody>
</table>

#### Table 24. Type of Security Personnel by Station

<table>
<thead>
<tr>
<th>TYPE OF SECURITY PERSONNEL</th>
<th>STATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ramp 5 (n = 32 Observations)</td>
</tr>
<tr>
<td>Security Guard</td>
<td>47 %</td>
</tr>
<tr>
<td>Gallery Guide</td>
<td>53 %</td>
</tr>
</tbody>
</table>

$\chi^2 = 8.348; df = 3; p = .039$
Table 25. Type of Security Personnel by Station Type

<table>
<thead>
<tr>
<th>TYPE OF SECURITY PERSONNEL</th>
<th>STATION TYPE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open (n = 61 Observations)</td>
<td>Enclosed (n = 42 Observations)</td>
<td>Total (n = 103 Observations)</td>
<td></td>
</tr>
<tr>
<td>Security Guard</td>
<td>64 %</td>
<td>55 %</td>
<td>60 %</td>
<td></td>
</tr>
<tr>
<td>Gallery Guide</td>
<td>37 %</td>
<td>45 %</td>
<td>40 %</td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 = .800; df = 1; p > .05 \)

Table 26. Level of Crowding by Type of Security Personnel

<table>
<thead>
<tr>
<th>LEVEL OF CROWDING</th>
<th>TYPE OF SECURITY PERSONNEL</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Security Guard (n = 61 Observations)</td>
<td>Gallery Guide (n = 42 Observations)</td>
<td>Total (n = 103 Observations)</td>
<td></td>
</tr>
<tr>
<td>Low to Moderate</td>
<td>57 %</td>
<td>52 %</td>
<td>55 %</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>43 %</td>
<td>48 %</td>
<td>45 %</td>
<td></td>
</tr>
</tbody>
</table>

\( \chi^2 = .251; df = 1; p > .05 \)

Table 27. Observations Conducted by Gender of Security Personnel

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>75</td>
<td>86</td>
<td>79 %</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>14</td>
<td>21 %</td>
</tr>
</tbody>
</table>

\( \chi^2 = 1.878; df = 1; p = > .05 \)
Table 28. Observations Conducted by Age of Security Personnel

<table>
<thead>
<tr>
<th>AGE OF SECURITY PERSONNEL</th>
<th>TYPE OF SECURITY PERSONNEL</th>
<th>Percent of Security Guard Observations (n=63)</th>
<th>Percent of Gallery Guide Observations (n=42)</th>
<th>Percent of Total Observations (n=105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 – 29 years</td>
<td></td>
<td>21 %</td>
<td>100 %</td>
<td>52 %</td>
</tr>
<tr>
<td>30 – 39 years</td>
<td></td>
<td>19 %</td>
<td>0 %</td>
<td>11 %</td>
</tr>
<tr>
<td>40 – 49 years</td>
<td></td>
<td>22 %</td>
<td>0 %</td>
<td>13 %</td>
</tr>
<tr>
<td>50 – 59 years</td>
<td></td>
<td>38 %</td>
<td>0 %</td>
<td>23 %</td>
</tr>
</tbody>
</table>

$\chi^2 = 63.636; d.f. = 3; p = .000$