SEEING AMERICAN INDIANS
Self, Other, and the Role of Visitor Mindsets in Museums

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Cover Art: Edward S. Curtis, *Wishham Girl*, 1910 (CUR.40). Courtesy of the Autry Museum of the American West.

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PREFACE

The NEA Research: Art Works project *Seeing American Indians* (2015-2018) grows out of an urgent need for our society to understand cultural difference and to exercise empathy and compassion towards those we consider to be different from ourselves. This interdisciplinary work is the product of two researchers, Nancy Marie Mithlo, a cultural anthropologist, and Aleksandra Sherman, a cognitive scientist. Mithlo, a senior American Indian Studies educator and an active member of a federally recognized tribe (Fort Sill Chiricahua Apache), reports from thirty years of experience in tribal colleges, community colleges, liberal arts colleges and large universities, in addition to her active curatorial practice nationally and internationally. Sherman, an Assistant Professor embarking upon her academic career brings grounded experience in the arts combined with keen insights for analytic research in cognitive science and psychology. Sherman's experience as a childhood immigrant to the U.S. informs her work for social equity. Both are educators devoted to social justice concerns.

We are especially grateful for research assistance from former Occidental undergraduates Lani Cupo, Eushrah Hossain, and Ian Silverstein. Additional assistance was provided by UCLA graduate researcher Clementine Bordeaux. We are grateful to John Paul Rangel for his graphic design assistance on the final report (http://asphaltapache.com/). We also appreciate the support of the staff at both institutions, especially the development offices at Occidental who oversaw the grant and the director, education, library, and curatorial departments at the Autry who provided invaluable guidance, implementation, oversight and feedback. The Society for Visual Anthropology Visual Research Conference organizers and participants discussed findings at the 2018 American Anthropological Association meeting. Mithlo benefitted from her external sabbatical support in 2017-2018 provided by the University of California Los Angeles Institute of American Cultures, American Indian Studies Center Visiting Scholar Fellowship, Brown University's George A. and Eliza Gardner Howard Foundation Fellowship and the Getty Research Institute Guest Researcher designation. The NEA staff was incredibly helpful in providing the details for our grant reporting and submission. The opinions of the authors expressed here are our own and are not those of our sponsors.

ABSTRACT

Given the problematic depictions of Native Americans and the pervasive cultural biases that exist, we asked how contemporary educational practices in museums might address these preconceptions. Moreover, what conceptual tools are available to encourage viewers to consider the context of their received wisdoms rather than passively absorb conventional representations? In the present study, we tested whether and how viewers perceptions and interpretations of Native peoples might be affected by encouraging empathy – specifically by taking the perspective of the Native individual depicted in a photograph they are visually analyzing.

Whereas prior research on American Indian exhibitions has primarily utilized in-depth interviews and sample survey questionnaires to rate visitor satisfaction,[1] our research goes further, examining perceptual, emotional, and cognitive processes using various novel metrics. Specifically, we measured viewer's eye movements, physiology, self-reports, and verbal and written responses to photographs of American Indians in both a controlled lab setting and in the context of a museum. Research at these two distinct sites often converged, indicating consistency and greater accuracy of findings.

Our data (including eye tracking, textual, and coding-based analyses) suggests that although perspective-taking can lead viewers to interpret American Indians in a more social, emotional, and human-centered manner than our control conditions, cultural biases about American Indians were stubbornly resistant to change and, in some cases, appeared even more frequently for participants encouraged to adopt others' perspectives. Based on our findings, we submit that many of the current educational approaches for teaching American Indian subject matter in museums are unproductive in advancing the personhood of American Indians and perhaps by extension, other disenfranchised communities. We argue that interventions in cultural intolerance – both standard educational approaches in the museum (including Visual Thinking Strategies, didactic, descriptive labels and docent or expert-led tours) as well as psychological approaches – cannot be uniformly applied, but must be unique to each cultural group impacted. The history of American Indian peoples in the settler context of the United States must be addressed directly to achieve progress in social equity.

EXECUTIVE SUMMARY

From both an anthropological and psychological perspective, the quest for understanding cultural difference is nothing new. In 2018 however, polarization and divisiveness have become normalized in our political and social landscape. The United States is experiencing a period of rapid demographic changes, with expectation that the country will become a "minority-majority" population by 2044.[2] While some scholars debate the accuracy of these findings, others assert that the political context of the census data projections are real and must be addressed.[34] These projected demographic shifts have created an anxiety described in terms of a "persistent sense of threatened white identity"[5] and leads White Americans to express greater racial bias.[6] While news reports and politicians often report discrimination against African American, Asian and Latino/a populations, scant progress is being made in the context of the U.S. for improving perceptions of American Indian peoples. Research has shown that explicit bias against one disenfranchised community often leads to prejudice against other groups.[7] To address these issues, we sought to determine effective strategies for mitigating bias using visual imagery as a prompt. We particularly aimed to understand the role that empathy and perspective-taking play in encouraging racial tolerance.

Our broad goal was to gain a better understanding of how the public views American Indians. Our research used interdisciplinary methods — combining traditional ethnographic interview techniques with quantitative approaches from cognitive science — to identify interventions that may be successful in altering persistent conceptions of racial difference using the arts as a forum of analysis.

Our work used photographs of American Indians by Edward S. Curtis as eliciting devices to ascertain attitudes and beliefs about American Indians. We presented Autry museum visitors and Occidental College lab participants with these photographs and assessed their perceptions and interpretations (reflected in eye gaze, self-reports, physiology, and written and verbal responses) depending on one of three mindset conditions: perspective-taking, conventional narrative suppression, or control. For perspective-taking, participants were asked to imagine the life of the subject — what would it be like to walk in their shoes; what were they thinking or feeling? For suppression, participants were asked to avoid thinking of conventional narratives during viewing and to remain objective and detached. Finally, for control, participants were not given specific instruction.

Results from lab data suggest that perspective-taking led viewers to gaze at the eyes of the depicted subject more often, whereas conventional narrative suppression led viewers to gaze at objects more (i.e. decorative features, hair, headpieces). Additionally, viewers who took the perspective of the subject used more emotional words relative to control and suppression. For application in museums, these findings point to the positive impact of interpreting Native peoples' lives rather than focusing on the objects that Native people manufacture.

A surprising outcome from all participants at both the museum and lab across, however, was the tendency for visitors to reify prior conceptions and to engage in a form of cultural fantasy. Words such as princess, beautiful, proud and authentic revealed an extent of exocitization that we did not fully expect. Although prior research has consistently shown that perspective-taking interventions have positive effects including increased compassion towards out-groups and decreased prejudice, our findings suggest this strategy alone will not alter enmeshed and persistent bias for American Indian populations. Even when asked to take the perspective of American Indians, viewer interpretations exhibited unrealistic and biased personhood. Cultural biases about American Indians are stubbornly resistant to change and, in some cases, appeared even more frequently for participants encouraged to adopt others' perspectives. Especially in museum settings, where emotions are heightened, educators should consider methods of encouraging visitors to forestall conclusion-making and embrace uncertainty.

> **Cultural biases about American Indians are stubbornly resistant to change and often occur even when viewers are encouraged to take the perspective of a Native person.**

Consistent with this suggestion, we found that across contexts, there were few open-ended responses indicating curiosity or comfort with ambiguity. Moreover, there were few historical assessments even in the museum where more historical context was present. Specifically, although viewers assumed the historic images (sepia-toned Edward S. Curtis images dating from the turn of the last century) were old and commented on the dichotomy between modern and contemporary, they rarely historically contextualized individual's lived realities, which included warfare and genocidal political policies. If this recognition was present, the implications were minimized.

Together, our findings indicate persistent biases that require dynamic intervention. Rather than blame the viewer for a lack of curiosity, we suggest continuing to interrogate the museum as a place of *didactic* rather than dialectic learning. Educating the public about American Indian peoples requires unique approaches due to the public's entrenched and distorted perceptions of American Indians. Museum professionals must make explicit their incomplete knowledge about Native peoples. Ideally there should be a process of forgiveness involving acknowledgement of harm.[8] Additionally, museum professionals should be more transparent about their exertion of authority and take care to limit that authority in all of their educational outreach, community involvement, press, captioning, and exhibition techniques. Future research on the individual visitor experience may provide important insights that are more productive for change-making than community outreach efforts alone.

INTRODUCTION

Research indicates that non-Indians possess little understanding of American Indian history and "have a foggy, distorted set of perceptions about Indians, usually based on little direct contact and what some admitted were little more than Hollywood stereotypes and generalizations." [9] Scholars assert that these misperceptions have existed since contact. American Indian populations in the U.S. are frequently depicted in dated and imaginative fictions that poorly reflect the lived realities of Native communities. Art historians Moffitt and Sebastián state that "with few exceptions, the illustration of the Native American…[is]…an exercise of the imagination – or prejudice" (133). [10] Recent studies suggest linkages between the poor life expectancies of American Indian peoples and lived contexts where their personhood is compromised by ignorance, bias or even hate. Bias as expressed in verbal and visual stereotypes thus can lead to Native communities experiencing diminished mental and physical health, poor life chances, and compromised political and economic standing. [11,12,13]

Given the problematic depictions of Native Americans and the pervasive cultural biases that exist despite continued educational programming, we asked how contemporary educational practices in museums might address these biased readings. Moreover, what conceptual tools are available to encourage viewers to consider the context of their received wisdoms rather than passively absorb conventional representations? Our goal was to encourage viewers to build their knowledge base and to delay their conclusions and interpretations, rather than reify their established values. Our respective training in cognitive science (Sherman) and anthropology (Mithlo) informed our highly interdisciplinary methodology.

Our field sites of a large urban museum and a small liberal arts college in southern California provided a platform for collecting data with participants ages 18 to 79. We specifically tested the notion that cognitive empathy, or the active adoption of another person's perspective might increase viewer's cultural competencies at the same time as decreasing bias. However, our primary findings only partially supported this conclusion. While encouraging viewers to adopt the perspective of American Indians had some positive impact, we also found that there was a consistent tendency for viewers to rely on dated and one-dimensional interpretations of American Indians. The results of our study are congruent with audience reaction studies conducted twenty years ago by the Smithsonian Institutional Studies Office in which researchers concluded, "although most

visitors have had some minimal contact with contemporary Native Americans, imagery of the past dominated their responses."[14]

PROJECT BACKGROUND

Researcher Nancy Marie Mithlo entered the tribal college system in her early twenties, attending the Institute of American Indian Arts' (IAIA) museum studies program in Santa Fe, New Mexico. As an urban Indian, growing up away from extended family and tribe, she negotiated her mixed-race background in a context that was both multi-tribal, and local to the Native nations of New Mexico. In the mid 1980s when she enrolled in IAIA, the tribal cultural center movement was just emerging following the passage of several key legislative victories for Native people, including the American Indian Religious Freedom Act (AIRFA) and the The Indian Child Welfare Act, (ICWA) both in 1978.[15] Prior to these government actions, American Indians were prohibited from practicing their religion and Native children were being separated from their families at alarming rates.

This cultural revitalization of the 1980s was an extension of the Civil Rights movement of the 1960s and 70s which emerged in response to widespread state-sanctioned violence and human rights abuses against marginalized communities of color. By the time Mithlo earned her Ph.D. at Stanford University in 1993, the Indian Arts and Crafts Act and the Native American Graves and Repatriation Act were passed (both in 1990), seemingly ensuring an upward trend of American Indian rights and recognition.

Yet in 2018, forty years after the passage of AIRFA and the ICWA, troubling indications of continued prejudice against American Indians remain present and alive in America. The militarization of law enforcement response against Dakota Access Pipeline protesters (water protectors) in the fall of 2016 vividly demonstrated government dismissal of American Indian religious freedom and human rights.[16] The use of tear gas and water spray against crowds of peaceful demonstrators at below freezing temperatures and the employment of attack dogs was documented widely, making visual record of these government-backed private security force actions. Clearly, the democratic principles of "liberty and justice for all" have not been upheld.

The present study grows from research indicating persistent bias and restricted visual registers for American Indian populations. Children's literature and toys, dressing and playing Indian as entertainment and commemoration of colonial desires, negative

American Indian portrayals in film, and derogatory mass-produced commercial goods are all evidence of the on-going, continued diminishment of Native personhood and agency. Additionally, debates surrounding the disputed use of Native sports mascots (such as the Washington Redskins) continue to garner attention in national media.[17] Studies point to the fact that not only are Native youth negatively impacted by racist imagery,[18] but that when Euro-Americans are exposed to Indian sports mascots, they adopt negative attitudes about American Indians.[19] The literature demonstrating the damaging effects of mascots is wide.[20,21,22,23]

As in our study, Chaney et al suggest that damaging one-dimensional portrayals like mascots are the "default" impression (or stereotype) many have of American Indians, making living American Indians "inauthentic" in non-Native eyes.[24] More troubling is that most participants in their study not only held negative implicit biases towards American Indian mascots relative to Caucasian mascots but participants did not distinguish between their feelings toward American Indian mascots and their feelings toward American Indian people. American Indian mascots were perceived as essentially equivalent to American Indian people and both were perceived negatively. This study thus delegitimizes the claim by mascot supporters that they are honorably representing American Indian people.

Negative images, portrayals, and words are an integral component of broader racist thought and actions directed at and against communities of color. Notably, however, problematic portrayals of American Indians may also be seemingly positive. For example, viewers often exoticize or deny Native peoples' contemporaneous existence and struggle to relate to the individuals portrayed as real people, not simply fiction characters. Here, instead of using simply the word stereotype, we employ the term "conventional narrative," which Mithlo uses to describe the tightly woven indicators of difference commonly referenced as stereotypes. Whereas stereotypes typically indicate a negative connotation only, the concept of "conventional narrative" allows for a more nuanced appraisal of associated verbal and visual referents.[25] In a similar way, scholars such as Robert Jahnke use the terms "customary," "trans-customary," and "non-customary" to describe various Maori art forms, moving discussions beyond problematic dichotomies like traditional vs. modern.[26]

This apparent reduction of living cultures to flawed imagery and the prevalence of negative and discriminatory bias against American Indian populations calls for urgent educational interventions. Our research was inspired in part by sociologist David Pilgrim's work to establish the Jim Crow Museum of Racist Memorabilia.[27] The museum's mission to "use objects of intolerance to teach tolerance and promote social justice" empowered our

commitment to address how visual representations are employed and interpreted across apparent racial divides.[28] Moreover, we were interested in exploring how museums, as public institutions dedicated to education, can foster curiosity and build compassion towards Native Americans.

THE ROLE AND CHALLENGES OF THE MUSEUM

For many Native peoples, the museum is a site of contention, a colonial institution exploiting objects from its collections that were likely obtained without permission, either through forced sale, looting, or archaeological excavation. Over time, these treasure houses of goods have served to provide a means whereby Native communities can reclaim cultures by using, referencing or repatriating items back to their places of origin. The emotional pain, confusion and longing that many Indigenous peoples experience when seeing their objects behind glass, described by an outsider, are real. There can also be pride and a sense of belonging when one's ancestors are interpreted well within the museum walls. These heightened emotional responses stem from the often uninterpreted, unrecognized and unhealed harms that American Indians have inherited from the colonial history of the United States. Art historian Ellen Fernandez-Sacco cites the "collective amnesia" surrounding the act of collecting arguing that, "A museum's space transforms acts of war. Its multiple functions as a site of reflection, celebration, and contemplation often obscure the violence implicated in the making of objects produced for display" (571).[29]

This vexed setting of a museum presents a problematic context for learning about Native peoples in way that seems equitable for American Indian communities. Yet, the museum is precisely the location where many visitors come to learn about American Indians and museum exhibits are the primary means by which most visitors have contact with American Indian culture and communities.[30] Additionally, the material culture of Indigenous peoples often plays a central role in the establishment of national narratives, making the display of American Indian content not only a required premise for many museums, but a weighted topic. Scholars Fee and Russell argue that, "Despite [Indigenous peoples'] small numbers, their impact on the national imaginaries, formed by early contact and by subsequent histories of colonial domination, has been large and they remain a major focus of (usually stereotyping) cultural production."[31]

Given that the museum is a space where people are going to learn about American Indians, how can we mobilize more effective educational strategies to assure that they

learn accurately? Several programmatic and practical barriers exist that inhibit the development of thoughtful and effective tools for interpreting Native cultures in the museum including: 1) a lack of diversity (especially for American Indians) among the staff working in museums and the museum visitors themselves, 2) insufficient data on audience research, especially for American Indian topics, 3) a disengagement with class and race in the discussion of effective museum education tools. These are discussed below.

> **Given that the museum is a space where people are going to learn about American Indians, how can we mobilize more effective educational strategies to assure that visitors learn accurately?**

The museum staff demographic is largely non-minority. In a 2014 Mellon survey the percentage of American Indians listed as curators, conservators, educators and leadership was 0%.[32] The need for diversity in American museums was reflected upon by the former President of the Association of the Association of Art Museum Directors Dr. Johnnetta Betsch Cole in her 2015 keynote address to the American Alliance of Museums (AAM):

> "...we cannot fully carry out the visions and the missions of our museums, and indeed our museum cannot continue to be of social value if we do not do what is required to have more diversity in who works in our museums, in the work we present in our museums, in the audiences we welcome to our museums, and in the philanthropic and board leadership in our museums."[33]

A 2018 report by the AAMs' Diversity, Equity, Accessibility, and Inclusion Working Group urges museum professionals to face their unconscious bias and cite the great need for additional research.[34]

Visitor reception studies in general are problematic because the museums sponsoring such studies rarely address the representative sample of their research. In other words, in many of these existing studies, the museum appears content with their current visitor profile and all efforts are aimed at pleasing an established audience. This class and race blind approach is prevalent across the visitor studies analyses. While literature exists concerning the ability of museums to adapt to changing demographics, funding levels, social trends, and increased community outreach and participation, less is known about the actual

viewing experience of visitors. In addition, there is scant research on the effect of inclusivity in museum contexts[35] and audience research using experimental design for an American Indian focus are few and needed.[36,37]

Problematically, museum visitors are thought to reassert their own biases when they see exhibits, frequenting museums and exhibits they think will align with their attitudes, views, and beliefs. [38,39]Although research suggests that viewers rate "enriching my understanding" and "connecting to others" as a high entrance value, few visitors actually select this as an experience they find especially satisfying during their visits in exit interviews. Rather, viewers tend to enjoy "being moved by beauty" more.[40] Because visitors tend to respond more positively to exhibits they already relate to and tend not to challenge their preconceptions, research shows they gain little new knowledge.[41]

As stereotypes or conventional narratives are a cognitively "efficient" way to organize social information in memory, once they are formed, they are maintained and strengthened through several cognitive processes. Research has robustly demonstrated that people have a tendency to overweigh the importance of confirmatory information and to discount or minimize counterstereotypic information (a cognitive bias dubbed "confirmation bias"). [42] Similarly, people tend to solicit information about others and to reason about the causal attributions of others behaviors in a way that confirms and maintains their initial expectations. This desire to have one's narratives confirmed makes the task of re-educating museum visitors away from damaging stereotypes all the more challenging.

PROJECT GOALS AND DESCRIPTION

Based on the premise that museums have the capability of enacting social change, we aimed to understand how contemporary educational practices in museums can address non-Natives' biased readings of Native people, art, and material culture. Broadly, we hoped to characterize ways in which museums can improve their educational and interpretative analysis of non-Western art and material culture. Several questions motivated our research:

1. Can we expand viewers often-limited and flawed interpretations of Native arts and culture in museum settings? How can educators foster deeper reflection about art that visitors might perceive represents insurmountable cultural differences?

2. Is it possible for viewers to think about individuals they see represented in art and material culture — individuals who they may consider to be "others" — empathetically, and in a way that can enhance their own self-understanding?

3. Rather than erase cultural distinctions and flatten inequities, can we encourage viewers to find warmth and compassion for those depicted?

4. What conceptual tools might be most effective at encouraging viewers and learners to consider the context of their received wisdoms rather than passively absorb conventional representations? Can we also identify tools that will build visitor curiosity and tolerance for uncertainty about Native American peoples?

5. Moreover, can we build knowledge by encouraging visitors to ask open-ended questions, to more readily acknowledge what information they may be missing, and to forestall conclusions?

Of the many museum educational models that are now employed as tools for assisting visitors to understand and enjoy exhibitions, Visual Thinking Strategies (VTS) is commonly thought of as a leading method.[43,44] Co-founded by cognitive psychologist Abigail Housen to foster aesthetic development, VTS asks visitors a series of three questions: 1) What do you see in this image? 2) What do you see that makes you say that? and 3) What more can you find? The facilitator remains non-intrusive and keeps the discussion moving only by repeating the questions, paraphrasing the answers and linking remarks. A wealth of research supports the effectiveness of VTS in deepening viewers' observation skills, as well as in fostering more flexible thinking and open communication.[45, 46]

Twenty years past the development of VTS, issues of how to interpret race and discrimination have surfaced in discussions of the exhibit *Kerry James Marshall: Mastry* at The Museum of Contemporary Art, Los Angeles (MOCA) in 2017 in which,

> "...candid comments about painful stereotypes sparked tension and hung in the air. Unfortunately, simply paraphrasing and linking comments didn't seem to be alleviating this strain. It wasn't helping students reflect more deeply upon the concepts of race and stereotype in play, nor address the vulnerability that comments were stirring up. It wasn't supporting students to talk about the conversation itself, which some could be finding insensitive or even racist."[47]

In this case, the museum staff decided to provide contextual information about the artist and his work before engaging in VTS discussions. From our perspective as researchers, this foregoing of the essential core premises of the VTS methodology of non-interference and fixation on the object, evidences the method's weakness and potential non-applicability

for non-Western arts. Likewise, Mithlo argues in her forthcoming essay that the aim of VTS — to "support aesthetic growth" — varies considerably from the goal of most Indigenous artists to retain cultural knowledge and to enhance the strength and resilience of Indigenous communities.[48] The focus on the art object and the art viewer at the expense of the communities of origin is a social justice issue closely tied to the religious freedom and human rights of Native nations.

In the present study, we tested the effectiveness of a conceptual framework distinct from VTS that we believed might more readily encourage individuals to move beyond their default conventional narratives; namely, encouraging viewers to attempt to take the perspective of the Native individual depicted in the photograph they are visually analyzing.

Based on the substantive literature, we believed that perspective-taking would be a promising method for reducing viewer's tendency to confirm their biases. Particularly, psychological research has shown that adopting other's perspectives decreases stereotyping, increases positive attitudes, improves empathy, increases intergroup understanding, increases desire to engage in intergroup contact, and increases general social affiliation. [49,50,51,52] Additionally, relative to controls, perspective-takers rely less on egocentric judgments[53] and spontaneously seek our more information that is *inconsistent* with their expectations about others. This suggesting that perspective-taking may undercut default processing modes.[54] Although the mechanisms by which perspective-taking does this aren't completely clear, researchers propose that cognitive representations of the self and other merge during perspective-taking, whereby individuals see more of themselves in others, and to see more of others in themselves. [55,56,57] Others have suggested that the effects of perspective-taking may come about because it requires more complex, abstract, and deliberate thinking.[58]

In this two-part research study we expanded on prior research by investigating how perspective-taking shapes viewer's perceptual, cognitive, and emotional responses to photographs of American Indians from the Autry Museum of the American West. Our research was distinct from prior work in a number of ways. First, we know of no other studies that systematically compare viewers interpretations in a controlled lab environment to a naturalistic museum environment in the way that we have. Additionally, whereas much work in social psychology tends to measure viewers biases by assessing how perspective-taking influences endorsement of stereotype-consistent (and inconsistent) statements, we aimed for a more naturalistic approach of assessing viewers spontaneous interpretations. We also integrated eye tracking and physiological metrics such as heart rate and skin

conductance into our study in hopes of understanding how perspective-taking influences attention, gaze, and emotional arousal.

We compared perspective-taking to two other conditions: stereotype-suppression and control. Suppression refers to an explicit attempt to suppress our own preconceived biases or biases that we know to exist socioculturally. Although this may be an intuitive strategy for expanding our current views, previous research demonstrates that suppression can rebound and lead to avoidance behaviors, causing individuals to ruminate on the biases they hope to eliminate, potentially causing further harm.[59,60] Based on prior research, we thus hypothesized that relative to control and suppression, a perspective-taking intervention would increase viewers' empathy and positive attitudes towards Native Americans while decreasing stereotyping, and that these effects would be reflected in eye gaze patterns, physiological responses, self-reports, and written/verbal descriptions.

METHODS

All materials and procedures were approved by Occidental College's Institutional Review Board. All participants signed informed consent prior to participation in the study.

This interdisciplinary study posed several challenges to the researchers, bridging as we have, the often separate or even conflicting standards of our disciplines. For Mithlo, the ever-changing and sometimes chaotic environment of the museum represented an opportunity to collect context-rich data. Children setting off a security alarm by reaching for an object, someone asking directions to the bathroom in the middle of data collection, crowds of school children moving past loudly, the occasional announcement over an intercom, were all validation that the study was accurately mimicking the experience of an average museum visitor. For Sherman, however, these unanticipated interruptions represented unwelcome "noise in the data." Mithlo struggled to utilize and incorporate the basic premises of cognitive science: experimental conditions, coding variables, and quantifying what to her seemed like mountains of data. As researchers, we reveled in the moments where we were required to translate to each other the varied premises of our respective academic fields, knowing that the task ahead was complicated and would require additional conceptualization and care in presenting the findings.

Field Sites

Smithsonian researcher Andrew Pekarik suggests that one approach to participant-oriented evaluation in the museum context is the use of a "living, changing, organic exhibition" rather than the permanent exhibition model.[61] Our data collection and analysis accomplishes exactly this with research sites both in Sherman's cognitive science laboratory at Occidental College and at the Autry Museum of the American West. Not only is our research geared to the experience of viewing, but the space in which the data was gathered at the Autry served as the changing exhibition site Pekarik champions. This temporary exhibition space (what Autry staff call the "jewel box gallery") enabled the short term exhibition of the *Seeing American Indians* project described here as well as subsequent news-sensitive exhibits such as Autry's short term exhibit in the same location titled *Standing Rock: Art and Solidarity* (May 20, 2017- February 18, 2018).

All data collection was conducted by the two co-principal investigators (Sherman and Mithlo) and facilitated by trained student research assistants at both sites (Figure 1). This interdisciplinary approach is essential to both psychology and museum studies, because very few psychology of art studies occur outside of the lab context nor, as Sherman has argued in her recent work, are enough empirical studies aimed at understanding the social and epistemic impacts of art experiences.[62] Additionally, there is a scarcity of museum studies drawing on empirical research. Importantly, the inclusion of undergraduate students in the study conforms to Mithlo's American Indian Curatorial Practice methods that are long-term, mutually-meaningful, reciprocal and involve mentorship.[63] All four of these qualities, as Indigenous research strategies, were employed in the present research.

Figure 1. Occidental undergraduate student Eushrah Hossein (left) and Assistant Professor of Cognitive Science Aleksandra Sherman (right) with museum visitors. Autry Museum of the American West, 2017.

Materials

The use of photographs to document cultural difference has been present since the birth of the technology, however photography as a research method is largely linked with John Collier, Jr. and his book *Visual Anthropology* first published in 1967 and later revised with his son Malcolm in 1986. These authors use the phrases "the fluency of recognition" to describe the potential for assessing values cross-culturally, suggesting,

> ""...we think and communicate photographically. The nonverbal language of photorealism is a language that is most understood interculturally and cross culturally. This fluency of recognition is the basic reason the camera can be of such importance in anthropological communication and analysis."[64]

As researchers, we take the premise that photographs are useful tools for tracking the varied cultural values associated with the subjects portrayed. In the present research, we aimed to understand how viewers ascertain cultural difference in a set of photographs of American Indians. To garner more accurate results, we selected visuals that were standardized. The photographs had to be: a) of a sufficient size to employ in the museum context, b) a high enough resolution without distracting out of focus qualities, c) ideally made by the same photographer to ensure consistency and d) accessioned in the collection of the Autry Museum where Mithlo was employed. The visuals we ultimately chose to use as research prompts are those of photographer Edward S. Curtis (1868 -1952). Curtis's biography is well-known. A portrait photographer based in Seattle, Washington, Curtis started to photograph local Indians at the turn of the last century. As his interest in American Indian culture grew, he was successful in meeting influential leaders in politics, academia and industry who assisted with his production of the 20 volume photographic project *The North American Indian* (1907-30).

Reactions to Curtis' work range from adoration to heavy critique. Scholar Mick Gidley summarizes Curtis's legacy stating, "His image, as we might put it today, was that of the archetypal Westerner confronting a wild, savage and alien new world."[65] In *The Vanishing Race and Other Illusions*, Christopher Lyman argues that Curtis was an irresponsible ethnographer, purposely deleting evidence of Western civilization in his photographs that sought to capture dying cultures.[66] Mithlo critiqued the use of Curtis photographs in her review of the 2003 exhibit *Staging the Indian: The Politics of Representation* held at Skidmore College's Tang Teaching Museum and Art Gallery. The exhibit sought to use Curtis's images as the starting point for Native American self-representation with contemporary Native artists proposing new or recent projects to "stand in relation to"

Curtis's legacy. Mithlo suggested the exhibit served to "reify rather than challenge notions of historic authority."[67]

For our current study, however, we decided to use the collection because of the ubiquitous nature of Curtis' work. The photographs should thus be considered inert prompts in the context of this research project and are not intended to be analyzed in reference to Curtis' individual history. We discuss how the choice to use these photographs may have influenced our findings in more detail under Challenges and Open Questions.

Fifteen portrait photographs of Native Americans by Edward S. Curtis taken between 1903 -1928 and housed in the collection of the Autry Museum of the American West were chosen for inclusion in our study. At Occidental College, all fifteen photographs were presented to participants in high resolution (1920 x 1080) on a computer. At the Autry Museum of the American West, a subset of four of the fifteen photographs (Figures 2 and 3) were installed in the temporary "jewel box gallery" exhibition space as components of the *Art of the West* exhibition in the Irene Helen Jones Parks Gallery of Art from February 2017 - May 2017.

We were particularly interested in working with portraits as we believed highlighting an individual's face would focus the viewer on the individual personhood of each depicted individual and increase empathy overall. We also chose photographs of individuals with relatively neutral and/or ambiguous facial expressions. This ambiguity meant that our prompts could exert more robust effects on interpretations. To ensure that composition and other formal features did not strongly impact viewing and analysis, we chose photographs that were similarly sized (16" X 12"), similarly shot, and similarly colored. However, the final set of included individuals who varied in gender, age, and the type of clothing they wore (Figure 2).

Figure 2. Final set of photographs chosen for inclusion in our lab study. Edward S. Curtis photos held by the Autry Museum of the American West. Top row (L to R): *A Son of the Desert - Navaho*, 1904 (Cur.4), *De Gizzeh - Apache*, 1906 (CUR.26), *Red Thunder - Nez Perce*, 1903 (CUR.36), *No Title*, early 1900s (CUR.18), *A Southern Diegueño*, 1924 (CUR.234). Middle row (L to R): *No title*, 1904 (CUR.250), *Chief Joseph - Nez Percé*, 1903 (CUR.258), *A Chukchansi Matron*, 1924 (P.37590), *Dusty Dress-Kalispel*, 1910 (CUR.1337), *Wife of Modoc Henry-Klamath,* 1923 (CUR.1545). Bottom row (L to R): *Povi-Tamu ("Flower Morning") -San Ildefonso*, 1925 (CUR.1681), *A Cree*, 1926 (CUR.1726), *Sam Ewing -Yurok*, 1923 (CUR.1537), *A Walpi Man,* 1921 (CUR.262), *Wishham Girl*, 1910 (CUR.40). All photos courtesy of the Autry Museum of the American West.

Figure 3. Edward Curtis photographs installed at the Autry Museum of the American West (February 2017- May 2017). From L to R: *Povi-Tamu ("Flower Morning") -San Ildefonso*, 1925 (CUR.1681), *Wishham Girl*, 1910 (CUR.40), *Wife of Modoc Henry-Klamath*, 1923 (CUR.1545), *Ola - Noatak*, 1928 (2003.102.1.33).

Figure 4. Brochure provided in the Autry exhibition space.

The Autry Museum exhibition area included a folio attached to the wall that contained a brochure describing the project (Figure 4). This brochure was available to any museum visitors that happened into the exhibition space, but otherwise this area did not appear separate from the larger *Art of the West* exhibit of which it was a part. The intention was for our data gathering to appear inconspicuous. For visitors who did participate in the study, the brochure was provided during debriefing.

Procedures: Occidental College

One hundred and twenty Occidental College undergraduates (age range: 18-22, 70 females; normal or corrected-to-normal vision) gave informed consent to participate for partial course credit. An equal number of participants were randomly assigned to each of the three between-subjects conditions (control *N*=40; perspective-taking *N*=40, suppression *N*=40). However, four participants were removed from all analyses because data collection occurred the week following the 2016 presidential election, potentially skewing results. Six additional participants were removed from analyses based on data quality.

After providing informed consent, all participants were given instructions describing the nature of the study. Participants were told they would be viewing art photographs of Native Americans from the Autry Museum of the American West, that their gaze would be recorded via an eye tracker, and that they would be asked to provide a series of responses after viewing each photograph.

Participants eye movements were monitored using an Eye Tribe eye tracker (resolution 0.1° [RMS] and a sampling rate of 30 Hz). Viewing distance (26cm) and head position were maintained using a chin rest. The height of the chin rest was adjusted for each participant so that participants' eyes aligned with the center of the screen. A nine-point calibration was completed for each participant and continued until an accuracy of at least 0.30° of horizontal and vertical visual angle was achieved. Eye movements were recorded using pygaze[68] and stimulus presentation was controlled using OpenSesame. [69] The study was conducted in a dimly lit room.

Physiological responses were monitored in half of participants using an Empatica E4 wristband. The wristbands recorded Blood Volume Pulse (BVP) from photoplethysmograph (PPG) sampled at 64 Hz, Electrodermal Activity (EDA) in μS sampled at 4 Hz, Interbeat Intervals (IBI) with 1/64 second resolution, temperature in Celsius measured at 4Hz, and

from 3-axis accelerometer sensor in the range [-2g, 2g] measured in 32 Hz. Note that physiological data is not analyzed or described in this report.

Crucially, in order to assess the extent to which mindset influenced how participants viewed and analyzed photographs of Native Americans, we randomly assigned participants to one of three between-subject conditions: perspective-taking, suppression, and control. Depending on the condition assignment, participants were provided with a set of instructions detailing how they should engage with the set of photographs to be presented. For control, participants were not given a specific set of viewing instructions. For perspective-taking, participants were instructed with the following prompt:

> "As you view and engage with each photograph, please try to take the perspective of the individuals pictured. Imagine a day in their lives. Picture yourself living in their world and walking around in their shoes."

For suppression, participants were instructed with the following prompt:

> "Previous research has noted that our impressions and evaluations of others are consistently biased by stereotypic preconceptions. When viewing these photographs of Native individuals, please actively try to avoid thinking about the photographed individual in stereotyped a manner."

Each trial began with a central fixation point and continued only after the participant remained fixated for three seconds. One of the fifteen photographs, presented in randomized order, was then displayed on the screen for eight seconds. Following each photograph, participants were asked to provide two sets of responses. First, participants were asked to use the paper provided to write a brief passage describing the photograph they just saw and any impressions and reactions they had to the photograph. Next, they were asked to rate how emotionally moved they were by the photograph using a 1-6 scale (1 indicated they were not at all emotionally moved, and 6 indicated they were extremely moved). Participants were encouraged to take their head off the chin rest during written responses and required to place their head back on the chin rest before beginning the next trial. Finally, at the end of the study, participants provided their age, gender and if they had any experience with a Native community.

Procedures: Autry Museum of the American West

Sixty Autry Museum visitors were recruited inside the museum (either at the entrance or within the galleries) by the co-principal investigators and/or by a student research assistant. The Autry Museum visitors were within the age range of 19 to 79, their average age was 56, and more than half (*N*=34) were female. Because they expressed interest, museum docents were encouraged to participate. Most of the Autry Museum visitors were significantly older than our undergraduate population. This aspect of the research is related to the average age of museum goers nationally and was also related to the fact that although the Autry does serve a high number of school children, we were not conducting work with underage participants for this study. The researcher and students were aware of this age gap and would try to recruit younger participants when possible. Additionally, we collected data both on weekdays and on weekends in an effort to garner a representative sample. These factors are addressed further in the wider discussion.

All participants gave informed consent to voluntarily participate by signing a release. An equal number of participants were randomly assigned to each of the three between-subjects conditions as above (control *N*=20; perspective-taking *N*=20, suppression *N*=20). Data from five participants was lost and is therefore not included in analysis.

All participants were outfitted with an Empatica E4 wristband to measure physiological responses (however, as above physiological data is not reported here). Museum visitors then viewed each of the four exhibited photographs in the same order for one minute. After viewing each photograph, participants were asked to verbally describe the photograph as well as any impressions and reactions they had to the photograph. These observations were recorded using an iPad and were later transcribed by the student research assistants. These transcriptions were checked and occasionally edited for accuracy by the researchers. After describing their impressions and reactions, participants verbally rated how emotionally moved they were from a range of 1-6 (1 being the least moved and 6 being the most moved). These responses were recorded in a notebook.

After participants viewed all four images, they provided their age, gender and if they had any experience with a Native community. Finally, participants were thanked, debriefed about the purpose of the study, and were asked whether they found the experience surprising or enriching.

FINDINGS

Eye Gaze

We examined participants eye movements (lab setting only) to determine how attention was allocated and whether fixation locations differed depending on the prompt (control, perspective-taking, suppression). We were particularly interested in comparing gaze allocations to the eyes to gaze allocations towards more decorative features of the photographs (e.g. clothing, jewelry, hair, ornaments, or background). For each of the fifteen presented photographs, decorative regions were defined as anywhere on the photograph that did *not* include the eyes, nose, or mouth (see Figure 5). Fixations were computed from raw eye movement data files consisting of time and position values, using the EyeMMV toolbox two-step spatial dispersion threshold algorithm.[70]

Figure 5. Predefined regions of interest (ROI). Across participants, we compared fixations to the eye and face regions to fixations to object regions (anywhere outside of the yellow boxes).

For each participant, we computed the average proportion of fixations that were located within the eyes and compared this to the average proportion of fixations that were located within the decorative regions across all 15 presented photographs. We then compared the average proportion of fixations using a 2x3 mixed analysis of variance (ANOVA) with ROI (eyes, decorative features) as the within-subjects factor and condition (control, perspective-taking, suppression) as the between-subjects factor. First, there was a main effect of ROI such that across conditions, participants fixated on decorative features significantly more often than they fixated on the eyes ($F_{(1,107)}= 11.15$, $p= 0.001$, $\eta^2= 0.094$). Although there was no main effect of condition ($F_{(2,107)}= 0.623$, $p= 0.538$, $\eta^2= 0.012$), there was an interaction between ROI and condition ($F_{(2,107)}= 3.255$, $p=0.044$, $\eta^2= 0.057$). Participants in the perspective-taking condition had significantly more fixations in the eyes than participants in the control and suppression conditions ($F_{(2,109)}= 3.152$, $p= 0.047$, $\eta^2= 0.054$) (Figures 6 and 7).
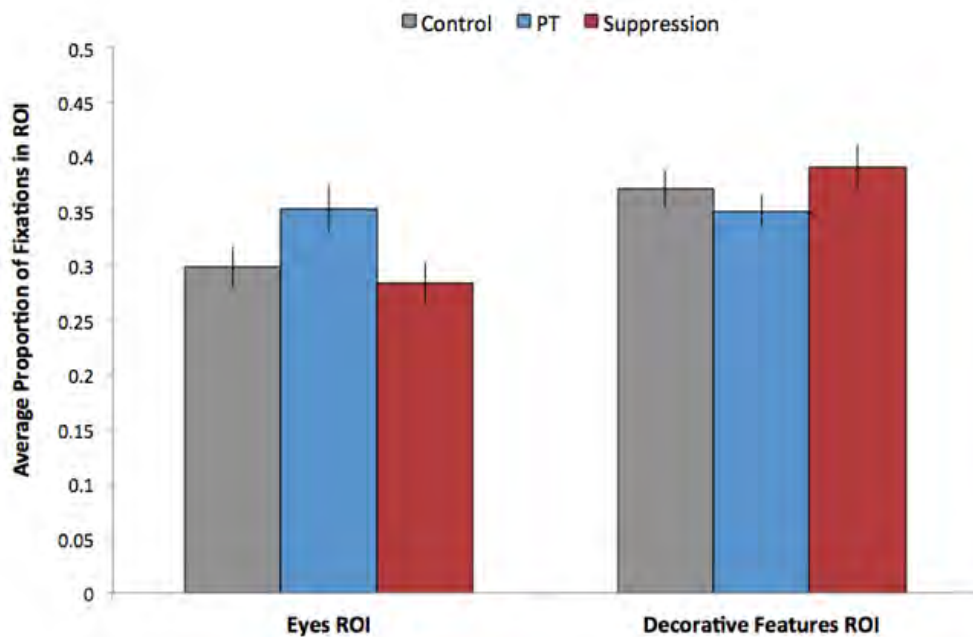
Figure 6. Average proportion of fixations in the regions of interest (ROIs) (eyes, decorative features) based on the mindset condition.
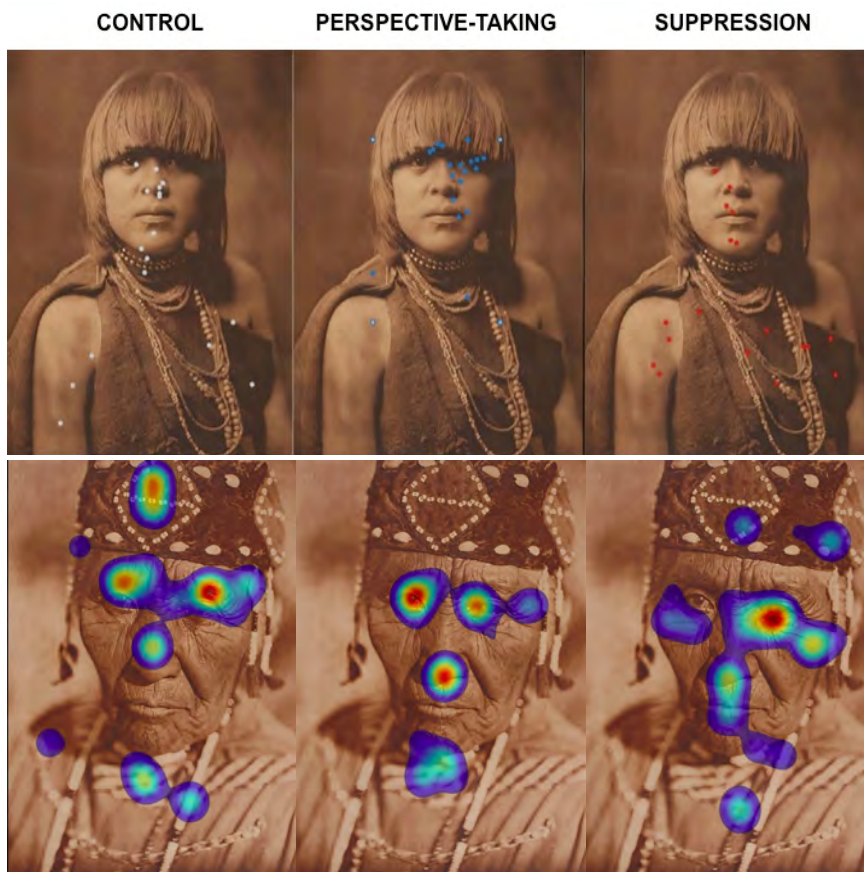
Figure 7. Distribution of gaze allocations (top) and a heat map (bottom) for a representative participant from each condition (left: control, middle: perspective-taking, right: suppression).

In addition to the participants assigned to perspective-taking allocating more time to looking at the eyes of the subject in the lab, many respondents reported in their verbal responses that gazing into another person's eyes was a means of understanding that individual's emotional state, resonating with their experience, and understanding their inner world. The eye tracking results may thus suggest that perspective-taking, by virtue of focusing one's attention towards the eyes more than suppression or control, encourages viewers to appreciate another person's individuality. In contrast, stereotype suppression may encourage the participant to be more detached and create more of a "distance," instead examining other aspects of the image such as the objects more. These results suggest that viewers are less engaged in the personhood of the subject under suppression. For application in museums, this finding may indicate that object-driven exhibits can easily objectify American Indian peoples. The fetishization of the object can result in a lack of recognition of American Indians as contemporaneous communities.

Cultural codes for looking are not universal in nature, so any interpretation of a cross-cultural context should be examined carefully. Rather than respect, eye contact has also

been argued to indicate subservience and control. In a close reading of hundreds of National Geographic magazine photographs, scholars Lutz and Collins argue that, "Those who are culturally defined as weak – women, children, people of color, the poor, the tribal rather than the modern, those without technology – are more likely to face the camera, the more powerful to be represented looking elsewhere," (199).[71] Historian Jane Lydon concludes that, "formal pictorial elements cannot be interpreted mechanically without addressing ... specific contexts, both in an image's production and in its subsequent consumption" (243).[72] The literature on eye gaze in the humanities is utilized unevenly with some theorists considering eye contact a way to demonstrate subservience,[73] and others suggesting eye contact demonstrates agency and defiance.[74] Moreover, because eye tracking primarily measures attention allocation, our speculations here about the role of eye contact in engaging with personhood should be interpreted cautiously. Emotional responses and empathy-related judgments are more directly accessible through participants' self-reports, physiological arousal (not reported here), and verbal and written responses.

How emotionally moved participants reported being

Next, we examined how emotionally moved participants reported being in response to each photograph (self-reports ranging from 1-6). Although we observed no significant difference across conditions and contexts in how emotionally moved participants were, lab participants did report being slightly less emotionally moved (M= 3.64) than did museum visitors (M= 4.32). This is consistent with prior literature in showing that engaging with real objects leads to more emotional investment than engaging with digital representations.[75,76,77,78,79] Additionally, in a pilot version of this research, Occidental College students were tasked with responding to images of objects from the Autry Museum exhibit *Empire and Liberty: The Civil War and the West* as projected onto a screen in the classroom. At a later date, the students completed a similar exercise responding to the objects as installed in the exhibit at the Autry. Similarly, students reported stronger emotional reactions to art when engaging with objects in the museum setting rather than objects as projected onto a screen in a classroom setting.

Word Counts using LIWC

We started our analysis of the qualitative responses by using a validated and reliable text-analysis software. The Linguistic Inquiry and Word Count (LIWC) text analysis software [80] allowed us to measure the number of words participants used that fell into

specific categories: a) positive and negative affect words, b) words associated with stereotypes and conventional narratives, c) words indicating visual descriptions, d) words indicating cultural competency and sensitivity, e) empathy-related words, and f) words indicating curiosity. The 2015 version of LIWC had built-in dictionaries to assess emotion-related words, but we created custom dictionaries for the other categories. Table 1 details each word contained within our custom dictionaries. Differences across categories, conditions (control, perspective-taking, suppression), and contexts (lab, museum) were assessed using non-parametric statistics.

Table 1. Words contained in each custom dictionary made for analysis using LIWC. Note that the * symbol allows LIWC to count words with the same root, but with a different end (e.g. Challeng* = challenge, challenging, challenges).

| Conventional Narrative			Object Description				Eyes/Face		Cultural Competence	Empathy	Curiosity
Alcoholic	Hardlife	Rank	Accessor*	Fabric*	Paint	Stripe*	Cataract*	Line*	Appropriat*	Compassion*	Ambig*
Americanized	Hardship*	Ritual*	Adorn*	Fancy	Pant	Suede	Cloudy	Lip*	Assimil*	Connection	Curious*
Anglicized	Hardwork*	Rooted	Animal	Fashion	Pattern*	Suit	Empty	Mouth	Atrocit*	Empath*	Know*
Authentic	Heritage	Royal	Apparel	Feather	Piercing	T-shirt	Eye*	Nose	Capitalis*	Pity	Learn
Authority	Higher-status	Skinny	Attire	Flannel	Pigtail*	Tassl*	Foggy	Paint*	Coloniz*	Sorry	Relate
Battle	Horse	Socioeconomic	Bandana	Fringe	Pinstripe*	Trinket	Glanc*	Septum	Discriminat*	Sympath*	remind*
Beat	Humble	Spiritual	Bang*	Fur	Pixie	Tunic	Glar*	Skin	Displac*		Story
Been through a lot	Hung*	Status	Bead*	Garb	Plaid	Vest	Glass*	Wrinkl*	Euro*		Uncertain
Bride	Hunt*	Stern	Blanket	Garment*	Pocket	Wampum	Glaz*		Extinct		Unsure
Ceremon*	Ill*	Strage	Blazer	Garnet	Polka-dot*	Wear*	Glisten*		Forc*		Wonder*
Challeng*	Impoverished	Stress*	Bobcut	Hair*	Polo	Wrap*	Gloss*		Govern*		
Chief	Indigna*	Sweaty	Bone	Handkerchief	Poncho		Squint*		Integra*		
Clerk	Lead*	Tough	Bracelet*	Hat	Pony*		Star*		Mistreat*		
Cowboy	Malnourish*	Townsperson	Braid*	Head*	Quaffed		Tear*		Myth*		
Cultur*	Messy	Tradition*	Button*	Hoop*	Rag		Vacant		Oppress*		
Difficult	Modern	Tribal	Checker*	Jacket	Regalia		Watery		Persecut*		
Dirty	Money	Unclean	Cloth*	Jewel*	Ring		Ashy		Reductive		
Dusty	Musty	Underprivileged	Coat	Knot*	Scarf		Brow*		Stag*		
Econom*	Pocahontas	Untamed	Collar*	Leather	Shawl		Chapped				
Empower*	Poor	Warrior	Costume*	Material	Shirt		Cheek*				
Ethnic	Poverty	Weather*	Decora*	Metal	Shoulder		Chin				
Euro*	Power*	Wedding	Drap*	Multi-pattern	Shroud		Crack*				
Exoti*	Pretentious	West*	Dress*	Necklace	Simple		Crinkle*				
Farm*	Primitve	Work	Earring*	Nose-bone	Skins		Crow*				
Gambler	Princess	Weird	Elaborate	Ornate	Sleeve*		Fac*				
Grounded	Ragged		Embellish*	Outfit	Slick*		Forehead				

Our primary interest was to assess whether participants' visual analyses and interpretations reflected empathy and cultural sensitivity. Based on the prior literature, we predicted that participants in the perspective-taking condition would be more empathetic, whereas participants in the control and suppression groups would be more "objective." Specifically, we predicted that participants in the perspective-taking group would use more positive emotion words, would focus more on describing the individual (eyes and face) and less on describing the objects in the photograph (jewelry, clothing), would employ fewer conventional narratives, and would exhibit more cultural competencies, empathy, and curiosity.

Our results were only partly consistent with our predictions (Figure 8A). In the lab setting, participants in the perspective taking group used significantly more affect/emotion-related (both negative and positive) words than participants in control and suppression ($K(2)= 6.097$, $p=.047$). However, in the museum, we did not observe differences in emotion-related word usage across conditions (Figure 8B); Additionally, in both contexts participants in the perspective-taking group used significantly fewer visual descriptions than did participants in control and suppression ($K(2)= 6.097$, $p=.047$).

Consistent with the eye tracking results, these findings demonstrate that perspective-taking leads to more emotion-related descriptions that are both positive and negative in the lab setting and fewer "objective" visual descriptions about the visual and decorative features of the photograph. In contrast, control and suppression seems to lead participants to more "objectively" visually describe the photograph, and to use fewer emotion-related words. This may suggest that perspective-taking leads to increased empathy and deeper emotional connection relative to control and suppression. Contrastingly, control and suppression may lead viewers to, in a sense, "objectify" the depicted individuals; that is, whereas perspective-taking may be encouraging viewers to consider the personhood of the individual in the photograph, participants in control and suppression may feel more emotionally "distanced" from the individual and thus consider the visual features and objects more. A representative participant assigned to suppression exemplified this in their written response:

> "My attention went to the places of contrast, the white of her clothes and the reflection of her hair. I didn't feel that emotional about this photo and I think that is because my attention was more on the details and less on the person."

A.
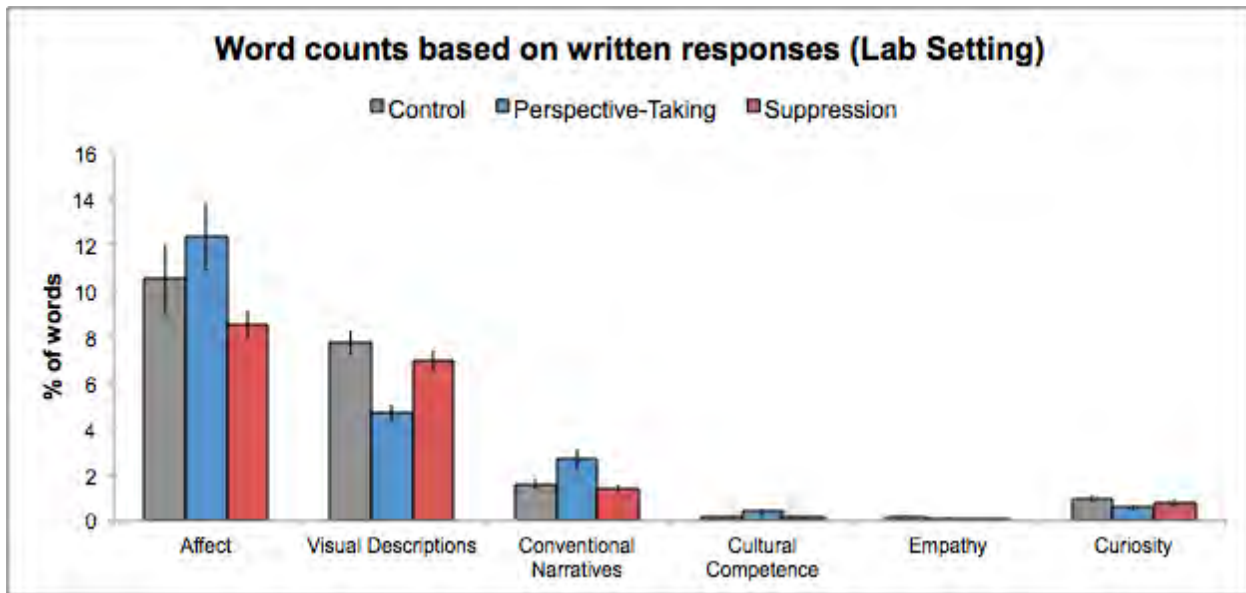
B.
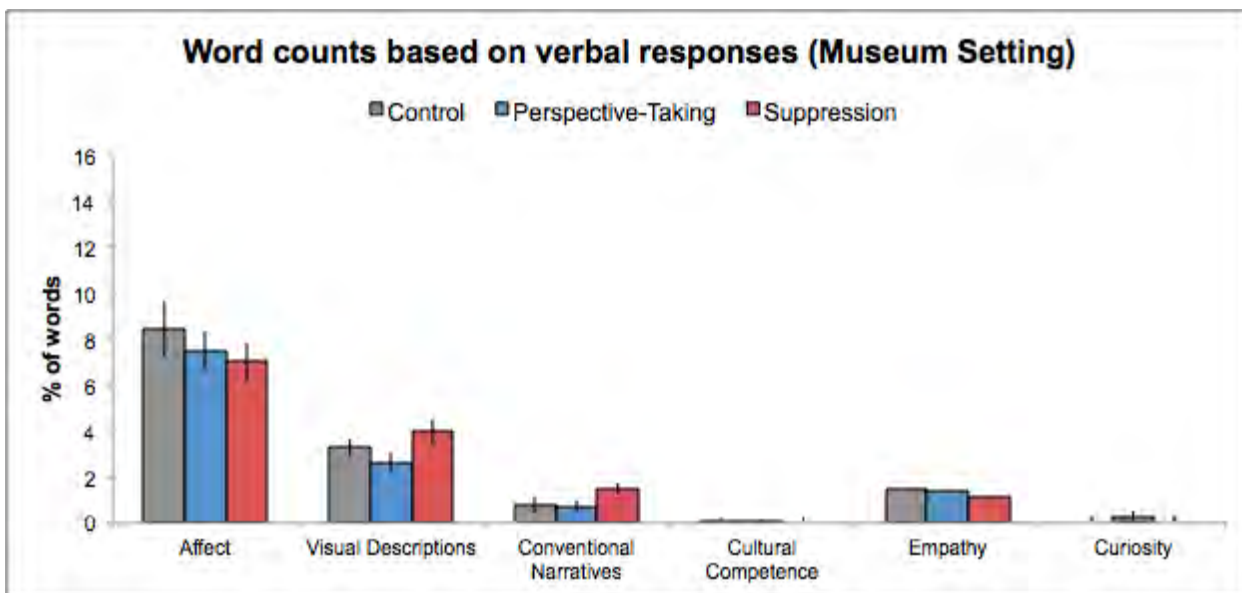
Figure 8. LIWC outputs (average percentage of words contained within each individual's response) for A) lab and B) museum setting.

One somewhat surprising finding is that there were no differences across condition in either the lab or museum in employing conventional narratives, or in exhibiting cultural competency, empathy, and curiosity (Figure 8). In fact, based on this word count analysis, it would seem that participants employed very few conventional narratives, and at the same time exhibited little cultural competence, empathy, and curiosity.

However, the LIWC outputs are limited by the fact that words are isolated and counted, rather than being considered in the context of a longer speech act. More complex and nuanced categories such as conventional narratives may thus appear significantly less often using a simplified word-counting approach. To further investigate whether conventional narratives were indeed employed, and whether the LIWC analysis underestimated the prevalence of these cultural biases due to the nature of the word-counting procedure, we conducted a more thorough coding-based analysis of our qualitative data.

Trends from coding qualitative responses

To complement the LIWC results, three independent raters (the two co-PIs and a trained student research assistant) coded the qualitative data by determining whether any given response reflected one the following specific categories or thought processes: a) conventional narratives, b) visually descriptions, c) emotion-related judgments, d) self-related judgments e) curiosity and uncertainty, and f) historical assessments. The criteria for coding is outlined in Table 2 and the summary of responses is outlined in Table 3.

Table 2. Qualitative Data Coding Criteria.

Conventional Narrative	- Employs narratives and biases they already have. May seem like descriptions but there is no evidence in photograph to support them. - Seems to be jumping to a conclusion/creating a closed narrative. - Creates fantastical or exoticizing narrative. - Employs own standards to judge the person ("The jewelry or headdress they are wearing suggests they have a high status in society") particularly when statements are wrong. - Seems to have small amount of knowledge that is applied inappropriately under the guise of the pan-Indian model ("I knew a Native person once," "I just read a book on Natives," "I just bought a pot in New Mexico," "I always buy jewelry from Indians." - When there are <u>two</u> of the following: - Any reference to a subject looking "tired," "worn out," or "exhausted." - Any reference to a subject having "been through a lot," "survived so much," or "had a tough past." - References to a subject looking proud, confident, or like a leader. - Descriptions of subjects as hard-working, strong, resilient. - Descriptions of subject's solitude, loneliness, or isolation. - Wisdom and age/ youth and innocence.
Visual Descriptions	- Any reference to subjects' attire, hairstyle, or headdress. "Objective" descriptions of what can explicitly be seen: Describing the quality of the photograph/coloring. - Age, gender, physical features (e.g. eyes are glassy). - Modern/traditional: but only insofar as it descriptive of what can be seen (modern clothing vs. traditional clothing).
Emotional/ Affective Judgments	- Positive: Describe the subject positively: "happy," "proud," "strong," "powerful," "wise," "solemn knowledge," "calm" (Empathy: feeling compassion/understanding). - Negative: Describe the subject in a negative light: "annoyed," "bad temperament," "strict," "angry," "not happy," "twisted," "miserable," "tired" (Sympathy: feeling pity for the person).
Self-emotions/ relating to self	- Relates the subject to something/someone in their lives. - Describes their own emotional state: - Positive: Emotions felt are positive. "I liked this piece/photograph." - Negative: Emotions felt are negative ones (sadness, fear, anger). "This image made me feel sad." - Neutral: "I did not feel anything," "I didn't feel particularly strong about it."

Curious/ Unsure	- Uses of the words "curious," "questioning," or "wonder." - Demonstrating curiosity, wanting to know more about the subject's story, not jumping to conclusions. - Feeling enlightened/learned something new. - Use of open-ended questions. - Questioning whether the subject wants to be in the photograph or is forced into taking the photo.
Historical Assessment	- Responses that include references to American imperialism, colonization, forced assimilation, or oppression. - Responses to the time period specifically: "This is 1945…" - Placing the photograph into history or questioning time frame ("I wonder when this was taken.") - Commenting on cultural norms.

Table 3. A summary of the percentage of responses by category, context (museum and lab), and condition (control, suppression, perspective-taking).

Museum Data and Lab Data	Control	Suppression	Perspective-Taking
Presence of Emotion-related Judgments	77% (63%)	69% (63%)	85% (77%)
Presence of Visual Descriptions	61% (61%)	51% (61%)	41% (37%)
Presence of Conventional Narratives	52% (40%)	45% (36%)	39% (59%)
Exhibiting Curiosity/Uncertainty	20% (14%)	5% (14%)	10% (7%)
Presence of Historical Assessment	18% (7%)	10% (6%)	13% (7%)

Consistent with prior research, verbal responses at the museum were overall more emotional in tone than they were at the lab. Across both contexts, perspective-taking led to more emotional/affective judgments than did control or suppression. There were also significantly fewer visual descriptions in the perspective-taking group than in than control or suppression at both the museum and the lab. This result is in line with the eye tracking and and LIWC results suggesting that perspective-taking may make viewers more focused on the person and their inner states, whereas control and suppression may make viewers focus more on visual descriptors such as objects.

Half of all respondents in both the lab and the museum expressed cultural bias by use of conventional narratives. Two representative samples below (one from the lab and one from the museum) indicate exoticizing and cultural fantasy:

> *"He is very weathered. He seems to be connected with nature. He almost seems confused about why he is being photographed. I could see him as a dad who is stern but also loving. The chief in pocahontas is my immediate first thought when i saw the image. I could see him riding a horse and being in battle."* (In response to CUR. 1726)

> *"I think this is a really odd looking image in a way. The hair looks butchered. It looks like it's almost super-added, wig-like, and so you have the child staring out from under this a little bit malevolently. Kind of a disturbing shadow across the top of the forehead there, so the child appears to be kind of looking out at us with a false pride. Then there's all the bling, you know. And that looks almost sort of classic dutch baby-the girl with the pearl earring. It's this very odd juxtaposition and that image. But the total effect is kind of weird."* (In response to CUR.1681)

Particularly troubling is that lab participants who took the perspective of the individual employed *more* conventional narratives than individuals in the control or suppression groups. Often, these conventional narratives were accompanied by a visual description suggesting that participants used the visual information to justify and confirm their biases. Example responses included:

> *" [There is] A sense of yearning [in this individual]. Poor, sad."* (In response to CUR.4)

> *"[This man] May not be friendly to get along with. Bad temperament. Strict."* (In response to CUR.281)

> *" Old, poor, painstaking, experienced, she seems to have a hard life."* (In response to CUR.68)

> *"I hold back my tears and anger as I remember someone I have lost."* (In response to CUR.218; *Note that here the respondent is narrating the perspective of the subject in the photograph)

Moreover, responses rarely featured open-ended questions, rarely indicated curiosity or comfort with ambiguity, and few historical assessments appeared even in the museum where more historical context was present. Although viewers assumed the historic images

were old and commented on the dichotomy between modern and contemporary, they rarely historically contextualized individual's lived realities, which included warfare and genocidal political policies. If this recognition was present, the implications were minimized. A notable exception indicating historical assessment, empathy, curiosity, and cultural competence was:

> *"Well, one was photographic. That wide open shutter so the face is exquisitely in focus and everything else is blurred out a bit. Also the timing, it being 1925 and a Modoc, this isn't that far after most her tribe would have been exterminated thanks you to the California Government. You can see all of the concern, the wisdom, the pain, all etched in that face."* (In response to CUR.1545)

Other participants did seem to both admit their lack of knowledge and asked questions. These open-ended and historically-framed responses should be a goal of future educational interventions.

> *"Similar to the last image the woman seems expressionless and I believe the photograph had the intention of displaying her outfit and jewelry. My reaction is to wonder why she is wearing that outfit and what is she about to do? Or if she's about to do anything pertaining to that outfit at all? How does she feel being photographed in her Native look?"* (In response to CUR.40)

CHALLENGES AND OPEN QUESTIONS

Taken together, our data (including eye tracking, textual, and coding-based analyses) suggests that although perspective-taking can lead viewers to interpret American Indians in a social, emotional, and human-centered manner, these interpretations still tend towards an unrealistic personhood that we, as researchers believe reflects cultural bias. This set of findings appears to be in stark contrast with the research demonstrating positive impacts of perspective-taking on decreasing cultural biases. Below, we consider several ways to explain this seeming discrepancy, and provide a set of recommendations for researchers and educators.

The metacommunication of the museum

Rather than blame the viewer for a lack of curiosity, or for harboring stereotypes (conventional narratives), we must interrogate the museum as a place of didactic rather than dialectic learning. The authoritative position of the museum as an institution is not altogether transparent to the average visitor, yet a type of "double bind" exists in which a visitor's actions are thwarted by metacommunication messages. In other words, a museum visitor cannot communicate to us about the communication of the museum. "The individual is caught in a situation in which the other person in the relationship is expressing two orders of message and one of these denies the other" (208).[81] On an abstract level, the museum is the prime authority, yet in our data collection we asked the visitor to question that authority by prompting them to do something different in the exhibit location - to take the perspective of the individual in the photograph or to suppress and avoid thinking in a certain way about the photographic subject. These injunctions may be at odds with the unspoken mandate of the museum and may have inhibited or otherwise impacted both our ability to recruit a wide range of participants and the type of information that the participants conveyed.

Museum visitor viewing habits

Viewers at the Autry Museum had difficulty observing the photographic prompt for one minute (we originally had required two minutes). This inability to focus for an extended period of time is a hallmark of our contemporary society, and not particular to museums. However, the sheer number of objects on display at any one time in a museum and the hurried pace of a contemporary viewer frequently results in a frantic effort to see every exhibit. A museum with a large collection is often encouraged to show as much of that collection as possible to the public, however the creation of an exhibition necessitates selectivity, not only because of the value of creating an accessible educational message for the public, but also because objects are fragile and cannot endlessly be on display due to conservation care.

Moreover, it seems that the field of museum education itself is moving towards a form of "customer satisfaction." Participant-oriented values see the museum as a place that serves others (and their desires for enjoyment and belief confirmation), rather than as a place that changes people for the greater good.[82] This vision sees the museum as "a hyper-reality—a trackless realm to play in, like Yosemite—that offers opportunity for engagement in multiple ways, with the capacity to be intense and powerful" (110).[83] The desire to please and wow an audience rather than educate appears to be a prevalent

narrative of the past two decades.[84] From an American Indian studies standpoint, the thought of having one's cultural heritage serving as a playground is disturbing.

These tensions in museum education between the democratization of viewing, the amount of stimulation given, the sheer quantity of objects displayed, and the guidance of museum educational and curatorial staff is a backdrop for future discussions of viewing habits.

Choice of stimuli

One potential way to explain the striking frequency with which participants employed conventional narratives is by examining the specific selection of photographs we chose. Curtis' photographs are historic, which may have made our stimulus set less neutral than we anticipated and in turn led viewers to reify their preconceptions and biases about Natives as non-contemporaneous peoples. A related issue is the "pan-Indian" nature of the photographs, signaling perhaps a flattening of the great tribal diversity and uniqueness that did and does exist amongst the 500+ tribes in the U.S.

Consistent with these claims, research has demonstrated that attempts to to take another's perspective may activate, rather than inhibit preconceptions and biases. People generally use social information they already have stored in memory to make rapid judgments, so it is unsurprising that the perceived stereotypicality of the person they are engaging with — that is, how strongly the other person seems, upon first glance, to fit into the stereotypical group — influences the degree to which conventional narratives are employed. If the subject of the gaze is not characteristically "different" from the viewer, the likelihood of endorsing biases during perspective-taking is decreased. Somewhat paradoxically, participants viewing a photograph of individual who is characteristically "other" either by looks or actions seems to activate more stereotypical assumptions even as the viewer attempts to take the perspective of that person. [85] Our choice to use historic photos may have made stereotypes more salient, resulting in viewers assigned to perspective-taking exhibiting *more* cultural biases than control groups who were not prompted to exercise empathy in looking.

Future research employing a more contemporary stimulus set (color photographs, contemporary dress, tribal specificity and/or the use of full-body photographs) may result in different findings. However, we emphasize that although we take these objections seriously, we are not convinced that the historic one-dimensional nature of Curtis' photographs or the portrait convention of the images explains our findings. The popularity

and prevalence of Curtis images of American Indians have rendered them typical and useful as generic images outside of chronological attributes. And, research has demonstrated time and time again that non-Natives perceptions and interpretations of contemporary Native Americans are riddled with cultural bias. Therefore, while it is interesting and important to use a contemporary stimulus set, we predict that without the appropriate conceptual tools, conventional narratives will remain.

Perspective-taking may be ineffective for increasing cultural competence

While most researchers focus on the positive outcomes associated with perspective taking, several studies (including a recent large-scale meta-analysis) have revealed that although perspective-taking activates positive attitudes about others from an outgroup, stereotypes continue to be maintained and unrevised (partly described above). Particularly relevant is a phenomenon coined the "Ultimate Attribution Error," which refers to one's tendency to believe that negative outcomes are caused by an individual's dispositions or traits when they are from an outgroup, but to believe that situational factors caused negative outcomes when individuals are from an ingroup. In contrast, positive outcomes are attributed to situational factors for outgroups, but to dispositions for members of an ingroup.

Interestingly, perspective-taking lowers the likelihood of these attribution errors. For example, research shows that after an African American male described social difficulties he experienced because of his race, participants who adopted his perspective reported feeling more empathy, attributed greater importance to situational causal factors, and expressed more favorable attitudes toward African Americans in general than did participants tasked with remaining objective and emotionally detached. [86] However, although perspective taking increased situational attributions, it did *not* decrease dispositional attributions. This means that while participants increased their tendency to attribute the difficulties the black man experienced in college to situational factors (e.g. systemic racism), their tendency to attribute those difficulties to his disposition remained intact. Similarly, while perspective-taking led to an increase in pro-black attitudes in general, anti-black attitudes remained and did not decrease.

Additional empirical evidence suggests that the self-other merging that happens during perspective-taking is bidirectional in that individuals who put themselves "into another person's shoes" ascribe positive characteristics about themselves towards others, *and*

ascribe negative characteristics, such as stereotypes about others onto themselves. This further supports the idea that perspective-taking can lead to positive attitudes about others from an outgroup, at the very same time as stereotypes are maintained.[87]

Although we have not yet analyzed our data with this particular lens, it is conceivable that in our study participants who adopted the perspectives of American Indians justified the conventional narratives they employed with more situational factors than control or suppression. However, we would predict that the rate at which people attribute stereotypic behaviors to American Indians' dispositions would not simultaneously decrease with perspective-taking. Such a finding would align with prior research and would provide evidence that while perspective-taking can have positive impacts such as increased empathy and compassion, cultural biases can simultaneously remain entrenched and unrevised.

Preliminary evidence for this comes from some participants assigned to perspective-taking who seemed to self-other merge so much so that they described the American Indian in the photograph using a first-person perspective (e.g. "I am neutral. My life has always had structure and I have never questioned it. Routine gives me purpose. I enjoy simple things, like animals and nature,"). Such responses clearly show that perspective-taking mechanisms and empathy are activated, that both situational and dispositional attributions are made, and that biases and damaging judgments remain.

> **One remedy alone for teaching cultural tolerance is insufficient. Educational interventions must be culturally specific.**

These studies and our findings suggest that perspective-taking and empathy interventions may be overly broad and inappropriate conceptual tools for researchers and educators to employ, especially for non-Native viewers who often have entrenched cultural biases. Psychologists Tal Eyal, Mary Steffel, and Nicholas Epley argue in their recent comprehensive study that "understanding the mind of another person is … enabled by *getting* perspective, not simply *taking* perspective."[88] They provide systematic empirical evidence showing that although perspective-taking has interpersonal benefits (as described throughout this report), it does *not* increase one's ability to accurately understand the actual content another person's mind. Only when participants have social knowledge available can perspective-taking enable them to make accurate inferences

about others. When participants do not have the adequate knowledge or framework, they must gather new information in order to make accurate inferences rather than utilize their existing (and biased) knowledge of others.

Crucially, Eyal, Steffel, and Epley also show that their lack of findings supporting perspective-taking as an effective method for reducing stereotypes at the same time as increasing one's cultural competencies, are not because their perspective-taking manipulations were not robust. In their study, participants in perspective-taking conditions reported feeling confident that they were able to adopt another's perspective and reported trying harder to do so than participants in the control conditions. Similarly, in our study, we don't believe that the fact that perspective-taking failed to reduce stereotypes is the result of an ineffective manipulation on our part. We have no reason to believe that participants struggled to "put themselves into another person's shoes," and have evidence (e.g. several participants using first-person narration) that they feel they succeeded. Rather, we argue that a generalized method like perspective-taking while somewhat effective for increasing empathy and emotional investment, is simply not suited for decreasing conventional narratives.

RECOMMENDATIONS

In the several public presentations of this work (see list below), it was notable that the audience typically offered critiques questioning the methodology of the study. It was rare that an individual would accept the results of the research. A skeptical reaction was anticipated, given the stretching of the boundaries of each of our disciplines. In writing up the results and accounting for some of these concerns below however, we wondered if this skepticism indicated that the audience apparently desired different findings, meaning they preferred that there was not a prevalence of bias and a fictional one-dimensional characteristic associated with the Native subjects. Could these reactions mirror findings cited throughout this report indicating the American public is largely unaware of their own internalized biases, especially in relation to American Indian peoples?

Based on the considerable evidence we have provided both from prior research and through our own data, we believe it will take a concerted effort that is more complex and nuanced to undercut conventional narratives. Our major recommendation is two-fold.

1. Museum visitors viewing Native American exhibits should be encouraged to delay their interpretations of Native peoples,

2. Museum visitors viewing Native American exhibits need to be rewarded for uncertainty.

This study advances the idea of "not knowing" as a potentially fruitful premise from which to build productive interventions in creating tolerance for difference. The acceptance that one does not know a body of knowledge may not be an intuitive stance in an era where every answer may be found with a search on a smartphone. Additionally, in a competitive commercial society, expression of certainty is a hallmark of self-possession and leadership. However, these traits are not productive in a learning environment with new and challenging material. Uncertainty or forestalling closure in a learning encounter can enhance cultural competence.

> **Museum visitors should delay their interpretations of Native peoples.**

This approach of forestalling certainty as a means of reaching a higher truth is borne out both in the sciences and in Indigenous studies contexts. Our research draws on studies that demonstrate the utility of developing resistance to closure and building tolerance (and even enjoyment for) uncertain outcomes. Medical humanities programs,[89] for example, have successfully integrated the arts into their curricula as a mechanism to help students and professionals to increase their empathy, hone their observation and analytical skills, build their imagination and capacity to be more open to ambiguities, and foster cultural sensitivity by cultivating proper self and other regarding dispositions.[90] [91] [92] [93] Similarly, Lonnie G. Bunch III, the Director of Smithsonian's National Museum of African American History and Culture Museum (NMAAHC) recently stated,

> "What I want is a museum that helps the public embrace ambiguity. Because if you embrace the ambiguity, then it's about the learning, it's about realizing that there's not one answer to anything. And to realize that complexity is the way to understand who you are today."[94]

This move to uncertainty also finds relevance in Indigenous Studies. Scholars at the University of New South Wales assert that decolonial goals cannot be enacted simply by confronting Western pedagogies. They speak of prioritizing learning dispositions that encourage openness and less certain positions because such thought requires more complex and nuanced argumentation and "prevent[s] slippage into forms of thinking and critical analysis that are confined within dichotomies between primitivism and modernity; and as a way to avoid the closed-mindedness of intellectual conformity" (121).[95]

We believe the value of uncertainty can productively extend to museum professionals responsible for exhibit content. In addition, and in line with other truth and reconciliation efforts globally, institutions can benefit from adoption of forgiveness platforms, recognizing harm before renewing relationships.[96] Further, museum professionals should be more transparent about their exertion of authority and take care to limit that authority in all of their educational outreach, community involvement, press, captioning, and exhibition techniques. Future experimental research which considers the individual visitor experience may provide important insights that are more productive for change-making than the current norm of community outreach efforts alone. We are thus advocating actions beyond the standard of "utiliz[ing] ...current cultural stakeholders to give voice for their culturally valuable historical objects" (169).[97]

Moreover, our recommendations call for *culturally specific* interventions for bias, concluding that a generalized approach is inefficient and inappropriate as a tool for social change. In the most simplistic terms, the U.S. has collectively recognized that slavery as an institution is wrong and that dressing in blackface is socially inappropriate. However, the U.S. has not come to terms with its genocidal policies against Native populations and still considers dressing in redface acceptable. Because of this historical amnesia and continued discrimination, one remedy alone for teaching cultural tolerance is insufficient. We strongly contend that a universalizing discourse for museum interpretation is not only ineffective, but that it is procedurally wrong to impose Western institutional norms to the diversity of approaches for collections care and interpretation. A broadening of perspectives is needed in curatorial work, not a just simple inversion of dominant discourses.[98]

While we make recommendations for museums to substantially alter their standard methods for interpreting American Indian culture, it must be recognized that the institution of the museum may be limited in its present form to enact these types of changes. Anthropologists Ivan Karp and Corinne A. Kratz propose the concept of the "interrogative museum" defined as "moving away from exhibitions that seem to deliver a lecture...to a

more dialogue-based sense of asking a series of questions" and to "develop a plural sense of answers to the enduring and the changing questions that museums ask.." However, the authors readily concede "Admittedly this may not be fully realized in any real world situation, but it is a goal towards which to strive" (281).[99]

FINAL REMARKS

In his essay titled "Flies in the Buttermilk: Museums, Diversity, and the Will to Change," (originally published in 2000), NMAAHC Director Lonnie G. Bunch III calls out the "great chasm between the profession's stated ideas and its daily practices and priorities" (106) regarding diversity in the museum.[100]

In 2018, we continue to witness a desire for inclusion and diversity in the arts and museums, yet with a lack of demonstrable proven progress. With this NEA study, we hope to make a contribution towards providing tools that museum professionals, educators and arts professionals can use to encourage audiences to engage cultural difference in meaningful ways. *Seeing American Indians* demonstrates how experimental multidisciplinary research can target visitor outcomes and identify productive means of engendering empathy through arts encounters.[101]

> **Museum professionals must embrace uncertainty as a guiding principle for interpretation.**

PROFESSIONAL AND PUBLIC PRESENTATIONS
(* denotes student author)

We appreciate the feedback provided by the organizers and participants of each of these conferences and workshops.

2016

- Sherman, A. & Mithlo, N.M. (August 2016). "Expanding Cultural Competencies for Interpreting American Indian Subject Matter in Museums through Cognitive Perspectives." Talk presented at 11th International Conference on the Arts in Society. Los Angeles, CA.

2017

- Sherman, A., & Mithlo, N.M. (October 2017). "Seeing American Indians: Self, Other, and the Role of Visitor Mindsets in Museums." Invited talk and paper workshop at the Autry Museum of the American West, Los Angeles, CA.

- Mithlo, N.M. (October 2017). "Self and Others: Why Not Knowing May be a Good Thing." Invited talk presented at Phi Betta Kappa (En)Lightning Talks, Los Angeles.

- Cupo, L.*, Mithlo, N.M., Sherman, A. (November 2017). "Seeing American Indians." Poster presented at Psychonomic Society 58th Annual Conference. Vancouver, Canada.

- Hossain, E.*, Cupo, L.*, Silverstein, I.*, Mithlo, N.M., Sherman, A. (November 2017). "Seeing American Indians: When Physiology Meets Art in the Museum." Poster presented at SACNAS Conference. Salt Lake City, UT.

2018

- Mithlo, N.M. "Seeing American Indians." (October 2018). Talk presented at University of California Los Angeles, Institute of American Cultures Fall Forum.

- Mithlo, N.M., Sherman, A. "Seeing American Indians: Self, Other, and the Role of Visitor Mindsets in Museums." (November 2018). Talk presented at the American Anthropological Association Society for Visual Anthropology Visual Research Conference.

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