

**Differential Concerns: Perceived Benefits and Barriers to Visitation from the Mental Models of Museum
Visitors and Non-Visitors.**

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A thesis
Submitted in partial fulfillment of the
Requirements for the degree of

Master of Arts

University of Washington

2017

Committee:

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Program Authorized to Offer Degree

Museology

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Abstract

Differential Concerns: Perceived Benefits and Barriers to Visitation from the Mental Models of Museum Visitors and Non-Visitors.

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Some people don't like going to museums. Other people love going to museums but rarely go. Understanding what keeps these *Non-Visitors* and *Occasional Visitors* from being *Frequent Visitors* is a complicated issue. Any single museum visit is the product of the perceived benefits of the visit outweighing the perceived barriers standing in the way of that visitation. In order to understand the perceived benefits of, and barriers to museum visitation for various museum visitor groups this study looks at how the mental models of museum held by these visitor groups differ. The mental models were elicited through three modified Twenty Statement Tests and analyzed according emergent coding. Barriers and motivations were found within the mental model of each visitor group which differentiated them from the other groups.

It was found that *Frequent Visitors* emphasize the benefits a museum provides their community, as well as using strong spiritual language to describe museums. *Occasional Visitors* show a complex mental model which associates many of the same benefits to visitorship as expressed by *Frequent Visitors* while at the same time expressing a large variety of barriers. Social relationships in particular are complex for *Occasional Visitors* and are expressed as both a motivation for, and a barrier to visitation. *Non-Visitors* strongly associate museums with being boring and less than they wanted. A fourth visitor type emerged from the study that was unsure if they liked museums. This group strongly associates the risk of not having their needs fulfilled with need for the right group of people to be with them at museums. If museums want to create more *Frequent Visitors* it is important to address these perceived barriers and either creates new experiences that meet the needs of these visitors, or combat false perceptions that do not fit with their institution.

Introduction

Despite the wishes of museum professionals, not everyone enjoys going to museums. Possibly even worse is that many people who like going rarely do. Ideally museums would be able to create experiences that attract everyone and bring them in often. But simply asking people why they do not visit museums carries the risk of respondents simply rationalizing their behavior (Prentice, Davies, & Beeho, 1997). This study looks to compare the mental models of frequent museum visitors with those of occasional museums visitors and *Non-Visitors* as a way to better understand why people do or do not go to museums.

Research into the motivations of why people go to museums is well established. John Falk's Visitor Identities has enabled museums to determine what people seek within their walls, and why visitors choose to visit a particular museum in the first place (J. H. Falk & Storksdieck, 2010). This research showed that motivations for visitation can differ even between visits to the same museum for any given person.

Before Falk's research Marilyn Hood looked at what leisure time motivations brought people to museums and what kept them away (Hood, 1989). According to Hood: "People choose to come to museums, to find experiences that reward their investment of time, effort, attention, and sometimes money. And they choose not to come if they find the rewards don't meet their expectations or are less than they can attain in alternative offerings." Hood found that occasional visitor had different leisure goals than frequent visitors, and that the museum experiences did not align with the dominate leisure goals of occasional visitors.

But studying visitors can only take museums so far. Reaching out to people who do not normally go to museums or who don't like museums may help/be useful to truly grow and reach a greater segment of the communities museums are trying to serve.

A great deal of the literature on museum non-visitors focuses on the demographics and socioeconomic profiles of those who do or do not go to museums (Prentice et al., 1997). These studies paint pictures of age, education

level, skin color, family situations and other labels that divide people into categories. But, demographics do not tell us why people do or do not choose to visit museums (Hood, 1989). Studies that do look at the why tend to focus on consumer motivations and value from consumption based models (Prentice et al., 1997). These models often combine a person's desire to perform or not perform an action against the ease and social pressures to perform or not perform that action. But even these studies have a tendency to infer lack of motivation regarding museum visitation for non-visitors based on the motivations of museum visitors (Prentice et al., 1997). Davies and Prentice (1995) argue that inferences from visitors regarding the behaviors of non-visitors are useless until we understand the attitudes toward museums, and the constraints on visitation non-visitors face. But simply asking people why they do not visit museums carries the risk of respondents simply rationalizing their behavior (Prentice et al., 1997).

Theory of Action (Argyris & Schon, 1974) describes how people will respond to questions based on an espoused theory but then act based on a different set of mental constructs. This idea, which they refer to as 'theory in use', is similar to the rationalizations that Prentice et al. (1997) warns of, but goes further to explain that the answers someone gives to a direct question are not necessarily tied to the decisions made about that subject. To determine why non museum visitors do not consider museums a viable expense of time and money, then we need to get at their theory-in-use. Jones, Ross, Lynam, Perez, & Leitch (2011) was the first to make the link between Theories of Action and Mental Models. Mental Models can be described as a cognitive structure made of accumulated perceptions, which are then used to make decisions. Mental Models have a long history dating back to Craik (1943) and have been taken up in many professional realms, including resource management and human resources management, to identify and counter misconceptions and elucidate people's decision making apparatus.

The purpose of this study is to use Mental Models of museums as a framework to compare barriers and motivations of various museum visitor groups. In this study participants will be divided into three groups:

people who frequent museums, people who say they like museums but don't go very often, and people who don't like museums. Each group will be presented with the same set of modified Twenty Statement Tests to draw out their Mental Models. This indirect elicitation technique is based on the work of Kuhn & McPartland (1954) and has the advantage of avoiding the rationalizations that more direct lines of questioning could elicit and may allow for more latent motivations and barriers to be expressed.

Research questions:

1. What motivations and barriers exist in people's' mental models of museums?
2. Can we see latent motivations or barriers within museum visitors' mental models?
3. Can we see commonalities in the mental models of museums for museum visitor groups differentiated by willingness to and frequency of visitation?

Having a better understanding of why various visitor groups do or do not visit museums will allow museums to help remove barriers and provide experiences that are more likely to attract and satisfy potential visitors.

Literature Review

Early research on museum visitors' found that the visitors' ability to understand what the museum had to say determined who were visitors and who were not (Hood, 1993). Information was both the motivation and the barrier to museum visitation. This ideology later shifted slightly to say that well educated people enjoyed the challenge of the information presented by museums and that lesser educated people found the challenge too daunting (Pommerehne & Frey, 1980). The trend of finding socioeconomic or demographic factors that related to museum visitation still continues (Hendon, 1990; Prince, 1990; Schäfer, 1996) As early as 1916 'museum fatigue was discussed as another reason some people didn't like visiting museums. Arthur Upham Pope (1924) argued that museum fatigue was physical exhaustion, while Edward Robinson argued that museum fatigue was mental exhaustion. Either way, the museum format was exhausting to many. Robinson (1933) argued as early as 1933 that museums needed to change to meet the needs of their visitors and do a better job responding to visitor expectations and desires rather than those of the curators.

Museological research recognized that some people like going to museums and some people do not as early as 1916, But the literature did not recognize that some people would like to go but do not until much later.

Cameron and Abbey (1961) were the first to divide museum visitors into *frequent visitors*, *occasional visitors* and *non-visitors*.

Marilyn Hood (1989) broke from the tradition of explaining museum visits through a socioeconomic lens and instead looked at what motivated people in their leisure time activities. For Hood "People choose to come to museums, to find experiences that reward their investment of time, effort, attention, and sometimes money. And

they choose not to come if they find the rewards don't meet their expectations or are less than they can attain in alternative offerings.”

Hood found Six Important Concepts driving people's leisure needs. Three of these six motivations were the type of experiences frequent visitors museums sought: wanting to learn something; wanting to do something worthwhile, and wanting the challenge of the new. The other three Important Concepts were sought by occasional visitors and included wanting social interaction; wanting to feel comfortable in your surroundings; and wanting to actively participate (Hood, 1993). Hood found that family centric visitors were more likely to fit into the occasional category of visitor and were more likely to weigh every potential visit against their leisure criteria before visiting, while frequent visitors are more likely to just go (Hood, 1989)

Like Hood, Falk (2016) stresses a need for a visitor centric view of visitors' motivations based on their personal needs. Falk (J. H. Falk, Moussouri, & Coulson, 1998) found five domains or roles that described visitors' motivations for visiting or for their behavior within a museum. These five domains are: *Explorers* who are curious and driven by interest and an expectation to learn something; *Facilitators* who are socially motivated to enable others; *Professionals and Hobbyists* who have a close tie to some specific content of the museum due to a professional or hobby based passion; *Experience seekers* who visit from social pressure or some other perception of importance; *Rechargers*, who go to the museum to have a contemplative or restorative experience. This work started from a series of interviews at the Academy of Science and was intended to explain behavior within an informal science setting but was found to be applicable to any museum setting, including zoos, aquariums, and botanical gardens.

Prentice et al. (1997) looked at the motivations of visitors and the barriers felt by non-visitors for museums and other attractions in Edinburgh. Prentice et al. used one visit in the last twelve months to separate visitors from non-visitors and gave each group set of motivation or set of barriers to identify with. This research found that museums were not solely visited out of specific interest but were visited frequently to gain general knowledge,

out of curiosity, as part of a day out, escaping routine by relaxing with family and friends; all supported by a long term view that this activity will aid in the preservation of the museum for future generations. Self-fulfillment was a middle priority for visitors. The most common barriers were lack of time followed by lack of interest. Preferring to do other activities, not considering museums as an option, and being able to go in the future, were the next three most common responses.

Dennis et al. (2009) did a thematic content analysis on twenty years' worth of literature (1987-2006) on barriers to visitation. They found eight broad themes presented as barriers in the literature, and then asked non-visitors questions directly addressing these themes and their role as a barrier. These barriers were *physical access* or getting to the institution, *personal access* which includes personal feeling toward museums and personal circumstances preventing visitation, *cost* which includes concerns over value of visiting, *time and timing* which includes lack of free time and inconvenient operating hours, *product* which includes judgements about the atmosphere, staff, or *the feel of a place*, *personal interest and peer group* for statements about lack of personal interest and pressure from peers who do not want to see a particular place or thing, *socialization and understanding* for statements about belonging and understanding, and information for lack of awareness or access due to language. Dennis et al. found in their interviews with non-visitors that barriers were often intertwined and no single barrier was dominate.

Dudzinska-Przesmitzki and Grenier (2010) presented another way to look at barriers to visitation through the use of mental models. Their study looked at how African-Americans conceptions of museums affects their visitation decisions. According to Dudzinska-Przesmitzki and Grenier "mental models purposefully go beyond simply gathering participants' surface-level perceptions. Instead, a mental models' approach reaches deeper to uncover the perceptions, prior experiences, beliefs, and biases that individuals use when making decisions, providing a more detailed picture of their conceptions." Grenier and Dudinska-Przesmitzki (2015) also define mental models "as a collection of past perceptions garnered from many experiences over time that are linked

together by a common theme or feature.” Mental models allow a researcher to get at the decision making apparatus of an individual and begin to investigate how or why particular biases were formed. The ability of mental models to find an individual’s biases or misconceptions about a particular idea or concept has made it popular in a variety of professional fields. A large portion of recent literature on mental models comes from applications in management and development settings like human resource development (H. H. Johnson, 2008; Seel, 2001), natural resource management (Jones et al., 2011), and risk management (Bostrom et al., 2015; Hagemann & Scholderer, 2007). Part of the power of a mental model approach to studying decision making is that mental models can be changed and restructured; once the source of a bias is identified you can directly address that issue. For management fields this means that biases preventing effective communication or collective decision making can be addressed (Jones et al., 2011). Other bodies of literature on mental models come from fields interested in changing an individual’s misconceptions like adult education (Eckert & Bell, 2005, 2006; Nadkarni, 2003), medical education (Trautner et al., 2013), and psychology (Barrett et al., 2013).

Mental models have their origin in cognitive theory and research. They were first proposed by Craik (1943) and later experimentally supported by L. Johnson & Laird (1983). Researchers exploring the theory behind mental models don’t generally agree where mental models exist within the mind Some argue they are a construct of working memory (L. Johnson & Laird, 1983), while others contend they exist within long term memory (Craik, 1943). Nersessian (2002) proposed that mental models existed in both working and long term memory and that the long term memory mental models can be called upon by working memory mental models to aid in decision making. For Jones et al. (2011) the idea of mental models in both long term and working memory is reminiscent of Argyris and Schon’s (1974) “theories of action”. Argyris & Schon (1974) differentiate what people say when they are asked about a subject with what they called the espoused theory, while the actual decisions people make comes from their theory-in-use. Jones et al. (2011) equated working memory mental models to answers based on an espoused theory, while long term memory equates with actual decision making and theory in use. Jones et al. felt that the key challenge to mental model based research is determining if you are eliciting a

long term memory, theory-in-use based mental models, the short term memory, or espoused theory based mental models. Grenier and Dudinska-Przesmitzki (2015) stated a similar concern but used the terms perceptions for working memory models versus mental models for long term memory models.

Discussions on mental models often come down to elicitation techniques. Which technique is appropriate for a particular subject of study, or study environment, and does this technique actually elicit the deeper decision making mental model that interviewers intend to capture. The variety of fields interested in mental model usage is probably to blame for the multitude of elicitation techniques and the lack of a consensus (Grenier and Dudinska-Przesmitzki, 2015). One of the oldest elicitation techniques, is an indirect technique called a Twenty Question Test or TST. The TST was first proposed by Kuhn & McPartland (1954) based on symbolic interaction theory. TST has been used to research relationships between self-concept and behavior or other social objects (Schwirian, 1964). Dudzinska-Przesmitzki & Grenier (2010) use what they call multiple modified TST's as part of a study to explore the attitudes of African Americans toward museums. The idea behind the TST is to have participants give twenty answers to the same prompt. The original TST used the prompt "who am I", but the modified TST uses more topic specific prompts. The theory behind the TST interacts with theory-in-use, in that the repetitiveness of the multiple answers will exhaust the typical responses, or espoused theories, and will begin to draw out harder to elicit latent response, or those tied to their theory-in-use.

Tourism research uses a concept similar to a mental model they call the destination image (Beerli & Martin, 2004; Cherifi, Smith, Maitland, & Stevenson, 2014). It is not too much of a stretch to say that destination images come from mental models; the only difference is elicitation of destination images is less worried about drawing out latent connections, and more focused on the origin of images. Study participants are asked open ended questions about a place and their responses are coded according to some combination of four criteria: *Designative* statements or attributes of a place; *Cognitive* statements or intentions toward a place; *Evaluative* statements or judgements about a place; *Affective* statements or feeling toward a place.

Designative and *Cognitive* statements are sometimes combined as are *Evaluative* and *Affective* statements depending on the author (Cherifi, Smith, Maitland, & Stevenson, 2014). Research on destination images shows that motivations influence the positive *affective* components of statements, while past experiences influence negative *affective* statements. Beerli and Martin (2004) Found a significant and positive relationship between the travel experience of respondents to the *cognitive* statements of first time visitors to a place, and the *affective* language of repeat visitors. They linked this correlation to a higher tolerance for negative experiences that comes with greater experience traveling, but remarked that this connection was unproven and just conjecture. Destination image research often focuses on the origin of images and how mutable aspects of images are. The credibility of a source of information matters when forming an image of a destination (Cherifi et al., 2014). Word of mouth from a close relationship is the most impactful and hardest to change. Images formed early in life are also very resistant to change (Cherifi et al., 2014). This has implications for mental models as well as the mutability of mental models.

Methods

The goal of this research was to look at the motivations and barriers that affect museum visitorship. In basic decision making models the perceived benefits of an action must outweigh the perceived barriers to that action. This model is often imagined as a two sided scale or a teeter-totter to emphasize the way barriers and motivation interact. This simple model suggests several explanations for the differences in the behavior of *Frequent Visitors* compared to *Occasional Visitors* or *Non-Visitors*. When the perceived importance or presence of a motivation goes up or the perceived barriers go down, individuals are more likely to engage in frequent visitations. An occasional increase in motivations or a brief reduction of barriers can explain the infrequent visiting behavior of occasion visitors. A lack of, or diminished sense of, benefits, or an overabundance of perceived barriers can explain the *Non-Visitors* lack willingness to visit a museum. To get a full picture of various museums visitors' motivations and barriers toward visitorship this study used mental models to elicit more latent aspects of people's decision making process. Visitors' mental models let us ask three questions. What motivations and barriers are expressed in visitor's mental models? Can we find evidence of latent motivations and/or barriers in visitor's mental models? Finally, can we see commonalities in the mental models of museum visitor groups differentiated by willingness to, and frequency of, museum visitation?

This study used three modified Twenty Statement Tests to elicit the mental models of museum from frequent museum visitor, occasional museum visitors, and museum non-visitors in a qualitative study. Mental models are directly tied to decision making and allows for a glimpse at more latent aspects of influencing decisions. Mental models are used frequently in research that needs to understand people's misconceptions about an idea or discovering differences between groups surrounding a particular idea or product (Barrett et al., 2013; Eckert & Bell, 2005; Hagemann & Scholderer, 2007; Jones et al., 2011). In this case the product is museums. This work followed partially the design of Dudzinska-Przesmitzki and Grenier (2010) who used

mental models to look at the mental models of museums from African American in the Washington DC area. While Dudzinska-Przesmitzki and Grenier used three separate mental model elicitation techniques in their study, we employed just the modified TST portion of their design.

Subjects

Participants were initially contacted through a purposeful snowball approach, which started with personal acquaintances. These initial recruitments were specifically looking for participants that did not enjoy visiting museums. Later the survey was administered through social media, primarily Facebook, where shares of the survey provided a snowball like distribution to the convenience sampling, but provided greater reach and faster response rates than direct snowballing. Over 25 direct shares of the survey were reported via Facebook. This sampling protocol was approved through University of Washington IRB.

Participants were divided according to the question “Do you like going to museums?” This gave 60 yes’s and 19 no’s and an unexpected group of 14 sometimes, maybe, depends. These will be called *Indecisive Visitors*. The yeses were then split based on frequency of visitation. The dividing line for frequent versus occasional visitor was based on the phrase “a few times a year” and people’s propensity exaggerate or over generalize. This gave a final split of 26 *Frequent Visitors*, 34 *Occasional Visitors*, 14 *Indecisive Visitors* and 19 *Non-Visitors*. All responses were coded into emergent categories, the language within those categories compared and coded for positive, negative, or neutral sentiments. The “a museum is” statements were also coded in an a priori framework from destination image literature.

Instrument

Participants were surveyed using an online form created using Survey Monkey. The instrument started with two open ended questions to allow participants to indicate if they like visiting museums and how often they visited. Some open ended questions asking about frequency of childhood visits, and the circumstances of their last visit

and what a typical visit looked like were added to look for commonalities within groups and help explain outliers. The main portion of the instrument was three modified Twenty Statements Tests. The prompts “a museum is...”, “I would go to a museum if...” and “I would not go to a museum if...”. These three questions should give us the opportunity to see what visitors associate with museums and what attracts or repels them. Demographic questions were asked regarding age, sex, cultural affiliation, and education level in order to check for inherent bias within the sample.

Data collection took place over roughly three months from the end of January to early April, with the first month being email only correspondence and two months of primarily Facebook based collections. All responses were collected through Survey Monkey and not direct contact.

A priori coding used the destination image framework that divides statements about a place into four categories. These categories are *Designative statements* or what a place does or is, *Evaluative statements* or judgements about a place, *Affective statements* or feelings from or about a place, and *Cognitive statements* or expressed intentions toward a place.

The emergent coding yielded 13 categories, which accounted for 99% of the responses given. Intercoder reliability for the emergent coding was confirmed at 82%. The categories are as follows.

Purpose: Statements about what the museum does, or should be doing, not related to displaying content, were placed in this category. These statements are about a museum’s role in society or missions. Examples of Purpose statements are “A museum is a gateway to art”, “I would go to a museum if a good place to learn”, or “I wouldn’t go to a museum if (it) isn’t designed with kids education in mind”. Statements mentioning being “full of...” or “displays of...” were coded as content while collecting or preserving of specific objects was coded as purpose.

Reputation: This category is for statements about the reputation of the museum or its staff. This reputation can come from personal experience, word of mouth, or the media. Examples of Reputation statements include “A museum is a way to learn from experts”, “I would go to a museum if the museum is famous”, or “ I would not go to a museum if (it had) unfriendly staff members”

Content Statements about the actual stuff on display and how it is being displayed go in this category. This includes statements about interest or curiosity in the exhibits. Examples include “A museum is Cultural differences and commonalities”, “I would go to a museum if something piqued my interests”, or “I would not go to a museum if it was not interactive”

Voice

This category is for statements about what the museum says beyond the basic content knowledge. This includes statements about the tone of the content, curatorial voice, and greater themes or ideologies being presented. Examples include “a museum is culture”, “I would go to a museum if (it) had an interesting perspective”, and “I would not go to a museum if it’s content was political in nature”

Change in content

This category is for statements regarding the changing of content. This includes traveling and special exhibitions as well as the addition of new permanent content. Examples include “a museum is a place that’s tough to visit more than once”, “I would go to a museum if (it) brings in new exhibits and experiences”, and “I would not go to a museum if all of the exhibits were outdated”

Events

This category is for statements about special events, parties and talks. These are one time or recurring events as opposed to limited run or temporary exhibits. Examples include “I would go to a museum if there was a community talk happening” and “I would go to a museum if it offered classy fun after hours parties with lecturers or guests and wine and cheese that made me feel smart and cultured”. Statement in this category were only mentioned for the “I would go to a museum if” prompt.

Atmosphere/amenities

This category is for statements about the atmosphere of the museum including tangible elements such as cleanliness and less tangible ideas such as being inviting. Also included are statements about amenities like having a café or enough benches. Examples include “a museum is quiet”, “I would go to a museum if IMAX”, and “I would not go to a museum if there was no place to sit down”

Convenience/access

This category is for statements about limits to access or the effort needed to get into the museum. It includes statements about proximity, transportation, parking or hours of operation. Examples include “a museum is for all ages”, “I would go to a museum if some weren’t so far away”, and “I would not go to a museum if difficult to park”

Money

These are statements concerning the price of admission. Examples include “a museum is expensive”, “I would go to a museum if it was free.” Or “I would not go to a museum if I had to pay for every special exhibit”

Social

This category is for statements about relationships. While related to Falk’s Facilitator motivations it also includes statements about wanting to spend time with another person, not just facilitate their visit. Examples include “a museum is

Professional

This category is for statements derived from professional motivations and include school work, research or industry focused relationships

Personal Benefits

This category is about personal benefit. Similar to the motivations of Falk’s Recharger these statements talk about seeking inspiration, awe, or wonder and the meditative properties visitors find in museums.

Free Time

This category is for statements about free time use. Statements about fun, vacations, and exploration go in this category. Examples include “A museum is fun“, “I would go to a museum if I was visiting a new place”, and “I would not go to a museum if I didn’t have time”.

This study was not intended to represent the distribution of visitor types within the greater population. Each visitor type was purposefully selected for comparison between each other. The lack of equal distributions of participants and the lack of statistically significant populations for each visitor type limits the robustness of these results. These results should be seen as trends within this sample which may warrant further investigation and not as sweeping generalizations. This sample is both highly educated and overly Caucasian, which may limit its applicability to more marginalized communities. This sample is also slightly skewed toward female respondents and residents of the western United States, especially the west coast.

Results

This qualitative study used three modified Twenty Statement Tests to elicit the mental models of museums from participants in order to determine if there are differences in participants mental models based on frequency and willingness of museum visitorship. Ninety three participants gave fourteen hundred and seventy responses to the prompts: “A museum is...”, “I would go to a museum if...”, “and I would not go to a museum if...” Several open ended questions were used to allow participants self-identify into categories based on their general attitude about museums and their frequency of visitorship.

Participants were divided into four categories: People who like museums and visit frequently or *Frequent Visitors*, people who like museums and visit infrequently or *Occasional Visitors*, People who dislike museum or *Non-Visitors*, and finally an unexpected category of people with an undetermined general attitude toward museums who will be referred to as *Indecisive Visitors*. Twenty six participants identified as liking museums and visiting frequently. Thirty four participants identified as liking museums but visited infrequently. Nineteen participants identified as not liking museums and fourteen participants were indecisive about their general attitude about museums.

Findings

Participants were first asked to identify if they liked going to museums. Of the ninety three participants who completed the questionnaire sixty indicated “Yes”, while nineteen indicated “no”. Participants who indicated no will be referred to as *non-visitors*. The remaining fourteen participants indicated some indecision or conditions to their answer with responses like sometimes, maybe, somewhat, or occasionally. These participants were grouped together and will be called *indecisive visitors*.

Participants were then asked how often they visit museums. Twenty six of the sixty respondents who indicated they liked visiting museums indicated they visited museums four or more times a year. Respondents who like

museums but indicated they visited three times a year or less were labeled *Occasional Visitors*. The threshold of three visits a year was chosen to capture the statement “a few times a year” in the occasional category. No respondents gave an answer of “3 to 4 times a year”.

Respondents were then asked if they remember visiting museums often as a child. A little more than half the respondents said they remember going to museums often, while another 16% of the respondents said they remember going but not often. Over 70% of both the *Frequent Visitors* and the *Indecisive Visitors* indicated going often. *Occasional Visitors* were the least likely to have visited as a child, or to have visited only rarely.

Respondents were then asked to describe their last visit to a museum and if this visit was typical. *Frequent Visitors* had the widest variety of answers with content specific answers being common like “February 2017, train museum on big island of Hawaii. I like railroad themed museums to see the artifacts of preserved history” and “usually go for a specific exhibit, then check out general collections while I'm there”. *Occasional Visitors* predominantly gave answers related to Falk's *Facilitator* visitor identity and statements about vacation like “Last Fall, taking my son for a father son day” and “Generally when I'm on vacation, I see the museums in those cities.”, though some content related comments were given. *Indecisive Visitors* and *Non-Visitors* almost exclusively gave statements related to Falk's *Facilitator* visitor identity, with a few statements from each group mentioning vacations. Typical statements were “Last year my mom wanted to stop by a free museum and there was an event going on...”

Three modified Twenty Statement Tests were then given. Participants were asked to give as many answers as possible to three different prompts: “A museum is”; *etc.* All answers were coded according to emergent categories or domains, and coded for positive or negative comments.

A museum is...

Participants gave an average of 7.78 responses to the TST prompt “A museum is...”. *Frequent Visitors* gave on average nearly one more response than the average participant with 8.65 responses per subject. An aggregate of all respondents show that 26% of all “a museum is” statements were about content with 80% of all respondents mentioning content. This was the largest domain of responses and was followed by statements about purpose which made up 23% of all responses and with 75% of respondent making statements about purpose. Around half of all respondents made statements about *Exploration* and *Personal Benefits*, 51% and 47% respectively, with those statements making up 9% and 12% of the total number of “a museum is” responses. Statements about atmosphere were the next most common at 44% of respondents, followed by voice and social at 32% and 26%.

| # of responses | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Personal | Free Time |
|---------------------|------------|------------|-------|------------|--------|------------|-----|--------|-------|--------|--------------|------------|-----------|
| Frequent (n=179) | 40% | 5% | 7% | 7% | 0% | <u>16%</u> | 3% | 2% | 1% | 8% | 0% | 22% | 13% |
| Occasional (n=265) | 17% | 4% | 7% | 9% | 0% | 26% | 1% | 2% | 4% | 4% | 2% | 9% | 9% |
| Indecisive (n=104) | 18% | 4% | 6% | 12% | 0% | 37% | 2% | 2% | 3% | 1% | 0% | 8% | 6% |
| Non-Visitor (n=143) | <u>15%</u> | 1% | 8% | 19% | 0% | 29% | 1% | 1% | 5% | 6% | 0% | 8% | 4% |
| Total (n=691) | 23% | 4% | 7% | 11% | 0% | 26% | 2% | 2% | 3% | 5% | 1% | 12% | 9% |

| # of respondents | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Personal | Free Time |
|--------------------|------------|------------|-------|------------|--------|-------------|-----|--------|------------|------------|--------------|------------|------------|
| Frequent (n=26) | 92% | 27% | 38% | <u>31%</u> | 0% | <u>62%</u> | 15% | 8% | <u>8%</u> | 42% | 0% | 65% | 69% |
| Occasional (n=34) | 76% | 21% | 29% | 41% | 0% | 82% | 6% | 9% | 26% | 21% | 6% | 44% | 50% |
| Indecisive (n=14) | 79% | 14% | 29% | 57% | 0% | 100% | 14% | 14% | 21% | <u>7%</u> | 0% | 50% | <u>43%</u> |
| Non-Visitor (n=19) | <u>47%</u> | <u>11%</u> | 32% | 58% | 0% | 84% | 11% | 11% | 37% | 26% | 0% | <u>26%</u> | <u>32%</u> |
| Total (n=93) | 75% | 19% | 32% | 44% | 0% | 80% | 11% | 10% | 23% | 26% | 2% | 47% | 51% |

Figure 1. Distribution of responses for “A museum is...” by category per visitor type (top), and number of respondents per visitor type mentioning a category in responses (bottom). Departures above the total sample average of 8% or more are bolded. Departures of less than 8% from the average are underlined.

Frequent Visitors differ a great deal from the average respondent. *Purpose*, *Social*, *Personal Benefit* and *Exploration* statements are emphasized compared to the average, while *Atmosphere*, *Content*, and *Money* were de-emphasized. *Purpose* statements were made by 92% of *Frequent Visitors*. Statements about the museum’s role as an educator, or a place of learning, were the most abundant and make up 40% of the *Purpose* statements. Statements about the museum’s role as a place to collect history were the second most common and accounted for 14% of the *Purpose* statements. The *Personal Benefits* museums can have on visitors were the second most common category for *Frequent Visitors*. Comments about museums being inspiring or thought provoking were

most common within this category and make up 29% of these statements. Museums as relaxing or meditative were also common statements. Other *Personal Benefit* themes expressed by *Frequent Visitors* were awe and wonder. Statements about *Content* were the third most abundant for *Frequent Visitors*, but were mentioned by 18% less people than the mean would expect. “Historical” and “interesting” were mentioned in equal amounts and were the most common type of statements made in the *Content* category. *Exploration* statements were the fifth most common type given by *Frequent Visitors*. More individual respondents mentioned *Exploration* than *Personal Benefits* or *Content* specific ideas. “A Museum is fun” was overwhelmingly the most common statement in this category. Museums as a place for tourism were the second most common idea. *Personal Benefits* were mentioned by one less respondent than *Exploration* but made up 9% more of the total number of responses.

The thirty four *Occasional Visitors* gave two hundred and sixty five statements to the prompt “a museum is”. *Occasional Visitors* closely resemble the average respondent differing by no more than 6% in any category for both number of respondents and total number of responses. This is not surprising though as *Occasional Visitors* make up 36% of all respondents. *Content* was the most common category mentioned by *Occasional Visitors*, with statements about history or historical objects and statements about interest each comprising about 20% of those statements. Nine percent of the *Content* statements were critiques or negative statements. *Purpose* was the second most common category of response for *Occasional Visitors*. Like *Frequent Visitors*, the majority of these statements were about the museum’s role as an educator with 52% of statements mentioning education or learning. Leisure goals, atmosphere and Intrapersonal affects all were mentioned by between 40 and 50 percent of the occasional visitors and made up around 9% of the total statements each. The vast majority of leisure statements, nearly half, were about fun. Statements about atmosphere were more varied with 20% mentioning museums as big, 20% as quiet, and 16% being beautiful. The intrapersonal effects mentioned by occasional visitors were also quite varied with no dominant idea but included many of the same statements as seen in the frequent visitors included ideas like inspiration, immersion, meditation, and wonder.

Indecisive Visitors gave 104 responses to “a museum is”. They differed from the average respondent in the frequency of respondents making *Content, Atmosphere, And Social* statements. A *Content* statement was mentioned by every indecisive respondent. Statements about a museum being interesting and about museums being boring were equally common at 18% of the total statements about content; three individuals mentioned both. Historical, informative, and visual each accounted for 11% of the content statements while interactivity accounted for 8%. Over a third of the content statements were critiques or negative statements like “a museum is better when there’s interactive parts for adults as well.” Purpose based statements were the second most common type and mentioned by the second highest percentage of respondents for *Indecisive Visitors*. Statements about museums as a place of education make up 53% of these purpose statements. Statements about atmosphere were the third most frequent for indecisive visitor and were mentioned by the third highest number of respondents. Large or big was the only recurring idea in this group but included use of size in a negative sense, as in “A museum is too big”. It is not certain if everyone in this category consider size as a negative though. *Personal Benefits* were the fourth most frequent for *Indecisive Visitors*. The statements themselves were quite varied and included both “challenging” and “mentally painful”, as well as “a way to figure out where you came from” and “isolating”. Overall there are more positive statements than negative ones.

Non-Visitors differ from the average respondent in many categories. They made proportionally more statements about the museums atmosphere and the cost of museums. Proportionally fewer respondents made statements about Purpose, Reputation, Personal Benefits, and Exploration. Statements about museum content made up nearly a third of all statements, but unlike the other three groups of respondents three quarters of the responses about content were contingent, like “A museum is interesting depending on focus”, critiques like “A museum (is) should be mostly visual”, or negative statements like” A museum is boring”. Boring was the most common statement making up 32% of all statements about content. Statements about the amount of stuff in museums were also common with statements like “a museum is full of nick-knacks” or “a museum is a building

full of stuff”. Atmosphere was the second most common type of statement for non-visitors. Quiet and tiring were the most common “a museum is...” statements given, with large a close third. Like the content statements a majority of these statements were negative including “rundown”, “Dusty”, and “full of snotty screaming kids”. Museum Voice and intrapersonal affects both accounted for 8% of all statements for museum non-visitors. Only one of the statements about the museums voice was positive, the others were like “a museum is pretentious” or “a museum (is) has an agenda”. The Intrapersonal affects were mostly positive with inspiring being the most prevalent idea.

The “a museum is...” responses coded according to destination image literature show frequent visitor to be very different than the other group. Frequent visitors give a much lower proportion of evaluative statements than the other visitor types and a much higher proportion of designative and affective responses. Non-visitors and *Indecisive Visitors* give more evaluative statements than any other type. *Occasional Visitors* show similar proportions among the destination categories as *Frequent Visitors* but give far less affective statements and far more evaluative statements.

| | Designative | Evaluative | Affective | Cognitive |
|-------------|-------------|------------|-----------|-----------|
| Frequent | 56% | 31% | 14% | 0% |
| Occasional | 52% | 40% | 7% | 1% |
| Indecisive | 44% | 52% | 4% | 0% |
| Non-Visitor | 42% | 49% | 8% | 1% |

Figure 2. All “A museum is...” responses coded for destination image framework and shown by percent of response categories by visitor type.

I would go to a museum if...

For the second prompt of the modified TSTs, there were four hundred and seventy five total responses with an average of 5.2 per respondent.

| # of responses | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Intrapersonal | Free Time |
|---------------------|---------|------------|-------|------------|------------|------------|-----|--------|-------|--------|--------------|---------------|-----------|
| Frequent (n=112) | 1% | 10% | 2% | 6% | 12% | 22% | 7% | 12% | 12% | 17% | 5% | 4% | 21% |
| Occasional (n=167) | 0% | 3% | 2% | 10% | 3% | 23% | 4% | 10% | 10% | 10% | 4% | 4% | 15% |
| Indecisive (n=81) | 1% | 7% | 5% | 6% | 2% | 33% | 4% | 4% | 11% | 10% | 4% | 0% | 12% |
| Non-Visitor (n=103) | 2% | 6% | 6% | 16% | 0% | 26% | 2% | 5% | 10% | 16% | 3% | 4% | <u>5%</u> |
| Total (n=463) | 1% | 6% | 3% | 10% | 4% | 25% | 4% | 8% | 11% | 13% | 4% | 3% | 14% |

| # of respondents | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Personal | Free Time |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|-----------|------------|
| Frequent (n=26) | 4% | 23% | 8% | <u>15%</u> | 27% | 73% | 31% | 42% | 42% | 54% | 12% | 8% | 62% |
| Occasional (n=34) | 0% | 12% | 12% | 35% | 12% | 71% | 18% | 41% | 44% | <u>44%</u> | 6% | 15% | 47% |
| Indecisive (n=14) | 7% | 29% | 14% | 29% | 14% | 86% | 21% | <u>21%</u> | 64% | 57% | 21% | <u>0%</u> | 43% |
| Non-Visitor (n=19) | 11% | 21% | 21% | 47% | <u>0%</u> | <u>63%</u> | <u>11%</u> | <u>21%</u> | 42% | 63% | 16% | 11% | <u>16%</u> |
| Total (n=93) | 4% | 19% | 13% | 31% | 14% | 72% | 20% | 34% | 46% | 53% | 12% | 10% | 44% |

Figure 3. Distribution of responses to “I would go to a museum if...” by category per visitor type (top), and number of respondents per visitor type mentioning a category in responses (bottom). Departures above the total sample average of 8% or more are bolded. Departures of less than 8% from the average are underlined.

For every visitor type *Content* was the most common statement type for this prompt. For all groups except *Non-Visitor's*, statements about interest dominated the *Content* statements. Within these statements about interest, specific interest was mentioned by respondents than statements about general interest for every visitor type; at a ratio around 2 to 1 for every type except frequent visitors. For frequent museum visitors, the ratio of respondents who mentioned specific interest to general interest was 1.29 to 1. *Indecisive Visitors* had the highest proportion of respondents mention specific interest as a reason to go to museums. *Non-Visitors* mentioned how content was delivered almost twice as often as interest. Wanting more interactive displays accounted for half of these statements about how content was delivered, but other common themes were uniqueness of presentation and wanting less content.

Overall *Social* statements were made by the second largest number of respondents for the “I would go” prompt, followed by *Money*, *Free Time* and *Access*, but none of the actual visitor groups follow this order. *Free Time* statements were made by the second largest number of *Frequent Visitors* but were made nearly as often as content statements. *Social* statements were the third most common type for *Frequent Visitors* both in the number of respondents and the number of responses given. Statements about *Money* access and *Special Events*

were the next most common and were given number of times and by the same number of respondents. A third of the *Social* statements for *Frequent Visitor* were about entertaining friends or family like “if I want to show my family of friends the museum”, or “...if I had friends or family in town”. Being personally asked to go to a museum made up 26% of responses with statements like “...if someone asked” or “...if I was personally invited” and dating made up another 11%. Most of the comments about cost are about admission being affordable. Events linked to specific exhibits were the most common type of event mentioned for *Event* statements, “...if there was an opening event.”, or “...if they had events associated with the exhibits.” being examples.

For *Occasional Visitors*, *Free Time* was mentioned by the second highest number of respondents, followed by a tie between *Money* and *Social*, and then access followed by *Atmosphere*. Having more free time accounted for half the *Free Time* responses. Being new to, or visiting, an area made up a half the remaining *Free Time* statements. *Atmosphere*, *Access*, *Money* and *Social* statements were tied for third most frequent with each accounting for 10% of the “would go” statements for *Occasional Visitors*. The majority of *Cost* statements indicated that museums are too expensive with language like “wasn’t so” or “less” expensive, but statements about being affordable or about being free were also common.

The statements about relationships, for *Occasional Visitors*, show two dominant ideas: they wish to facilitate for friends and family but those relationships are also an obstacle to visitorship. Examples of relationships as obstacles includes “if my children were just a little bit older” and “if I had friends who were interested”. Half of the *Atmosphere* statements were about physical amenities like web presence, or food and drink. There were also *Atmosphere* statements were about both the presence and absence of kids or crowd.

For *Indecisive Visitors*, statements about *Free Time* were the second most frequent with *Money* a close third and *Social* a close fourth. The *Money* statements were mostly mention admission being cheap or free, but they lack

the idea of needing to be less than they are now. The *Social* statements for *Indecisive Visitors* were quite unique. Nearly all the statements given by *Indecisive Visitors* mention going with a group or going to the museum because friends already wanted to go, rather than a desire to take, or facilitate for, others, or go alone.

Statements about relationships and atmosphere were tied for the second most frequent type for *Non-Visitors*, but just as many respondents mentioned relationships as did content. Half of the *Social* statements are about facilitating other people’s visits. Statements like “...if my wife desperately wants to see an exhibit” or “...if my kids are interested” are common but the phrase “forced to go” appears several times as well. Statements about a museum’s *Atmosphere* were quite varied and included phrases like “...if it had a restaurant/bar” and “...if there were more places to sit” to “...if it didn’t give off a vibe of being something highfalutin”. Like the *Occasional Visitors* there were both positive and negative statements regarding the presence of children. Statements about *Money* were the fourth largest category for non-visitors. These statements are a mix of wanting museums to be free or at least reasonable and comments that the current cost is too high. *Non-Visitors* also had a much lower incidence of Statements in the *Free Time* category than the average respondent.

I would not go to a museum if...

Respondents gave 325 responses to the statement “I would not go to a Museum if”, with an average of 3.6 responses per respondent.

| # of responses | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Intrapersonal | Free Time |
|--------------------|---------|------------|-------|------------|--------|---------|-----|--------|-------|--------|--------------|---------------|-----------|
| Frequent (n=83) | 2% | 15% | 5% | 10% | 0% | 22% | 6% | 14% | 15% | 5% | 0% | 0% | 5% |
| Occasional (n=104) | 1% | 10% | 5% | 10% | 0% | 29% | 4% | 14% | 19% | 5% | 1% | 2% | 1% |
| Indecisive (n=56) | 0% | 4% | 4% | 14% | 0% | 27% | 4% | 13% | 18% | 5% | 0% | 0% | 11% |
| Non-Visitor (n=73) | 0% | 3% | 7% | 16% | 0% | 18% | 8% | 15% | 18% | 5% | 0% | 0% | 8% |
| Total (n=316) | 1% | 9% | 5% | 12% | 0% | 23% | 5% | 14% | 17% | 5% | 0% | 1% | 5% |

| # of respondents | Purpose | Reputation | Voice | Atmosphere | Events | Content | New | Access | Money | Social | Professional | Personal | Free Time |
|--------------------|---------|------------|-------|------------|--------|------------|------------|------------|------------|--------|--------------|----------|------------|
| Frequent (n=26) | 8% | 23% | 15% | 38% | 0% | 65% | 27% | 46% | 58% | 19% | 0% | 0% | 19% |
| Occasional (n=34) | 3% | 26% | 15% | 29% | 0% | 62% | 12% | 41% | 56% | 15% | 3% | 6% | 3% |
| Indecisive (n=14) | 0% | 14% | 14% | 36% | 0% | 71% | 14% | 50% | 71% | 21% | 0% | 0% | 21% |
| Non-Visitor (n=19) | 0% | <u>11%</u> | 16% | 42% | 0% | 58% | 26% | 42% | 63% | 21% | 0% | 0% | 26% |
| Total (n=93) | 3% | 20% | 15% | 35% | 0% | 63% | 19% | 44% | 60% | 18% | 1% | 2% | 15% |

Figure 4. Distribution of responses to “I would not go to a museum if...” by category per visitor type (top), and number of respondents per visitor type mentioning a category in responses (bottom). Departures above the total sample average of 8% or more are bolded. Departures of less than 8% from the average are underlined.

Content and *Cost* were the top two categories for all visitors' responses for this prompt, with *Content* being most common and *Cost* being second, except for *Non-Visitors* who gave an equal proportion of statements for both. More than half of all content statements in this category were about a lack of interest for all visitors. Statements about cost were nearly all a variation of "I would not go to a museum if admission was too expensive".

Statements about a museum's *Reputation* were the just as common for *Frequent Visitors* as statements about *Cost* but those statements were from fewer respondents. Poor press, bad advertising, being unfriendly, or snobby were all mentioned several times. Statements about *Access* and *Atmosphere* were also common for *Frequent Visitors*. Distance to the location, and ease of parking were mentioned equally, while crowds being overwhelming was the most common statement about atmosphere.

Access was third most common statement type for *Occasional Visitors*. Over 70% of all comments about access used the words "too far". *Reputation* and *Atmosphere* both made up 10% of the total answers for *Occasional Visitors* with similar verbiage to *Frequent Visitors* about bad press and unwelcoming staff. The majority of *Atmosphere* comments for *Occasional Visitors* were negative statements about crowds as well, but not to the same extent as *Frequent Visitors*. Statements with a theme of wanting to being left alone and allowed to take time were also prevalent for this group of visitors. *Atmosphere* was the third most frequent category for *Non-Visitors* with a wide variety of topics. Statements ranged from "too big" to "no place to sit down". Dirty or unkempt facilities were the most mentioned at 33% of the comments about atmosphere.

Survey demographics

Finally respondents were asked series of demographic question to look for biases in the sample but were not analyzed with regard to responses as this was not designed to be a representative sampling of a larger population. The distributions of ages for this survey were well distributed with an average age of 37 and a

range of 21 to 71. *Occasional Visitors* were slightly older with an average age of 39 and non-visitors were slightly younger with an average age of 35. The respondents were slightly skewed female with 55% identifying as female. The sample is overwhelmingly white and educated. Only 8% identified as something other than white or Caucasian. The average education level was at or above graduated college with a 4 year degree for all groups. The *Frequent Visitors* had the highest education level with a third of respondents having a graduate degree.

Discussion

Visitor mental models of museums suggested a wide variety of motivations and barriers. Most of this variety came from the ‘would go’ and ‘would not go’ prompts but there were motivations and barriers associated with visitor’s mental model of what a museum is too.

Interest was the most widely mentioned motivation across the entire survey, while lack of interest was the most widely mentioned barrier from attending. Ten percent of all TST responses mentioned interest. Within the interest statements, existing interest in a subject matter as a motivation, or the lack of an existing interest as a barrier accounted for the majority of all statements. Nearly twice as many participants mentioned going to museums for specific interest in every visitor group, except frequent visitors, and even with in frequent visitors 12% more of the respondents mentioned specific interests over general interest. People in this survey go to museum to satisfy their curiosities, not to look for new interests. Daniel Spock, the longtime exhibit designer and Director of the Minnesota Museum of History said in a talk at the American Alliance of Museums Annual Meeting, that “museums are better at sparking curiosity than satisfying it.” But this statement is out of alignment with why this research suggests most people go. If the visitors most likely to go to museums to satisfy a curiosity are the least satisfied with museums in general, and the visitors most likely to visit out of general curiosity are also the most satisfied with the museum experience as evidence by their frequency of visitation, maybe there is something to this misalignment of museums strengths and public demands. *Occasional Visitors*, *Indecisive Visitors* and *Non-Visitors* all used the statement “a museum is interesting” more often than *Frequent Visitors*. There is a general association of museums being interesting in these visitor mental models, but this association does not seem to be enough of a motivation to increase visitation. The fact that *Frequent Visitors* mention interesting the least of the visitor groups, but mention curiosity as a reason to go the most, may suggest that *Frequent Visitors* are more curious people or demand less

out of the museum. It could also be that *Frequent Visitors* recognize museums as a place to spark their curiosity, so place less demands on the content, and are looking for the experience that museums are better at.

Admission price and location were both mentioned as motivations and as barriers to visiting in the “would go” and “would not go” prompts. Most responses used the relative terms “too far”, “if closer”, or “too much” when speaking of cost or location but did not indicate what the threshold of too much or too far was. The few respondents that gave exact costs varied greatly; ranging from 30 dollars to 5 dollars but only 4 respondents out of 93 gave a number. Only one respondent gave an exact number for how far they were willing to travel to go to a museum. Both *Occasional Visitors* and *Non-Visitors* associated museums with being expensive, with 24% and 37% of respondents in those categories giving the statement “a museum is expensive”. *Occasional Visitors* also indicate an association of museums being too expensive in the language they use for “I would go” statements about cost where they predominantly use the phrase like “were cheaper” or “cost less”. This language is very different from the *Frequent Visitors* who predominantly use the phrase “if affordable”

Museums have become increasingly more social institutions in the eyes of the visitors. Thirty years ago social interactions were not a priority for families who visited museums but instead were a trait prioritized by non-visitors for Hood (1983), spending time with friends and family was ranked seventh in a list of reasons for attending museums by visitors for Prentice et al.(1997). Falk (2016) noted though that nearly every museum visit is a social gathering; be it a date, or a gathering of family or friends. *Social* motivations were the second most mentioned reason to go to a museum in this study.

Many of the motivations for visiting were also mentioned as barriers. These include; interest in subject matter, the presence or absence of children, size of the museum, and ambient noise level. Some of these polarizing aspects of museums were tied to visitor types. Many *Frequent Visitors* mentioned liking the quiet, and not liking crowds while *Non-Visitors* mentioned museums were too quiet. The presence or absences of children is

another very polarizing theme throughout the survey responses. While you could just decide who as museum to serve, and cut your losses, a better path may be to recognize when reaching out to new audiences that some people really enjoy the traditional museum experience. Learning to speak to both sides of polarizing issues means augmenting the tradition museum experience to new layers that can speak out to audiences normally turned away for a particular reason. This can look like an adult play night at children's museums or a Saturday morning kids club at an art museum that flip the typical audience of a museum. Or it can mean late nights with music playing or some other drastic change in atmosphere.

Part of the appeal of using mental models to look at visitor behavior is the chance to discover latent motivations not normally expressed in traditional surveys. This is achieved through the repetitive nature of the Twenty Statement Test exhausting the normal surface answers or espoused theories. The low number responses to both the 'I would go' and 'I would not go' prompts make it unlikely that any latent motivations or barriers were expressed except for a few by a small number of respondents. But it is worth looking at ideas strongly associated with museums in the 'a museum is' prompt but not mentioned in the other prompts as possible latent motivations or barriers. Two possible candidates for latent motivations are the *Personal Benefit* language used predominately by *Frequent Visitors*, and the museum as a place of education.

Two thirds of all respondents mentioned museums as a place of education or learning. This idea is one that museums have been pushing for at least 40 years as one of their roles in society. Wanting to teach others is a main component of Falk's most common Visitor identity, the facilitator (J. H. Falk & Storksdieck, 2010). Wanting to learn is also one of Hood's Six Important Concepts (Hood, 1989). But despite the strong association with learning and museums only 14% of respondents mention learning or teaching others as a reason to go to a museum in this study. John Falk (2016) has commented on this same phenomenon, and thought that people don't mention going to museums to learn because it is too obvious an answer. He gave the

analogy that when asked why you go to a restaurant you don't say because you were hungry, because it is assumed you are hungry. It could be that museums have done such a good job of associating themselves with learning that people no longer feel the need to mention learning as a reason to go. But the phenomenon of people not mentioning going to museums to learn is a shift. The ability to consume the information presented by a museum was the earliest identified trait of frequent visitors (Hood, 1993), and broadening one's general knowledge was the most given response for Prentice et al. (1997). The phenomenon isn't that visitors do not mention learning as a reason to visit museums but that they do not mention it anymore. It is possible that technology has changed how people consume information and why people visit museums. Maybe in the past people did go to museums learning as a primary motivation, but museums may need to rethink the “we are education” branding. One *Indecisive Visitors* commented on this idea directly saying “I would not go to a museum if the cost is too high, much of the purpose of going to a museum is to interact with the physical exhibits. If it's only about the information most of that can be required elsewhere at lower cost”

One distinct aspect of frequent visitors questioned in this study was the abundance and tone of the *Personal Benefit* language used. Twenty two percent of the nearly 700 ‘a museum is’ statements given by *Frequent Visitors* involved some personal feeling or benefit. Statements like “a museum is inspirational”, “a museum is thought provoking”, “a museum is meditative” and “a museum is a place to open one’s mind and to be aware of what’s outside your own life” are all almost spiritual in nature. This language was also used by the other visitor groups but in much less frequency and by fewer respondents. But none of these sentiments were expressed as reasons to go to a museum. This strong spiritual experience associated with museums, but not seen as a reason to go, seems like a latent motivation. One of John Falk’s visitor identities is the Recharger, who uses museums to relax, meditate and be inspired, but according to Falk’s studies this is one of the rarest motivations outside botanical gardens and art museums (J. Falk, 2016). If Rechargers are so rare why do 65% of the *Frequent Visitors* and 44% of *Occasional Visitors* associate museums with these almost spiritual experiences? A latent spiritual draw to museums for *Frequent Visitors* matches with them being less concerned with the content of a

museum or its atmosphere, using less evaluative language, and being more interested in sharing the museum with others than the other visitor groups.

The presence of strong latent spiritual language was not the only thing that set *Frequent Visitors* apart from the other visitor groups. *Frequent Visitors* had a much more robust picture of what museums do, with an average of three statements regarding a museum's purpose or role in society per respondent. Part of this high average comes from two individual who gave 8 and 9 purpose based responses, but even removing these outliers, *Frequent Visitors* still averaged 2.16 responses per respondent while the other visitor groups averaged between 1.35 to 1 statements about purpose. This more robust picture of what museums do is also reflected in the higher percentage of designative statements given by frequent visitors. The *Purpose* statements and the *Free Time* statements of *Frequent Visitors* express an idea that museums are connected to their communities that is missing from other visitor groups. *Frequent Visitors* perceptions of museums are more about what museums can do for them or others as opposed to what museums have and if they will be entertained. This matches what Falk and Dierking (2016) found. They said that that people who visit museums do so because of their sense of the institution and what they presume its value is, both to themselves and to others. This research may suggest that the sense of value may not just be institution specific but may be better developed and more generalized in the mental models of *Frequent Visitors*.

Occasional Visitors and *Indecisive Visitors* gave very similar responses in both how their statements were distributed and at what proportions. Their language was very similar with a few exceptions. Both groups mention *Content* most often for all three TSTs, but the *Indecisive Visitors* use boring in in the prompt "A museum is" whereas *Occasional Visitors* only used boring with the prompt "I would not go". *Occasional Visitors* have more emotional language for their affective statements and use language similar to the frequent visitors like calming, meditative, and peaceful. *Occasional Visitors* also associated museums with being inspiring, which accounts for nearly a quarter of their affective statements and is never mentioned by the

Indecisive Visitors. Another difference between *Occasional Visitors* and *Indecisive Visitors* is the in the variety of leisure language used. *Occasional Visitors* give a variety of statements regarding when and why to go to a museum which *Indecisive Visitors* do not. The final difference between *Occasional* and *Indecisive Visitors* is in the ways they associate museums with their relationships with other people. *Occasional Visitors* indicated both a desire to facilitate visits for others and that other people are a barrier to going. *Indecisive Visitors* only want to go to museums with a group and never alone, which is not seen in any other visitor group.

Occasional Visitors have a complex mental model of museums. They focus more on details of museum visit and less on the effects of that visit than *Frequent Visitors*. You could say that *Occasional Visitors* mostly see the trees while *Frequent Visitors* focus on the forest. This can be seen in the percentage of respondents who gave *Personal Benefit* statement versus the percentage of respondents who gave an *Atmospheric* response. For *Occasional Visitors* 41% of the respondents gave responses in each category while only 27% of *Frequent Visitors* gave statements about the museums atmosphere but 62% gave statements about how the museum affected them. *Occasional Visitors* also associated more excuses with visiting museums than any other group. Not enough money, not enough time, too many responsibilities all create barriers to visiting. Even if these visitors recognize the same rewards as *Frequent Visitors* these and other rewards of visitation are not enough to overcome the cost and effort of visiting regularly. The majority of *Occasional Visitors* last visits were either while on vacations or in some facilitation capacity. Only six out of the thirty six mentioned going to a museum for their own interest as part a typical visit or as a reason for their last visit. This idea of family holding back visitors is typified by statements like “I would go to a museum if my kids were more interest”. But the idea of family holding back visitors isn’t new. Hood (1993) found that occasion visitors were more likely to be family oriented visitors. Family outings may be one of the main reasons people say they visit, but museums need to recognize it is also a major burden (Prentice et al., 1997). This complexity of how they perceive other people influencing their ability to visit museums is likely the biggest factor that makes them *Occasional Visitors* and not *Frequent Visitors*. In one case it seems these barriers can even push people to dislike going to

museums. One particular *Non-Visitor* in this survey responded with all the same language as a typical *Frequent Visitor*. All the spiritual associations with museums and the large number of purpose statements were present in the “a museum is...” responses, but she mentions “I would go if my kids would behave” and that she cannot go because of a five year old with special needs. Based purely on her mental model of museums as represented by the “A museum is...” statements, you would guess this responded went to museums once a week. But, family obligations seem responsible for making her dislike museums in general.

The *Indecisive Visitors* found in this study were a surprise. This group of visitors is probably the easiest to get into the museum. Social centric programming, events and packages like Groupons, combined with advertising are probably all that is needed to get these people in the museum. *Indecisive Visitors* mental models seem to have a strong association with groups, less association with personal benefits of visiting, and a mix of positive and negative perceptions. This is reinforced by the destination image coding which showed *Indecisive Visitors* to have the highest percentage of evaluative language and the lowest percentage of affective language. It is possible that the *Indecisive Visitors* captured in this study maintain strong mental images stemming from childhood experiences in museums. This group had the highest percentage of individuals that indicated going to museums as a kid, and mentioned museums as a place of education with the second highest frequency. If some of their school trips to museums were fun and others were not, it would explain the conflicted language, and the desire to go in groups. With the right people and the right museum, museums can be fun, but without both, museums are not a good experience. Cherifi et al. (2014) found that destination images that form very early can be very hard to change.

The mental model for *Non-Visitor* seems the clearest. Museums are large quiet spaces your spouse drags you to, where you get to walk around endlessly looking at things, and hoping something interests you. Most of the *Non-Visitors* are reluctant facilitators who personally want more out of their visits, especially things to do. They don't feel museums engage them and instead just wear them out. This image of museums is present in the

mental model of all but three of the non-visitor respondents. Edward Robinson (1933) said over 85 years ago that non-visitors didn't like going to museums because they felt museums didn't try to speak to them; this has not changed. A quarter of the *Non-Visitors* in this study associated museums with not being interactive. This was one Hood's 6 Important Concepts that kept people away from museums, so overcoming this perception is key to attracting non-visitors (Hood, 1993). Forty two percent of *Non-Visitors* said they would go to a museum if it was more interactive or some variation of that. It should also be noted that none of the *Non-Visitors* in this study were true non-visitors, with the exception of one who had not been to a museum in 25 years, all of had visited in the last five year, but what distinguishes them is they are reluctant visitors and forced facilitators who don't find reward in the experience.

Conclusions

Mental models of museums not only contained barriers and motivations for visitation, but each visitor group had fairly unique sets of concerns and rewards. Some of the uniqueness of each group came from the distribution of responses by theme, but many of the differences came from subtly in how each group talked about a given subject. This type of subtly is lost in more direct survey methods and shouldn't be over looked. Each visitor group that did not frequently visit museums already offered fairly collective means to get them into museums. But getting more museum visitors to frequent museums more often is not a simple task. Some people will require new programs and new ways to interact with the museum; some will require changes to the traditional museum experience that the museum field has been resisting for nearly 100 years. But museums also need to reach out to people and let them know they have changed for them, as many of the barriers to visitation are a part of what these potential visitors think a museum is.

While many of the respondents who don't visit museum want more social experiences there is still a very personal connection many that do frequent museums feel. This personal connection does not by any means exclude social interactions at museum, as *Frequent Visitors* strongly indicated a desire to share museums with others. There is a danger that changing too much to get new visitors could drive away the old visitors, and understanding how important the latent spiritual motivation seen in this study is may be very important to preserving the current visitor base. Spiritual motivations for visiting museums is not a new idea, but is not seen as a dominate motivation for museum visits except at botanical gardens and art museums. In this survey only 1% of the "I would go..." statements mentioned any of the spiritual language that was so strongly associated with museums as a reason to visit. Sixty two percent of frequent visitors had this spiritual or restorative association with museums in their mental models.

Limitations

This research only intended to look for trends and is not meant to be broadly applicable, statistically robust or to speak to the motivations or barriers felt by everyone. Culturally based motivations and barriers are known to influence visitation and are not represented here (Beerli & Martin, 2004). The ability to digest the subject matter has also long been seen as a barrier to visitation, which one could assume is not as present in a sample which had an average education of more than a bachelor's degree (Hood, 1993). Understanding content is not necessarily linked to the lowest levels of education though. One respondent in this survey, who indicated having a two year degree said they, would go to a museum if they were smarter.

The low number of responses per respondent in this survey may have limited its ability to draw out more latent aspects of peoples mental models of museums, especially for "I would go..." and "I would not go..." statements. Research on mental models has shown that number of responses is more a product of training and habit than anything and that students are more likely to give more answers (Schwirian, 1964). The rapid decline in the number of answers per question is most likely a product of fatigue. When this survey was test run, many of the respondents remarked that the survey was very hard to complete. There is a mental effort in this type of survey that is taxing for most respondents.

Future Research

Greater sample size could eliminate the lack of cultural voice. Reaching out to underserved communities and increasing accessibility for everyone has become a focus for museums, and being able to identify culturally unique barriers and motivations would be an invaluable resource. Research on destination images has found evidence of culturally based barriers to many aspects of traditional vacation activities. Mental models provide an ideal means to address this unknown aspect of why people do not visit museums.

The latent spiritual connection frequent visitors feel with museums needs to be further explored. Does this connection replace general interest for frequent visitors? Can this connection be fostered or developed to create more frequent visitor? If museums start trying to cater to visitors other than the frequent visitors with more hands on and social experiences will this take away from what may be drawing in the people who already visit? All of these questions need to be looked at further.

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