# RESPECTFUL AND RESPONSIBLE STEWARDSHIP: MAINTAINING AND RENEWING THE CULTURAL RELEVANCE OF MUSEUM COLLECTIONS

## Sanchita Balachandran\* and Kelly McHugh<sup>†</sup>

The evidence-room, he told me, was off-bounds, sealed and rarely opened. It belonged to the Nawab of Bahawalpur, and the local police used it until the 1980s but it had been sealed since then. 'We just make sure that it still stands.'... The space was crowded with objects, each tagged with a sin. The murder weapons, or weapons confiscated. The booze. The cutlery. They told me not to touch anything since it would be "dangerous." The archive had a topo-nomology: some objects were higher than eye-gaze and seemed to have lingered the longest. I saw weapons long superseded in their effectiveness at killing or maiming. There were files, reams of paper, and (I saw with the sinking heart of a historian) rolled up manuscripts. I made no move. There was no desire to touch, yet. The dust that had settled on everything was indicative of the life in this archive, the stories that I wanted to excavate. Here was a history of policing, a repository of all the sins in a small corner of the world. Every family's internal life was external here. Someone like me, someone obsessed with stories, how long could I live in this room, by myself, I wondered.

-Manan Ahmed Asif, Idols in the Archive

#### INTRODUCTION

Historian Manan Ahmed Asif's reaction upon gaining serendipitous entry into an aging police evidence room in Bahawalpur, Pakistan, is not unlike the experience of any museum specialist seeing a long-neglected storeroom for the first time. There is the immediate desire to understand the nature of the objects in the collection – to see the identifications noted on attached tags, map their physical locations and hierarchical

<sup>\*</sup> The Johns Hopkins Archaeological Museum, Baltimore, MD

<sup>&</sup>lt;sup>†</sup>The National Museum of the American Indian Cultural Resources Center, Suitland, MD

positions within the space, and assess their general state of preservation. Collection managers and conservators might first consider how objects are stored. Are objects in stable storage containers; are they physically accessible; are there characteristic odors – mold, mildew, off-gassing – of deterioration? Given our professional training, this response is to be expected, but beyond these physical considerations lie bigger concerns for the historian Asif, and for museum professionals as well. Responsible, and indeed respectful, storage of museum collections requires us to acknowledge them as more than mere assemblages of objects. Our responsibility to a collection goes beyond "just [making] sure it still stands" (Asif 2014, 10). Instead, it requires that we recognize there is "life in [the] archive," and this life could be "excavated" by "someone obsessed with stories." What place does storytelling have in a volume dedicated to preventive conservation, where the emphasis lies on protecting collections from harm? Storytelling and the maintenance of the stories, meanings, and values that museum objects contain is at the core of what museum professionals should strive to achieve. A fundamental responsibility of collection managers is to ensure that objects' stories remain accessible through our care.

In recent decades, the anthropological and museological literatures have considered the ways in which objects, and specifically objects in collections, embody layers of values, meanings, and relationships (Appadurai 1986, Kopytoff 1986, Pearce 1992, Clavir 2002, Sullivan and Edwards 2004, Ingold 2007, Tilley 2007, De La Torre 2013, Atkinson 2014). Values, meanings, and relationships may be interconnected in intricate ways that are further complicated by the manner in which objects are held, used, and displayed. Collecting institutions have historically held the authority to store, classify, interpret, and exhibit the objects they contain. Over the past 30 years, however, this authority has been challenged through federal legislation in the United States such as the Native American Graves Protection and Repatriation Act (National Park Service 1990), and international codes and charters including the Burra Charter (Australia ICOMOS 1979); the Nara Document on Authenticity (UNESCO 1993); the Convention for the Safeguard of Intangible Cultural Heritage (UNESCO 2003); and the United Nations Declaration on the Rights of Indigenous People (UNESCO 2007). These documents assert the rights of communities to engage with and manage their cultural heritage. They further underscore the many meanings that cultural objects and sites embody, emphasizing that these meanings must be maintained and allowed to evolve in a preservation process that includes the active participation of multiple stakeholders. Furthermore, only through collaborative approaches to preservation can these objects or places once again become culturally relevant. While these laws and charters evidence important political and ethical shifts, the practical work of democratizing the preservation process remains to be instituted. Most museum professionals are trained to maintain and protect collections in such a way as to accord them a sense of sanctity, offering a select group of specialists access to these inner sancta, and limiting the number of people who have the authority to tell stories

about these collections. How are we to respond to objects that have stories to tell, and to those who want to tell them?

Our insistence on recognizing and actively preserving these stories grows out of our professional work with collections that contain Native American cultural material in a national museum (McHugh, The National Museum of the American Indian) and ancient archaeological material within a research university context (Balachandran, The Johns Hopkins Archaeological Museum). On the basis of our experiences engaging with various stakeholders – descendant Native communities, academic researchers and students, and artists, among many others – we argue that all collections in storage possess a dormant power and agency, and that this power has the potential to be revived through thoughtful, flexible, and evolving museological practices. Furthermore, facilitating access and use of stored collections by stakeholders not only transforms our understanding of collections and how they should be preserved by the collecting institution but also transforms the stakeholders and the museum staff. We also insist that collaborating with stakeholders to contextualize, preserve, and revive stored collections is a fundamental responsibility of museum professionals no matter what the nature of their collections may be.

### RESPECTING ALL COLLECTIONS

The notion of respectful care of museum collections has a particular history within the United States. Following the passage of NAGPRA in 1990, museums holding Native North American human remains and associated funerary, sacred, or ceremonial objects were required to contact and invite Native American people to examine collections long held in inaccessible storerooms. This new dynamic challenged long-standing unequal conventions of ownership and authority, allowing Native perspectives on storage, care, and conservation to begin to enter the museum. Initially, wrote Sven Haakanson, founding executive director of the Alutiiq Museum, "[W]e [were] asked to fit the sacred into a tiny box so that others [could] manage our cultural property through policies" (Haakanson 2004, 123). Over the past quarter century, these early dialogues resulting from the passage and implementation of NAGPRA have resulted in ongoing relationships between museum staff and Native people. In the best cases, these relationships developed into a shared authority for cultural material, with new collection policies instituted to ensure the appropriate physical and cultural care of objects.

The inclusion of Native perspectives as a result of NAGPRA has raised awareness among museum professionals that collections – no matter what their "legal" ownership status – do not belong solely to the museum. In some cases such as The National Museum of the American Indian (NMAI), the institution is considered a steward rather than owner of the collection. The distinction between ownership and stewardship requires museum professionals to have a heightened awareness of their role as temporary caretakers with responsibilities and accountability to stakeholders beyond the museum's walls. This approach is not

unlike that seen for modern and contemporary art collections, where the artist or artist's estate is routinely consulted on matters related to artist intent in the preservation or display of artworks (Wharton 2015). Some collections such as libraries and archives may routinely prioritize their stakeholders' (e.g., readers') demands for access to objects by conserving or digitizing more heavily used items. Thus, for certain types of collections, stakeholder engagement and accountability are expected and in fact make the collection useful and meaningful in contemporary society (see Rose, Hawks, and Waller, chapter 3, this volume).

From historical textiles (see sidebar 1) to industrial objects (sidebar 2), archaeological materials to Native objects (sidebar 3) and scientific collections (sidebar 4) all

# SIDEBAR 1 Tensions in Store

The rhetoric of secrecy and revelation is embedded deeply in the image of the museum. As played out in movies, novels, and on television, museums and their storage spaces are depicted as intriguing places of concealment and revelation, mystery and knowledge – with an occasional edge of horror. But with this tantalizing glimpse of hidden things, there also comes frustration, even anger and concern over the appropriate use of public money and responsibilities for ensuring appropriate access for the public and scholars.

Increasingly sophisticated knowledge is helping museum staff manage collection storage and their environment in an effective and sustainable manner. This necessary engagement with the physical and economic reality of preserving material evidence of human activity means that it can be difficult to step back to look at the idea of storage. Considered as a cultural practice, museum storage is the tangible realization of an intangible vision. Stores represent a sorting of the material world, an object library that reflects a range of highly complex intellectual frameworks, rich with embedded cultural assumptions. Such collecting of the world may be seen as the last gasp of the Enlightenment's encyclopedic vision of an ordered, systematic world – containing, controlled, and managed according to clear principles and practices. This is, of course, an impossible ideal, ignoring the central paradox that museum storage needs to be safe and secure while also accessible and searchable.

Looking at two examples of categorizing objects is illuminating. The British Social History and Industrial Classification (Holms 1997) is widely used in social history collections. Its main aim is to link objects and their records, but it has also been used as the basis for the physical arrangement of collections in storage. Artifacts are first sorted into four sections: community, domestic and family life, personal life, and working life. These are further divided into more specific categories, each with a numeric code. To use examples from their website: smelling salts would normally be categorized as 2.7 (domestic and family life) but smelling salts associated with a known individual would be 3.72 (personal category) (Social History Curators Group 2015). The social life of the object can thus be tied into the record, whereas the physical location may be driven by the decision to locate the artifact in the sections of storage devoted to domestic and family life or dedicated to a specific person. Fine distinctions may be necessary: "a household apron could be . . . [2.52 (Dish washing)

or 2.532 (Clothes washing)] but could also be worn whilst cooking (2.65) . . . "(Holms 1997). In contrast, the Vocabulary of Basic Terms for Cataloguing Costume divides dress by function (main, outerwear, accessories), gender (male/female) and age (adult/infant) and then by its relationship to the body (above, at, or below the waist, etc.) (ICOM Costume Committee 2013). So the smelling salts in this system could be categorized as accessories, female, and above the waist while the household apron might be female, a protective garment or accessory, above and/or below the waist, and stored accordingly depending on the category considered most significant. Even such a brief comparison of ways of categorizing the world presents the difficulties and ambiguities of such a task as well as revealing the different worldviews implicit in these systems.

Life is less tidy than any fixed classification system. How, for example, should the components of a wedding dress be stored once they have been categorized: by individual, by function, by type, or by place on the body? Should related visual and archival evidence be kept with the dress? The pragmatic approach of storing dress, shoes, veil, and gloves with photographs and mementos has a certain logic and makes retrieval easy when family descendants wish to see the outfit but raises obvious concerns.

The conservator's view of appropriate categorization may present an altogether different view. The realities of materials, size, weight, condition, and the need to minimize degradation rates on the basis of the physical needs of different materials for different storage environments may conflict with an intellectual framework for location in a store. Fur garments and artifacts may be better stored apart, regardless of categorization, for effective pest monitoring. Equally, should degraded artifacts be retained? This is where value systems within the museum may themselves come into conflict and the categorization system needs to take account of a wide variety of factors. How and when should the decision be made to dispose of an artifact on grounds of poor condition when it may have intangible associative values or could be successfully conserved if time and funds permitted?

Museum storage is a contested space, a source of potential conflict within the museum itself – who holds the all-important keys or codes? The question of access by those outside the institution and how this can be achieved effectively concerns hard-pressed museum staff, makes funders anxious, engages the media eager for a quick sound bite, draws in national and local politicians, and perplexes the public. Practices are undoubtedly changing. Suzanne Keene (2005) discussed the rise of open storage and collection centers. Miriam Clavir (2002) has mapped the issues involved in reconnecting First Nations and their material heritage. Radically, Kieran Long, the senior curator of contemporary architecture, design, and digital at the Victoria & Albert Museum, asserts that "In the future, though, we aim to remove every barrier possible between the public and the collections . . . perhaps it might even be worth changing our policies on conservation to enable such access" (Bennes 2014).

Permeable storage may almost be with us. Conservators enshrined public engagement alongside their duty of care to artifacts in the resolution submitted to the ICOM-CC 15th Triennial Conference (2008), which stated that "the public has increasingly become an essential partner in safeguarding our shared cultural heritage," and this necessarily means resolving tensions in storage so the artifacts preserved for the future are appropriately accessible to the present generation with the active engagement of all involved in the museum.

MARY M. BROOKS, DURHAM UNIVERSITY

collections hold layers of meaning and value that only respectful and responsive care can make available again. In this chapter, we emphasize the importance of approaching all collections with an insistence on engaging closely with a range of stakeholders to identify best practices for long-term preservation. Preservation presents a range of options, from the physical conservation of objects and their associated documentation and information to the protection and care of the intangible aspects of these materials, and ultimately to the restoration of their cultural and social use and value.

#### DEFINING RESPECTFUL CARE

Collection managers have intimate relationships with the objects in their care. We see them in their most vulnerable state, when they are damaged, neglected, and poorly housed, but we also have the satisfaction and pride of seeing them conserved, safely stored, or beautifully exhibited in the best of conditions. But collections – all collections – have more than physical needs. The museum profession has been slow to recognize that even the physical care of museum objects, which supposedly falls within our expertise, might require consultation outside the museum. Even seemingly mundane storage and handling decisions change the ways in which collections might be interpreted or used in the future. Brooks (see sidebar 1) and Enote and Chavez Lamar (see sidebar 2) underscore the need to reexamine these fundamental means of organizing, storing, and using museum collections so as not to misinterpret collections, or privilege one interpretation over another.

Concerns about interpretation become more pronounced when one considers how removing an object from its physical, social, and cultural context and placing it in a museum context alters its meaning (Alpers 1991, Gosden, Larson, and Petch 2007). Once in a collection, does the object cease to be what it once was, or does it enter a new state or type of use? Can the object still fulfill some of its original purposes, and, if so, how? Forcing open storage vaults has also forced museums and their staff to reexamine the historical and political conditions under which collections were formed. Historically, collections were created through a range of interactions, from gifting and exchange to legal sales and plunder. As collection managers, we are rarely in the position of changing these circumstances, but we do control access to, and use of, collections. Reuniting companion ceramic pots (see sidebar 2) or the crowdsourced collections of urban ant subspecies (see sidebar 4) are examples of opportunities to enter into and potentially rewrite these historical, scientific, and political moments.

Researching and documenting the original context in which an object was once used is fundamental, but museum professionals are increasingly aware that there are histories, relationships, and knowledge systems that may not (or should not) be available to us (Dhar 2006, Thorn 2008). This information, however, may still be crucial to preserving the value of an object, and therefore requires stakeholders who can advise

about aspects of the work that must be protected and even revered. For example, Horelick (see sidebar 3) writes of the importance of preserving gum wrappers, match sticks, and tic-tac-toe games in a WWII aircraft, as leaving these materials in place is essential to telling the poignant story of the plane and its crew's place in history. This stakeholder knowledge, shared through consultation with a museum professional, assists in ensuring that these collections are given the appropriate reverence when encountered again, whether the object is in storage or on view.

## Please Touch: Engaging with Stakeholders

As part of the Smithsonian Arctic Studies Center's Material Traditions series, the "Sewing Salmon" program was held at the Arctic Studies Center Gallery in the Anchorage Museum in 2012 (National Museum of Natural History 2012). Marlene Nielsen (Yup'ik), Audrey Armstrong (Athabascan), and Coral Chernoff (Sugpiaq/Cheyenne) gathered to study the work of ancestral Alaska Native skin sewers in collections of the Smithsonian Institution and Anchorage Museum, exchange knowledge and techniques with each other, and demonstrate their art to student and public audiences over a five-day period (fig. 1). The artists led a team of museum staff in processing and sewing salmon skins to illustrate the biological and functional properties of the material. With no elders left to teach them, the artists examined museum collections for guidance. Chernoff said, "When I am learning how to construct something new, I look for answers from the pieces in museums. I noticed that the fishskin pieces here and those I saw in Russia used the same sewing, similar to how I sew my seams – that validates what I am trying to do. There has been a break in knowledge about materials and methods and I am glad I can find more answers in books and in museums" (Anjum 2013, 65).

In 2015, 13 undergraduate students in the course at Johns Hopkins "Recreating Ancient Greek Ceramics" (Balachandran 2015) attempted to reproduce the red-figure vases made in the sixth to fourth centuries BCE. Over 13 weeks, the students, master potter Matthew Hyleck, and conservator Sanchita Balachandran handled some of the museum's most iconic *kylikes*, or drinking cups, made in ancient Athens. Holding these personal vessels was essential for recreating them (fig. 2). We learned their delicate weight, felt the raised edges of slipped lines, and found evidence of the ancient painter's preparatory drawings, still visible in raking light. We talked to art historians, archaeologists, conservators, materials scientists, and potters across the United States, all of whom had experience holding similar objects. Their physical familiarity with these products of the ancient world and the diverse perspectives on how those objects were created made our hands-on experiments all the more valuable. The published literature, the archaeological record, and objects themselves are incomplete pieces of evidence. It took specialists, but also our own eyes and hands, to tell us what to admire, and also what remains beyond our grasp (Waystone Productions 2015).





As museum specialists, we are accustomed to the pleasure of handling objects on a daily basis, often forgetting that this unfettered access is a tremendous privilege. Given our training and expertise, we have perhaps taken for granted the idea that the best collection strategies are those identified by our peers and our professional organizations. But we are growing increasingly aware that the respectful care of museum collections requires ceding control of the objects in our care to other stakeholders as well (see Fenkart-Fröschl & Norris, chapter 2, this volume). How do we work with stakeholders outside the museum world? How do we even know who the stakeholders for our collections are? According to founding NMAI director Richard West, "[e]ngaging the source

**Figure 2.** Potter Matthew Hyleck and undergraduate students from the course "Recreating Ancient Greek Ceramics" examining ancient vessels in the Johns Hopkins Archaeological Museum. (Courtesy of Sanchita Balachandran)



community illustrates the height of practicality – it is the most efficient means of getting to the information and knowledge we need" (West 2004, 11). We interpret the term "source community" as the originating community, but we identify "community" to include all stakeholders who wish to engage with collections. And we suggest that "engaging" with this community takes many forms, from telephone calls and e-mails, to video conferences and on-site visits, and includes long-term partnerships and even crowdsourced research (see sidebar 4). The age of e-mail, teleconferencing, and webinars also opens up new possibilities for conversations, collaborations, and access; relatively inexpensive communication methods free both collection managers and stakeholders from relying solely on their institutions to provide the funding or infrastructure to begin to work with each other. Different modes of communication and subsequent documentation develop throughout the consultation process, which must remain organic, flexible, and expansive to capture the different ways in which stakeholders wish to engage with collections.

Two types of collections have emerged as models for engaging with stakeholders beyond the museum: modern and contemporary art, and indigenous collections. In both cases, consultations with the original makers and their descendants, and the individuals and communities closely tied to the meanings of these works are considered essential for their interpretation and preservation.

For contemporary works, numerous institutions and organizations have instituted procedures for tracking changes in the meaning of works over time as they relate to preservation. This includes artists' questionnaires, which are completed at the time of the acquisition of the work, interviews with artists in the presence of their work at regular intervals, and audio and film archives documenting the changing tangible and intangible aspects of these works. Examples of such approaches include the Artists Documentation Program (Menil 2015), Capturing the Contemporary (Hirshhorn 2015), and Voices in Contemporary Art (2015).

Discussions of consultation or collaboration processes have also emerged from experiences at various cultural institutions in North America, Australia, and New Zealand, where the emphasis has shifted to forming partnerships with Native people for the physical and cultural preservation, use and renewal of their material culture (Edmonds and Wild 2000; Johnson et al., 2005; Canadian Conservation Institute 2008; Smith, Austin-Dennehy, and McHugh 2010; Austin-Dennehy et al., 2013; Holdcraft et al., 2014; Association of Northern, Kimberly and Arnhem Aboriginal Artists 2015). Recognizing a need for a more egalitarian, robust, and yet flexible infrastructure for collaboration between communities and museums, a working group of Native American and non-Native museum professionals is currently working with the School of Advanced Research-Indian Arts Research Center to create "Community + Museum and Museum + Community: Guidelines for Collaboration" (School of Advanced Research 2016). These guidelines serve as a resource for those interested in engaging stakeholder groups and developing long-term partnerships. Although they are focused on work with Native American communities, the principles can be widely applied. People involved in contemporary art and cultural heritage conservation have much to learn from one another, and yet are essentially engaged in the same process of documenting what is valued – and therefore must be preserved. Recent work on engaging diverse stakeholders and collaborators across disciplinary boundaries is also adding to frameworks for a more holistic and engaged conservation practice (Balachandran 2017).

Although modern and contemporary collections and Native collections may vary in materials, historical, and cultural context, the aspects of collaboration between museum staff and stakeholders are also closely related. It is essential to enter into any collaboration with the hope of developing a relationship that will be sustained, respectful, and equitable. The process requires building trust between the museum and the stakeholders, with the recognition that the knowledge and experience gained from these collaborations will be documented, acknowledged as the stakeholders' own, and embedded in the museum's procedures where possible, within a reasonable time frame.

This collaboration must also allow physical access to museum collections as desired by the stakeholders. In our own work, talking with stakeholders as they handled objects resulted in the most transformative and informative ways for understanding collections. The experience of touching, moving, and turning objects in their hands elicited reactions and triggered stories and muscle memories that would otherwise have remained inaccessible. The physical object – be it sewn skin or fired clay – has the power to evoke the responses, observations, questions, and reminiscences that are part of the object's story. How, then, do we ensure that these diverse stories continue to live?

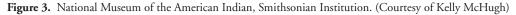
# "THIS [IS] A MOVEMENT. THIS IS ONLY THE BEGINNING": REVITALIZING STORAGE

Tsimshian artist, scholar, and dance group leader David Boxley is from Metlakatla, AK, a village established in 1887 by missionary William Duncan. Already converted to Christianity prior to the move to the village from their ancestral land, this group of Tsimshian retained little of their traditional culture. Says Boxley, "It was one of the most successful missionizing efforts in history" (McHugh 2009). Boxley believes that societal ills, such as alcoholism, suicide, and domestic abuse facing his people are a result of not knowing who they truly are. Having little access to elders who could teach him songs, dances, or the appropriate masks that accompany them, he set out to do research in museum collections. Boxley says the Tsimshian masks sitting on museum shelves are his elders and access to them is critical. The masks are the physical manifestations of stories told through song and dance and together they are an important vehicle for the transfer of cultural knowledge (figs. 3 and 4).

In May 2015, students from the "Recreating Ancient Greek Ceramics" class described their experiences on Baltimore's National Public Radio station. Anna Soifer said:

From wedging the first slab of clay, to painting with two-bristle brushes, to firing the kiln, we practiced and struggled with every step of pottery production . . . Our study . . . is unmatched in [recreating] the group dynamic of a pottery workshop and the deliberate attempt to cast ourselves in the mindset of apprentices. So although our cups may not have fired perfectly red and black, we have learned a valuable experiential lesson, not easily visible in the archaeological record, about apprenticeship, learning curves, and social dynamics in the workshop.

Student Savannah De Montesquiou stated, "I felt the same level of scholarly responsibility from holding ancient examples of kylikes at the beginning of our course to reaching into our kiln to grab my group's replica. We have broken every barrier that could prevent us from fully experiencing these small glimpses of ancient culture, transporting us beyond time and museum display cases" (Balachandran 2015). We even drank grape juice from our newly made kylikes (fig. 5), using our contemporary vessels as the ancient Greeks did centuries before us.





Preventive conservation, seeking foremost to physically protect objects, has historically limited access to museum collections and discouraged use. However, the development of newer models for risk management and increased stakeholder engagement has shown the importance of weighing the risks and benefits of use (Waller 2002, Keene 2005, Torres, Gallagher, and Balachandran 2017). New evidence confirms that use typically occurs in a deeply reverential way, minimizing the potential for damage (Pye 2008, Heald 2010). In fact, working in collaboration with those who are academically, emotionally, physically, and culturally invested in collections *revitalizes the stored object* so it can once again have a functional, interactive, and purposeful role. Stored collections also *revitalize those who access them*, eliciting memories, language, technical knowhow, and social relationships (Kaminitz et al., 2005 and 2009, Harrison et al., 2011, National Museum of Natural History 2015). Community uses of museum collections in dance, song, ritual, and even drinking,



Figure 4. National Museum of the American Indian, Smithsonian Institution. (Courtesy of Kelly McHugh)

transform the collective experience and memory of the group as a whole, while adding new layers of meaning to the objects themselves. But these recognitions and realizations are only the beginning of what Enote describes as a "movement" (see sidebar 2); that is, an ongoing engagement with stakeholders to ensure that a multiplicity of voices are invited to participate in the documentation, interpretation, and preservation of collections.

A "movement" towards a more inclusive and evolving use of stored collections requires an acknowledgement that the meanings of objects are not fixed, but rather constantly evolve. As representations of layers of relationships and values, we must not

**Figure 5.** Drinking from the vessels made in the course "Recreating Ancient Greek Ceramics." (Courtesy of Jay T. VanRensselaer)



expect that the full meaning of objects will, to use Haakanson's phrase "fit  $\dots$  into a tiny box" (2004, 123); rather, objects and their meanings will evolve and shift, changing with the people who claim them.

## CONCLUSION: "HELLO, GRANDMOTHER"

The contemporary museum, and the respectful and responsive museum, can no longer afford closedness and insularity. As stewards of our collections, our foremost responsibility is to preserve the potential stories that our collections hold, and to make those accessible beyond a select group of specialists. When diverse groups feel ownership of collections – whether these are ants, aprons, dance figures, aircraft, fish skins, or ceramic cups – heritage is no longer an abstract notion. Heritage becomes purposeful and real, and so do its past makers and users. However, our work as museum professionals still falls woefully short of the kinds of deep engagement that

## SIDEBAR 2 Reviewing Zuni Pueblo Collections

Have you ever considered what it would be like to collaboratively review your museum's entire collection of a source community's cultural heritage with community experts and add their knowledge and insights into your museum's catalog records? Such work could be daunting depending on the size of the collection, but the rewards include establishing lasting partnerships and documenting knowledge about a collection that will be preserved for future generations. In 2008, the A:shiwi A:wan Museum and Heritage Center at Zuni, New Mexico, and the School for Advanced Research (SAR) in Santa Fe embarked on a collaborative partnership to set the record straight about Zuni items in SAR's collection. The program had two major components: (1) systematically review the entire Zuni collection held at SAR (1080 items) and (2) provide SAR's digital catalog records of Zuni items to Zuni. We led the initiative that incorporated the expertise of Octavius Seowtewa, head of the Zuni Cultural Resource Advisory Team, and SAR's collection staff.

Our existing collegial relationship helped to initiate a dialogue about this collection review, thereby neutralizing any positions of leverage or authority. We both saw a need for correcting misinformation and filling information gaps about Zuni items in SAR's collection as well as implementing care and handling practices that reflect a Zuni sensibility. There was never any question that SAR would update catalog records to reflect our decisions about including new and richer Zuni context. This included incorporating Zuni names into the records. As an example, almost all of the water jars were identified in the collection information system as ollas. While Jim Enote and Octavius Seowtewa were familiar with this term, they did not view it as specific to a Zuni understanding of what these items are. They had lengthy discussions about several words that could be used to describe the vessels, which were largely based on how they were used. The word olla basically describes what it is, a pot or jar, not how it is used, and more importantly, it is a Spanish term not a word in any Pueblo language. They finally settled on the Zuni word, k'yabokya, which generally translates as water container in English. Now all of the SAR records for these ceramics are identified as k'yabokya and water container. While this seems like a simple change, it is an assertion of Zuni cultural authority as this change reclaims the identification of these pots, which have historically been labeled as ollas.

In another example, a carved Zuni dance figure was reviewed by Enote and Seowtewa after SAR staff had tried to reattach several of its accoutrements that had been removed at some point in the past. Upon inspection, Enote and Seowtewa found several of the items attached in the wrong place, such as a fringe that was placed across the chest of the figure but was supposed to be placed at the bottom of its dance kilt. Once corrections like this were made, the figure looked quite different. The various images of how this figure has looked over time have been saved as part of the catalog record and illustrate how working with community experts can correct mistakes such as these (fig. S-1). Bringing in community experts can also produce contextual connections among collection items. Enote and Seowtewa recalled an example at another museum where a special pot was supposed to contain a smaller companion pot but the two were cataloged and shelved separately within the museum. The pots were brought back together, and the true context of the pots was resurrected. If enough museums begin to collaborate with community experts and make such

Figure S-1. Courtesy of the School for Advanced Research, cat. number IAF.C2. (Courtesy of Addison Doty)





changes to their collection records and stewardship practices, we will see the circulation and expansion of more accurate Zuni cultural knowledge. As Enote has expressed, "This review was not a project. A project is something with a beginning and an end. I would prefer to see this as a movement. This is only the beginning" (Chavez Lamar, 2010).

Establishing more accurate and complete information along with instructions for housing and accessing certain collection items benefits SAR and future researchers because it provides them with a Zuni perspective. The Zuni also benefit in that misinformation will be corrected and will not continue to circulate. This is a point that Enote continually reiterates as a reason this type of work is important. He states, "Considering access to new information media, we want Zunis to have the right information about these things in the future. When young Zunis look at things in collections, and if the things in those collections are misidentified or lacking information, then those young Zunis are not learning about their heritage and their culture in the right way. We want to set the record straight" (Chavez Lamar 2010). Controlling how knowledge about Zuni collections is documented and interpreted is a strong reason for Zuni's collaboration with institutions stewarding Zuni collections.

In order for museums of the future to be relevant, they need to be inclusive, not only for museum visitors, but also for communities from which museum collections have been acquired. From all authorities, there has to be relinquishment of some control and ideology to create a space for negotiation and to acknowledge different points of view. As museum professionals, we need to initiate and be engaged in projects and programs that allow for a sharing of power and authority and be open to innovative methods of stewardship and documentation of collections that include indigenous knowledge in a way that has meaning for their people, scholars, and other admirers of the collections we care for.

Jim Enote, Formerly of the A:shiwi A:wan Museum and Heritage Center Cynthia Chavez Lamar, National Museum of the American Indian

# SIDEBAR 3 Technological Objects as Reliquary

Objects stored and displayed at the Smithsonian National Air and Space Museum (NASM) share many similarities with other living-culture museum collections. Technological artifacts may not be the first artifact type that one thinks of when considering collection materials possessing cultural sensitivity. However, technological artifacts can tell a specific story, possess secrets, and are fully replete with invested stakeholders concerned with preservation. Stakeholders engaged with the NASM collection include military veterans, pilots, astronauts, engineers, mechanics, and aviation and space-history enthusiasts.

Despite the mass-produced nature of most technological artifacts, many possess compelling and salient connections to history that would be lost if it were not for their preservation and on-going efforts by NASM to engage with the individuals who once used, flew, or designed air and spacecraft represented in the collection. Much like archaeological and cultural history collections, NASM collection items have associated smaller objects and accretions that may render the artifact a reliquary. These accretions and associated objects speak to historic use, which is extremely relevant and meaningful to our stakeholders.

Stakeholder engagement through access to the NASM collection is best exemplified by a 2014 visit from Sherman Best to the Udvar Hazy Center where work was underway on the preservation of a Martin B-26B-25-MA Marauder airplane nicknamed "Flak-Bait" (fig. S-2) by Lt. James J. Farrell of Greenwich, Connecticut, who flew more missions in Flak-Bait than any other pilot. Farrell named the bomber after "Flea Bait," his brother's

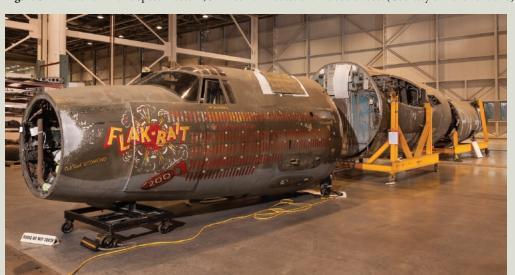


Figure S-2. National Air and Space Museum, Smithsonian Institution. A19600297000. (Courtesy of Dane Pendland)

nickname for the family dog (Air and Space 2015). This medium bomber and its crews flew more missions than any other American aircraft during World War II. Sherman Best was another one of its pilots. Access to Flak-Bait was meaningful to Best, now well into his nineties, because he had not seen the entire aircraft, albeit still in pieces, since the war ended in May 1945. It was disassembled on a muddy airfield in Germany in 1946 as it was too worn out and flak-damaged to make it back to the United States. The WWII pilot was reunited with this significant piece of history, with all the bullet holes, mud, flak damage, and dents intact. Apart from all the battle damage, the artifact possesses intimate links to specific individuals. A collection of matchsticks was found accreted into the gunner's turret (he was obviously a heavy smoker), a sardine can key, Wrigley Spearmint Gum wrappers, and cigarette butts, among other small personal effects have been found embedded into the interior of the aircraft. Most compelling among these discoveries are several games of tic-tac-toe drawn into the thick engine oil residue that covers the inside of the landing gear doors. These hand-drawn games were clearly played by servicemen when the aircraft was in operation, and have been untouched since 1946. These visible and tangible links to the past in some ways may be more meaningful to stakeholders due to their connection to specific individuals, and a specific day in history.

The accreted materials lodged into aircraft are relevant to the interpretation of this object as both a combat machine and an intimate time capsule for those who flew within it. The flak damage and the preservation of other reliquary-like items are similar to the sensitivity often shown to other collections that possess ritually accreted materials. While the context of the accretions on *Flak-Bait* is quite different from other artifact types, the discussion of how we care for material, and how meaningful our best practice decisions are to our stakeholders is no different from other museum collections.

Lauren Horelick, National Air and Space Museum

are necessary to actively preserve the myriad values of our collections. Our emphasis on preventive care should not hinder a more holistic approach to maintaining the tangible and intangible aspects of objects, but rather should be one of a series of strategies to keep collections culturally relevant. These relationships between multiple stakeholders and the objects they claim are what the museum storage space should embody. To use historian Asif's phrase, in a collection, "every family's internal life [is] external here" (Asif 2014, 10).

In April 2015, Nanebah Nez, an employee of the US Forest Service's Tonto National Forest examined an intricate rug at the Department of the Interior's Washington, DC, storage facility. As an archaeologist, Nez "often works with other employees and tribal representatives in identifying remains and artifacts" (Sosbe 2015), but her visit to see

## SIDEBAR 4

## Citizen Science: Engaging Society in Natural History Collections

Biological collections are more accessible to researchers than ever before. The National Science Foundation, along with other organizations, has funded successful digitization projects on specimens from around the world. Collection managers are more aware than ever that their collections must achieve a balance: scientists must use them for research but also preserve them for the future. Now, the challenge is to use these data to ask interesting questions from both basic and applied perspectives. There is no shortage of questions, but there is a shortage of time in the day for research employees to extract data from specimens. For this reason, and many others, use of the biological collections to answer questions about global change, evolution, and myriad other important topics, lags behind data availability.

Citizen scientists can bridge this gap by collecting data across unprecedented scales of space, a scope possible because of sheer numbers. They are also often more clever in their observations than scientists themselves, who tend to be too close to their work to see new and interesting trends. At the same time, scientists can provide the public with exposure to the scientific method, local diversity, and opportunities to participate in research of global importance. This symbiosis comes at a time when a larger percentage of people live in urban areas than ever before and when nature conservation scientists worry that the public is increasingly disconnected from the natural world.

Only a handful of citizen science projects have used museum specimens for research. One example, School of Ants, a project housed at North Carolina State University and the University of Florida, asks the public to collect ants from their yards with everyone's favorite bait, cookies (School of Arts 2017). Participants then freeze their ants and ship them to researchers who identify, catalog, and plot their locations on maps. Specimens are deposited in NC State's insect museum, where they benefit the museum with collections of urban species, a subset of biodiversity that is rarely cataloged and preserved. Similarly, in other projects, participants collect photos. While images are not actual specimens and do not bolster museum collections, they form a type of collection that can be made publicly available for research. The most famous of these projects, Project Noah, asks citizens to document nature using mobile phones (Project Noah 2017).

One citizen science project that makes use of digitized museum specimens, "Notes from Nature," enlists the public to help digitize collections (Notes from Nature 2017). Public participants access an online database and transcribe specimen data. There is no limit to how many specimens one can transcribe, which gives citizen scientists the freedom to contribute as much as they choose. While this project is an ambitious step toward citizen science on digitized biological collections, it helps the public curate specimens, not test hypotheses. The infrastructure built for this project could serve as a powerful platform for collecting ecological data sets, from herbivory to disease damage to parasite loads. This is a frontier – one that presents endless possibilities. The only limit is to what extent we, as scientists, design projects that unite collections with the public's infinite curiosity.

EMILY MEINEKE, HARVARD UNIVERSITY HERBARIA AND LIBRARIES

the textile woven by Bahe Shondee in the 1930s for the Navajo Shooting Way Ceremony, had a deeper purpose:

Nez turned to a roomful of U.S. Department of the Interior employees and asked for a moment to herself. When the group of curators left, Nez turned her attention to an 80-year-old piece of her ancestral past and began her private prayer in Navajo, "Yáat'eeh Shinaali," [she said,] "Hello, grandmother."

### **REFERENCES**

- Air and Space Museum. 2015. Martin B-26B-25-MA Marauder "Flak-Bait". http://airandspace.si.edu/collections/artifact.cfm?object=nasm\_A19600297000. (9 December 2015).
- Alpers, S. 1991. "The Museum as a Way of Seeing." In *Exhibiting Cultures*, edited by I. Karp and S. D. Lavine, 25–32. Washington, DC: Smithsonian Institution Press.
- Anjum, S. 2013. "The Art of Skin Sewing." *First Alaskans Magazine*, June/July: 60–65.
- Appadurai, A. 1986. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge, England: Cambridge University Press.
- Asif, M. A. 2014. "Idols in the Archive." *Journal of Asian Studies* 73 (1): 9–16.
- Association of Northern, Kimberley and Amhem Aboriginal Artists. 2015. "Harvesting-Traditional-Knowledge." Accessed December 9. 2015. http://ankaaa.org.au/special-projects/harvesting-traditional-knowledge/.
- Atkinson, J. 2014. Education, Values and Ethics in International Heritage: Learning to Respect. Farnham, Surrey, England: Ashgate Publications.
- Austin-Dennehy, M., G. Hansen, N. Firhaber, and B. Muens. 2013. "The US Exploring Expedition (Wilkes) Tapa Project." ICOM Ethnographic Conservation Newsletter 35: 5–11
- Australia ICOMOS. 1979. Burra Charter. Accessed December 9, 2015. http://australia.icomos.org/publications/charters/.
- Balachandran, S. 2015. "Recreating Ancient Greek Ceramics." Accessed December 9, 2015.

- http://archaeologicalmuseum.jhu.edu/the-collection/object-stories/recreating-ancient-greek-ceramics/.
- Balachandran, S. "Pedagogy and the 'Working Collection': Teaching Technical Research and Experimental Archaeology at the Johns Hopkins Archaeological Museum." Postprints of the October 2016 Penn Museum symposium, "Engaging Conservation: Collaboration Across Disciplines." London: Archetype, 2017: 19–28.
- Bennes, C. 2014. "Open the Stores: Conservation, Collections and the Museum of the Future." *Apollo*. Accessed December 9, 2015. http://www.apollo-magazine.com/conservation-accessible-stores-museum-future/.
- Canadian Conservation Institute. 2008. "Preserving Aboriginal Heritage–Technical and Traditional Approaches." Accessed December 9, 2015. http://www.cci-icc.gc.ca/discovercci-decouvriricc/symposium/2007Symposium-eng.aspx.
- Clavir, M. 2002. Preserving What Is Valued: Museums, Conservation and First Nations. Vancouver, Canada: University of British Columbia Press.
- Chavez Lamar, C. 2010. Personal communication with Jim Enote, July 15, 2010.
- De La Torre, M. 2013. "Values and Heritage Conservation." *Heritage and Society* 6 (2): 155–166.
- Dhar, S. 2006. "Challenges in the Context of the Living Sacred Tradition of Mahayana Buddhism." In *The Object in Context: Contributions to the* 2006 IIC Congress, Munich: 151–155.

- Edmonds, P., and E. Wild. 2000. "New Obligations: Conservation Policy and Treatment Approaches for Aboriginal Collections in Bunjilaka, The Aboriginal Centre, Melbourne Museum." In *Tradition and Innovation. Advances in Conservation*, edited by A. Roy and P. Smith, 60–64. London: International Institute for Conservation.
- Gosden, C. F. Larson and A. Petch. 2007. Knowing Things: Exploring the Collections at the Pitt Rivers Museum 1884–1945. New York: Oxford University Press.
- Haakanson, S. 2004. "Understanding Sacredness:
   Facing the Challenges of Cultural Change." In Stewards of the Sacred, edited by A. Edwards and L. Sullivan, 123–128. Washington, DC: American Association of Museums.
- Harrison, A., K. McHugh, C. McIntyre, and L. Smith. 2011. "The Impact of Access: Partnership in Preservation." *Objects Specialty Group Postprints*. Washington, DC: AIC. 18: 51–66.
- Heald, S. 2010. "Partnership in the Preservation of Tangible and Intangible Heritage at the National Museum of the American Indian." In *Textile Conservation: Advances in Practice*, edited by F. Lennard and P. Ewer, 108–115. London: Elsevier Butterworth-Heinemann.
- Hirshhorn Museum and Sculpture Garden. 2015. "Capturing the Contemporary." Accessed December 9, 2015. http://hirshhorn.si.edu/collection/conservation/#detail=/bio/about-artist-interview-program/&collection=conservation.
- Holdcraft, T. R., S. Haakanson, E. Promise,
  J. Jungels, F. Ritchie, and P. Capone. 2014.

  "Collaborative Study and Preservation of
  Coastal Alaskan Native Material Culture with
  Museum Staff, Alutiiq Scholars and Artists,
  University Students, and the Visiting Public."

  Object Specialty Group Postprints, American
  Institute for Conservation 42nd Annual Meeting.
  San Francisco: AIC. 2–20.
- Holms, S. 1997. "An Introduction to SHIC." Accessed September 29, 2015. http://www.holm.demon.co. uk/shic/shicint.htm (29 September 2015).
- ICOM Costume Committee. 2013. "Vocabulary of Basic Terms for Cataloguing Costume." Accessed

- December 9, 2015. www.collectionstrust.org.uk/assets/thesaurus\_icombts/vbt00e.htm.
- ICOM-CC 15th Triennial Conference. 2008. "Terminology to Characterise the Conservation of Tangible Cultural Heritage." Unpublished document circulated at the ICOM-CC 15th Triennial Conference, New Delhi. Accessed March 29, 2015. https://ceroart.revues.org/2794?file=1.
- Ingold, T. 2007. "Materials against Materiality." *Archaeological Dialogues* 14: 1–16.
- Johnson, J. S., S. Heald, K. McHugh, E. Brown and M. Kaminitz. 2005. "Practical Aspects of Consultation with Communities." *Journal of the American Institute for Conservation* 44: 203–215.
- Kaminitz, M. A., R. Kentta, and D. M. Bridges. 2005. "First Person Voice: Native communities and Conservation Consultations at the National Museum of the American Indian." *ICOM-CC Preprints*. 14th Triennial Meeting, The Hague. Paris: ICOM. 96–102.
- Kaminitz, M. A., W. R. West, Jr., J. Enote, C. Quam, and E. Yatsattie. 2009. "Conservation, Access and Use in a Museum of Living Cultures." In Conservation: Principles, Dilemmas and Uncomfortable Truths, edited by A. Richmond and A. Bracker, 197–209. Oxford, England: Butterworth-Heinemann.
- Keene, S. 2005. *Fragments of the World*. Oxford, England: Elsevier Butterworth-Heinemann. 113–114.
- Kopytoff, I. 1986. "The Cultural Biography of Things." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by A. Appadurai, 64–91. Cambridge. England: Cambridge University Press.
- McHugh, K. 2009. Personal communication with David Boxley, January 8, 2009.
- Menil Collection. 2015. "Artists Documentation Program." Accessed December 9, 2015. http://adp. menil.org.
- National Museum of Natural History. 2012. "Material Traditions. Sewing Salmon." Accessed December 9, 2015. http://www.mnh.si.edu/arctic/html/sharing-knowledge-alaska/SharingknowledgeAK\_Sewing-Salmon.html.

- —2015. "Sharing Knowledge Alaska." Accessed December 9, 2015.http://www.mnh.si.edu/arctic/html/sharing-knowledge-alaska/Index.html.
- National Park Service. 1990. "National NAGPRA." Accessed December 9, 2015. http://www.nps.gov/nagpra/.
- Notes from Nature. Accessed March 4, 2017. https://www.notesfromnature.org.
- Pearce, S. 1992. Museums, Objects and Collections: A Cultural Study. Leicester, England: Leicester University Press.
- Project Noah. Accessed March 4, 2017. http://www.projectnoah.org.
- Pye, E. 2008. "The Benefits of Access through Handling Outweigh the Risks." In Conservation and Access: Contributions to the 2008 IIC Congress, London: 162–165.
- School for Advanced Research—Indian Arts Research Center. 2016. Community + Museum and Museum + Community: Guidelines for Collaboration. Accessed March 7, 2017. http://sarweb.org/ guidelinesforcollaboration.
- School of Ants. Accessed March 4, 2017. http://www.schoolofants.org/about.
- Smith, L., Austin-Dennehy, M., and McHugh, K. 2010. "Collaborative Conservation of Alaska Native Objects at the Smithsonian." In *Living our Cultures, Sharing Our Heritage: The First Peoples of Alaska*, edited by A. L. Crowell, R. Worl, P. Ongtookuk, and D. Biddison, 284–289. Washington, DC: Smithsonian Institution.
- Social History Curators Group. 2015. firstBASE. Accessed December 9, 2015. http://www.shcg.org. uk/About-SHIC.
- Sosbe, K. 2015. "Historic Handwoven Rug Lays Path for US Forest Service Employee to her Shinaali." Accessed December 9, 2015. http://blogs.usda. gov/2015/04/20/historic-handwoven-rug-lays-path-for-us-forest-service-employee-to-her-shinaali/.
- Sullivan, L. and A. Edwards. 2004. Stewards of the Sacred. Washington, DC: American Association of Museums.
- Taylor, J. and Gibson, L. 2017. "Digitisation, Digital Interaction and Social Media: Embedded Barriers

- to Democratic Heritage." *Journal of Heritage Studies* 23: 408-420.
- Thorn, A. 2008. "Access Denied: Restricted Access to Indigenous Cultural Sites." In *Conservation and Access: Contributions to the 2008 IIC Congress*, London: 209–213.
- Tilley, C. 2007. "Materiality in Materials." *Archaeological Dialogues* 14: 16–20.
- Torres, J., K. Gallagher and S. Balachandran. 2017. "Rehousing a 'Working Collection': Perspectives from the Johns Hopkins University Archaeological Museum." *Journal of the American Institute for Conservation*, 56 (2): 96–112.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). 1993. "Nara Document on Authenticity." Accessed December 9, 2015. whc.unesco.org/document/9379.
- —2003. "Convention for the Safeguard of Intangible Cultural Heritage." Accessed December 9, 2015. http://www.unesco.org/culture/ich/en/convention.
- —2007. "United Nations Declaration on the Rights of Indigenous Peoples." Accessed December 9, 2015. http://www.un.org/esa/socdev/unpfii/documents/ DRIPS\_en.pdf.
- Voices in Contemporary Art. 2015. "Resources." Accessed December 9, 2015. http://www.voca.network/voca-resources/.
- Waller, R. 2002. "A Risk Model for Collection Preservation." *ICOM Preprints. 13th Triennial Meeting, Rio de Janiero*. Paris: ICOM, 102–107.
- Waystone Productions. 2015. *Mysteries of the kylix: Recreating ancient Greek ceramics*. Dir. B. Wegenstein. Prod. E. Rodini and S. Balachandran. Accessed December 9, 2015. https://vimeo.com/140393971.
- West, R. 2004. "The National Museum of the American Indian: Steward of the Sacred." In *Stewards of the Sacred*, edited by A. Edwards and L. Sullivan, 7–17. Washington, DC: American Association of Museums.
- Wharton, G. 2015. "Artist Intention and the Conservation of Contemporary Art." *Objects Specialty Group Postprints*. Washington, DC: AIC. 22: 1–12.
- Williams, S. L. 1999. "Destructive Preservation." Ph.D. diss., University of Goeteborg, Sweden.