Cheating the End:

Native Artifacts Contaminated with Toxic Preservatives

S. Jordan Simms

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ABSTRACT

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S. Jordan Simms

This research examines the practical and theoretical fallout of the toxic methods used by museum conservators to preserve native artifacts and regalia. These conservation practices, dating to the late 19th and early 20th centuries, were undertaken before the age of museum professionalisation and within a larger context of cultural assimilation. Many of these chemical preservatives produce the same harmful effects in humans as they do in the organisms they were designed to eradicate. As these contaminated artifacts are repatriated, members of native communities who attempt to reintegrate them into ceremonial and daily practice are put at significant health risk. Not only do these pollutants undermine the stated goals of repatriation but they also stand as a literal instance of the way in which a hegemonic and interpreting culture has metaphorically contaminated the culture it has purported to preserve and display.
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INTRODUCTION
TOXIC CONTAMINATION AND THE NATIVE ART OBJECT

In recent decades, Native communities across North America have begun to redefine their relationships with the various governing cultural and political institutions. This process has involved a gradual increase in self-government, some initial settlements of land claims, and continuing disputes over issues such as taxation, hunting and fishing rights, and cultural autonomy. Within this context, Native communities have been increasingly seeking, and gaining, ownership of their cultural artifacts. Many groups have seen repatriation as one of the most important means through which they can reclaim and reintroduce their rich cultural traditions to their own young people. Repatriation issues are linked to developments in indigenous affairs such as land rights and issues of intellectual property. In the United States specifically, the American government has responded to the call for the repatriation of artifacts by passing legislation in 1990 known as NAGPRA: Native American Graves Protection and Repatriation Act. This legislation sought to redress past wrongs by returning Native artifacts to communities and thus has served to legitimize Native claims of ownership over certain cultural patrimony.

But, despite its benign intentions, NAGPRA’s enactment has brought to light a host of significant problems associated with the history of museum practices in North America. These problems, along with their theoretical underpinnings and possible solutions to them, are at the heart of this thesis. In the aftermath of repatriation efforts, many Native groups are now faced with the
possibility that their artifacts may never be fully reintegrated into their communities in the way that both NAGPRA's proponents and the Native groups seeking repatriation had ostensibly imagined. This issue has its roots in the museum storage and preservation practices that prevailed during most of the nineteenth and twentieth centuries, when toxins and pollutants were permanently applied to artifacts as preservatives, so that it is now unsafe to use or even to handle many of these culturally significant objects.

In what follows, I claim that the toxic contamination of cultural artifacts carries grave implications for Native communities, art historians, conservators, and legislators. Drawing together disciplinary practices from art history, museum conservation, and Native and Canadian studies, I situate the problem of toxicity, understood both practically and theoretically, as part of a larger debate involving the interpretation and classification of what have always been seen, too often unconsciously, as art objects. Part of the goal of this thesis is to push at some of the disciplinary boundaries which have historically, and problematically, governed the disposition of Native artifacts and art objects. Situating preservation practices within the broader interpretive framework of art history, I claim that the preservation of Native art objects is inseparable from the acts involved in their interpretation and cultural transmission. And, while the issue of national borders within Native communities is itself problematic, much of my work here will be directed specifically to the American and to a lesser extent, to the Canadian context.
Given the new circumstances involving toxicity that the museum community and aboriginal peoples must now face, the future of repatriation efforts are at a critical stage. The application of toxic preservatives arose, in part, out of a failure of interpretation and cultural understanding. (tighten...The fact that museum curators have in the past often had difficulty recognizing the spiritual values of cultural objects from different traditions suggests that something more than an issue of pure practicality is at work here. It reveals a discord between Western museum practices and the Native world views concerning the cultural function of art objects and artifacts. Put simply, toxic conservation practices reflect a historical failure by western museum conservators and policy makers to understand the cultural values of Native people).

In an interview from 2001, Leigh Kuwanwisiwma, the director of the Hopi Cultural Preservation Office in Kykotsmovi, Arizona, attests to the ways that the issue of contamination threatens the very aims and incentives of the repatriation of Native artifacts: "Contamination put a huge question mark as to whether or not tribes should continue to request the return of items...These items are essential for the...practice of religion. That's on hold until we figure out this question of contamination." While drawing attention to the larger problem, Kuwanwisiwma's comments also throw into relief the relative lack of awareness of the same issue within a specifically Canadian context. Given the history of Native communities and settlement, the Canadian/American border is itself problematic for a host of reasons. Notwithstanding this problem, however, the
related issues of toxic contamination and repatriation have generated different responses on either side of the national border. Indeed, most of the work directed toward the removal of the toxins and the education of both museums and Native groups on how to handle these objects is currently taking place within the United States. The emerging concern is addressed most thoroughly in the United States through the efforts of Lee Davis at San Francisco State University in conjunction with both the Hoopa Tribe of Northern California and researchers at the University of Arizona. Partly as a result of their efforts to publicize the problem, chemists at three laboratories are currently searching for reliable and cost-effective methods for detecting the presence of chemicals on artifacts non-destructively, at the same time that they are testing potential removal techniques.

In response to these current projects, I situate the problem of toxicity as an issue of relevance to the cross-disciplinary constituencies enumerated above; at the same time, I stress that policies will need to be designed and implemented on a national level within Canada. Much of the impetus for this project thus lies in the fact that the issue is receiving scant attention within Canada. Throughout this project I suggest some of the reasons for, and the implications of, this lag. For, in the literature and research that considers the relationship between First Nations peoples, and Canadian museum practices, little attention has been paid to conservation practices in general.\(^2\) It is perhaps taken for granted that conservators play a benign, protective and undistruptive role. As Clavir points out, "Conservation practices that accomplishes this mandate through scientifically developed and proven techniques, in conjunction with a code of ethics whose
goal it is to preserve the original integrity of the object, have been considered
un debatable. 3

Like Clavir's, my outlook on the issue of conservation in general, and the
toxicity of Native artifacts specifically, has been shaped by theoretical
frameworks that attempt to shed light on an incongruity that is frequently
embedded in prevailing ideological structures. Fields such as cultural studies,
Native Studies, New Museology, as well as perspectives drawn from a broader
postcolonial approach inform my outlook here. As they are often applied to art
history, postcolonial methods remain a vital instrument for revealing the various
mechanisms at work in the western world's museums, mechanisms that shape
our understanding of what are in fact culturally specific approaches to curating,
collecting, and conservation.

Given the need, then, for a greater understanding of the relations that adhere
among preservation, interpretation, and cultural politics, I agree with Michael
Ames about the inadequacy of a detached and critical understanding of the
museum's function in society. I follow Ames in favouring scholarship that
discusses real life solutions to difficulties that museums and museum workers
confront:

It is easy enough to criticize museums for being what they are or for failing
to be what we think they should be, and to judge from one's own moral
perspective the actions and inactions of others. It is more difficult to
propose changes that are feasible, and to ground both criticism and reform
in an understanding of the situation, economic foundations and socio-
political formations of the museum to be gauged ... Useful criticism needs to
combine assessment with the empirical examination of real situations,
recognizing the complexity and intermingling of interests involved as well as
relations between the individual and the social, and the conditions within which they operate.\textsuperscript{4}

As Ames has it, then, the cultural function of the museum seems simple enough at first glance. But upon a closer examination, that function along with the practices that it sanctions are revealed to be embedded in a complex web of intersecting ideological and political imperatives. At an even more general level, museums have long been seen as sites for acquisition, preservation, and display. From at least the eighteenth century, within Western culture, the museum was seen as providing a necessary meeting place between the producer of an artifact and its eventual audience. Indeed, often enough, the museum’s function was thought to be a transparent one. An altogether necessary institution, the museum was both disinterested and benevolent; it offered some form of immortality to the artifact and perhaps to its creator, while promising accessibility and meaningfulness to the viewer. More recently, art historians and cultural theorists have begun to complicate the cultural function and effect of the museum along exactly these lines. The museum, together with its curator, might be seen to alter, construct, and block meaning as much as it enhances it.

Given this initial overview believe that an examination is especially vital within the context of Native art—where practices of preservation, interpretation, and classification, have generated a host of very specific and troubling problems. I will reexamine the formation and implementation of museum conservation policy from both a historical and cultural perspective—that is, as a particular form of cultural practice performed in a distinct kind of cultural institution. I thus begin from the assertion that museums constitute sites for the production of cultural
knowledge that shape our understanding of ourselves as well as others. Given my specific focus on Native art and toxicity, I am particularly drawn to a concept developed by Michael Baxandall regarding what he calls "cultural contamination". In his 1991 article "Exhibiting Intentions: Some Preconditions on the Visual Display of Culturally Purposeful Objects," Baxandall writes "there is no exhibition without construction." He examines how museum displays inevitably reflect the values of the exhibiting culture in addition to—or perhaps at the expense of—the culture that is ostensibly on display. Whenever one culture attempts to represent another, Baxandall argues, the former culture validates its own theories in relation to the now objectified, heavily mediated, and disempowered exhibited culture. The ideas of the empowered and exhibiting culture are "likely to be laden with theory and otherwise contaminated by a concept of culture that the viewer does not necessarily possess or share." Baxandall’s notion here of cultural contamination and his theories of a kind of interpretive assault directed against the art object have lasting resonance for my work here. As I open up questions of practical and theoretical relevance around the issues of the toxicity and contamination of Native art objects, I will return to the related lines of inquiry developed by Baxandall and the post-colonial perspectives enumerated above.

By viewing western conservation as a discursive practice, as another historically constructed domain of procedure and belief, it becomes apparent how it has thrived as an apparatus for exercising power through its self-promoted methods of expertise. When we begin to untangle the inherent biases in western conservation methods, when we locate conservation within a framework
of other hegemonic practices, we are able to see just how culturally determined its premises have been. Native scholar Phillip Cash Cash, in emphasizing the curatorial function of the museum as that which has received the most attention from art historians, defines curation as "a social practice predicated on the principle of a fixed relation between material object and the human environment." Curatorial practices, as Cash Cash suggests, raises very defined issues within the Native community given the highly politicized debates which have governed the interpretation, reception, and very possession of the art object. As Cash Cash reminds us, the potential for new cultural values and the overturning of old ones is especially noticeable within the history of Native art objects.

As a particularized strand within the history of art criticism and interpretation, the exhibition and dissemination of aboriginal cultural regalia has generally involved not only the display of Native artifacts but also the preservation of these celebrated objects. Thus in the first chapter, I focus on the history of conservation, and the related the practices of collection and display. While Baxandall considers the implications of theoretical and cultural contamination, my study begins with an examination of the ways in which the conservatorial zeitgeist of the nineteenth and early twentieth centuries dovetailed with new discoveries in chemistry and technology. This confluence helped legitimate the physical application of a prevailing cultural concept, a kind of cultural pollution in its most stark and tangible form. Indeed, conservation techniques have often
witnessed the application of prevailing theories—often permanently—to the object of study.

In the second chapter, I turn to the issue of repatriation across North America, focusing most of my attention on the American context. I show how the effort to repatriate Native artifacts arises out of a context of increased sensitivity and cultural awareness. Looking in particular at the political, social, and legislative imperatives which helped foster NAGPRA, I underline the relevance of such an initiative to both the Native and the museological communities. I then conclude the chapter with a disturbing instance of the ways in which often lofty repatriation efforts are thwarted by the very real issue of toxic contamination.

In the third chapter, I attend directly to the issue of contamination. Surveying a range of museological communities and collections from Canada, the United States, and Europe, I show how toxic contamination constitutes a serious threat to the stated goals of repatriation, and, moreover, to the efforts to foster greater understanding among Native communities and institutional interests. The threat to Native communities posed by toxic contamination is only exacerbated by the various competing and conflicting interests of the groups for whom the issue remains a vital one.

Notwithstanding these challenges, Native groups, along with a few public institutions from around North America, have begun the search for a solution to this culturally debilitating problem, and I discuss this search in the fourth chapter below. I examine both the practical reasons for and consequences of any
possible solution to the threat of toxic contamination, while situating these efforts
within a context of cultural sensitivity and awareness. While any solution must
confront a history of neglect and misunderstanding, it is not by any means an
unworthwhile endeavour. In the brief conclusion below, I show the benefits—
both practical and theoretical—which have followed upon the admittedly early
efforts to redress the effects of toxic contamination.

NOTES FOR INTRODUCTION
2 Clavir, Preserving What is Valued, xix.
3 Clavir, Preserving What is Valued, xix.
4 Ames, Cannibal Tours and Glass Boxes, 4.
5 Baxandall, “Exhibiting Intentions,” 35.
7 Kreps, Liberating Culture, 7.
8 Cash Cash, “Medicine Bundles,” 141.
CHAPTER ONE
THE RECOVERY AND PRESERVATION OF MATERIAL CULTURE:
AN OVERVIEW

In this chapter, I address some of the history associated with the collection and subsequent conservation of Native material objects. The problematic status of Native regalia and grave-associated artifacts with which my study is concerned is inseparable from larger cultural associations governing practices ranging from the excavation of art objects, to their collection and taxonomy, and to conservation and preservation. Too, any inquiry into the practices of excavation, collection, and conservation must include at its outset an examination of the nature of material culture itself and its relationship both to its societal origins and to the dominant culture which collects, displays, and preserves the art object.

Perhaps the most distinctive characteristic of material culture is that it is tangible. As F. Leibrack points out, since objects can endure through time they have the ability to span passing generations and potentially provide a sense of historical continuity and cultural cohesion.1 Because of this quality, then, material culture can often play a vital role in the transmission of cultural meaning. Leibrack affirms this point, stating that "material culture is a vital element in the constitution and dynamics of all societies because of two essential factors; it is the product of the interaction of people and their material worlds; and it is one of the principle means by which culture is stored and transmitted."2 Moreover, the meanings drawn from these objects from within their culture of origin can be
considered to be potentially counter-hegemonic since they arise out of lived experience and cultural memory rather than through ascribed meaning by a proxy dominant culture.\textsuperscript{3} Aside from language and memory, material culture is perhaps a society's principle medium of communication.

But at the same time, material culture and the artifacts associated with it, often fall prey to the kinds of cultural contamination theorized by Baxandall. Cultural knowledge drawn from material artifacts, can, because of the irregularity of its application, be in danger of being forgotten.\textsuperscript{4} Material culture is subject to various interpretations of its meaning depending on the context and the interpreter. This is particularly problematic when an object is being interpreted outside of its culture of origin, function and production. Leibrack explains:

While the analogy is often made that material culture can function like a crude language, objects can in fact be considerably more evocative, multifaceted, elegant and more ambiguous than language. A single simple object can communicate vastly complex feelings and bundles of information in an instant. It can also simultaneously evoke differing, even conflicting types and levels of information, depending on who is viewing it and in what context.\textsuperscript{5}

Indeed, it is this communicative power of objects that has historically been used to justify both the collection of non-western people's material culture and its subsequent removal to museums where it is systematically reclassified and culturally reoriented as "art." Native regalia and grave objects labeled as "scientific specimens" have often been housed in store rooms so that primary information can be learned about groups of people in particular, and human cultures more generally.\textsuperscript{6}
But, while objects displayed from non-western cultures have undoubtedly contributed to the western understanding of the cultures on display, what has been overlooked and perhaps denied is that these same objects have been needed to serve a similar, though not identical, purpose in their culture of origin. These now reclassified art objects are in fact often vital to the maintenance and transmission of cultural heritage. As Grant McCraken writes, objects qua cultural devices are particularly appropriate media for the storage and transmissions of the kind of information that is vital to the reproduction of a particular cultural system. The recognition of this valuation lies at the heart of many of the repatriation efforts of the last two decades within Native communities across North America. The idea that these objects may have been imperceptibly and irretrievably altered has not, until recently, been considered the issue, and has been overshadowed by the more obvious one of cultural ownership.

As Leibrack points out, even the relationship between a relatively homogenous society and the material culture that it produces and receives is both unceasing and self-reflexive; it is this very dynamism that often sets indiscernible changes to cultural objects on the periphery of our consciousness. Each time the material world is changed through ideological interventions and, in turn, through how we treat objects, a slightly different world results, and it is this altered and revised world that then informs our lives, shaping our future thoughts and actions. Leibrack goes on to point out that, “the effects of change in our relationship with our material culture may not be straightforward, predictable or reversible.” In cases of cultural contact, when one culture removes displays
and, most problematically, alters the cultural meaning of objects from another culture, a complex series of ramifications ensues. According to Leibrack, "Societies may and frequently do embrace items of material culture originating from external cultural settings only to find that they produce unexpected and unintended repercussions." But while we know that the removal of spiritually and culturally significant objects from their culture of origin can, and has, led to the demise of certain cultural traditions, we still do not know the cultural impact of the seemingly irreversible chemical and cultural corruption of many Native objects.

Rather than trying to interpret meaning from objects displaced from their culture of origin, Elisabeth Sackler suggests that we look "with a different set of eyes" and examine the fundamental assumptions that in fact underlie the actual practice of collecting ethnographic artifacts. As Sackler argues:

Collections are not merely accession numbers, inventories, and summaries. This is a time for everyone to do a little soul searching and examine what repatriation is about. It is not only about collections. It is not only about legislation. Repatriation is about people and living cultures. What is sacred? What is ownership? Who owns what? What can be bought and sold? The answers to these questions have been assumed by the dominant culture for a very long time. It is time now for those questions to be addressed from the "non-dominant" point of view: the spiritual and moral point of view as well as the legal one.

More contentiously, Homi Bhabha discusses the attempt to translate cultural difference as an impossibility. He suggests that it is unfeasible for the meaning of one culture to be fully transmitted or transferred. Indeed, when taken to their extremes, the Native and the 'scientific' perspectives on this issue seem incompatible.
These associated problems of possession, definition, and translation are particularly acute with regard to the Native art objects which are the subject of this study. The Native regalia and artifacts which fall under the purview of the Native American Graves Protection and Repatriation by definition are, or have been, closely associated with Native graves and burial rites. Given the sacred status of these objects, now reclassified as art objects and subject to associated practices of contamination, the challenges are especially complex. But in response to these challenges, many museums and Native representatives are now seeking, and sometimes finding, new common theoretical ground. Such movement is encouraging if not entirely surprising. Certainly many groups of Native Americans encounter these same theological and cultural debates not only in their relationship with Western anthropologists but also within their own evolving spiritual practice.

In an attempt to circumvent debate and to preserve the rights to excavate Native human remains, some archaeologists have stressed the diversity of cultural practices of aboriginals with regard to respect for their dead. Archaeologists in fact may be right that for some aboriginals the anxiety caused by having ancestral graves disinterred may be of relatively recent origin and does not necessarily arise from ancient cultural tradition and practice. But the frustration and anger experienced by some of these descendants is no less valid because of the recent nature of the cultural restriction. The assumption that Native cultural norms have to be rooted in ancient history in order to be justified is perhaps another way in which the dominant culture imposes a presumption
that Native cultures are primitive and static and that any change and modernization is considered a dilution of their "authentic" customs.

Because of the specific context of the art objects covered by NAGPRA initiatives, it is worth briefly considering another set of cultural associations and contexts having to do with burial ceremonies within both western and non-western cultures. Such consideration reveals that the challenges facing Native-American groups in their struggle to redefine the art objects that have been often plundered from burial sites are due in part to a contradictory set of associations within the western cultures themselves. The now relatively commonplace and unchallenged western concern with the desecration of gravestones and human remains, when more closely examined, occludes the fact that within the evolution of contemporary western burial traditions, there have been a number of important shifts and contradictions. That is cultural beliefs about burial—and about objects associated with burial—are not, and have never been, static.

Within many western cultures we can see cultural attitudes about burial as necessarily adapting and responding to historical circumstance. For example, within most western cultures, burial goods are no longer included in the coffins of the deceased, most prefer to be buried rather than cremated, and, for the most part, the location of burials have shifted from inside the church to outside, then from churchyard to cemetery. Within the Judeo-Christian tradition, it is often believed that after death the ultimate disposition of the corpse is entirely irrelevant, to where the soul of that person remains for eternity.
In her 1987 study of the history of grave-robbing, Ruth Richardson clarifies the extent to which the related modern practices of collecting and diagnosis emerge out of a complex and often insensitive perspective on burials. Richardson takes as the subject of her study the many British scientists who, until the 1832 Anatomy Act was passed, showed little respect for the bodies of the dead which had been laid to rest in their own churchyards; such attitudes say much about the opinions towards the bodies and grave objects of Natives whose cultures and rituals were completely alien to them.\textsuperscript{16} From the early 1600's until the 1830s, British anatomists routinely dug up the graves of the poor which were comparatively easy to access and they used these bodies for dissections at newly established medical schools. As Richardson explains, by the early 19\textsuperscript{th} century,

Corpses were bought and sold, they were touted, proceed and haggled over, negotiated for, discussed in terms of supply and demand, delivered, imported, exported, transported. Human bodies were compressed into boxes, packed in sawdust, packed in hay, trussed up in sacks, roped up like hams, sewn in canvas, packed in cases, casks, barrels, crates and hampers; salted, pickled or injected with preservatives. They were carried in carts and wagons, in barrows and steam boats; manhandled, damaged in transit, and hidden under loads of vegetables. They were stored in cellars and on quays. Human bodies were dismembered and sold in pieces or measured and sold by the inch.\textsuperscript{17}

The activities of anatomists and other scientists interested in human anatomy were generally not known and certainly not condoned by the British population at large. When a family would discover that a relative had been subjected to this sort of desecration, enormous grief and rage would typically ensue. As this practice became more publicly recognised, community revulsion swelled until 1832 when an anatomy school in Aberdeen, Scotland was discovered reburying
mangled corpses on the school grounds; upon this discovery, an angry mob burnt the building to ashes and removed the corpses.\textsuperscript{18} As Richardson describes it, what was revealed during this early formative stage of cultural attitudes towards graves and their associated objects was a patent contempt for the social norms regarding treatment of the community’s dead: "Burial of remains without funerary or rite in the earth of the schools backyard constituted a cavalier disregard of publicly recognised norms."\textsuperscript{19}

Even in the century following the Anatomy Act over 50,000 bodies of the poor who died in public institutions ended up on the dissection table, many times against the wishes of their relatives who were often too destitute to pay for a formal burial. In response to this issue, William Godwin published "An Essay on Sepulchres: or, A Proposal for Erecting some Memorial of the Illustrious Dead in all Ages on the Spot Where their Remains have been Interred" in 1808. In keeping with the beliefs of many in the early 19\textsuperscript{th} century, Godwin stressed the need to "...commemorate- to preserve, identify, and signalize the remains of the dead."\textsuperscript{20} Indeed, Godwin’s beliefs, notable perhaps for their representativeness, are made manifest in a short anecdote. When his wife, Mary Wollstonecraft, died shortly after giving birth to their daughter—who would become Mary Shelley—Godwin marked his wife’s grave with a stone and planted two willows beside it. Later, at the time Mary Shelly was visiting the graveyard, it had become a well-known haunt of body-snatchers. Richardson explains that these sets of behaviour demonstrate a familial preoccupation with the meaning of death at the same time that it highlights a contrasting preoccupation with a "disinterested" and
overly pathologized sense of death that dominated contemporary medical concerns. The struggle to assert a familial and sacred view of death over the now advancing quasi-scientific view would eventually find its way into Shelly's 19th century parable of the perils of the modern world, *Frankenstein*. Throughout her novel, Shelley would warn of the dangers of subordinating life and the sacred to "science."²¹

Richardson's work on the shifting cultural attitudes towards graves and burials has much to say to my study of Native gravesite regalia. Considered more broadly, grave-robbing has not been a pursuit restricted solely to western scientists, archaeologists, and collectors. From prehistoric Europe to ancient Egypt, and forward, it seems that whenever there have been valuable goods in a grave, the site has been susceptible to plunder. The desecration of enemy graves was common practice for many Native tribes.²² Archaeologists and museum curators have in the past cited these activities when claiming that their careful and controlled excavations are far preferable to the inevitable rifling of what are in fact often plunderers. Such accusations have frequently been made towards Native Americans themselves as a way of legitimizing existing practices of collection, ownership, and preservation.

Thus, while practices regarding the dead have changed dramatically in many cultures over time, there remains a widespread discrepancy between the emotional and practical understanding of what constitutes respectful treatment of the dead and the apparently cavalier attitude of scientists towards the dead of "others," whom they regard as legitimate specimens for inquiry. And while the
practices of excavation of human burial sites are now under intense public scrutiny, arguments rage among governments, lawyers, dealers, auction houses, museum directors and curators, collectors, historians, and archaeologists about the ownership of the spoils of war and burial goods that have earlier been unearthed. Today, these practical discussions take place at the highest level of government and the conservation and restoration of these historic artistic and ethnographic objects has developed into a distinct professional occupation, with a code of ethics, and a public acknowledgement of expertise; this was not, of course, always the case.\(^{23}\)

Indeed, if the recent history of burial associations and practices is fraught within western culture, that history is even more problematic when considering attitudes towards the practices and rights of culture "others." At the same time that Godwin and others were expressing concern about the treatment of graves and grave objects and the over-medicalization of death, by the mid 19\(^{th}\) century in Colonial American and Europe, collecting cultural and natural history specimens from Native cultures had become a significant and respected activity. In part such permissiveness is related to the popular system of "racial classification" developed in the mid-eighteenth century by the Swedish botanist by Carl von Linnaeus. Linnaeus's classification system fostered the collection of large numbers of taxonomy and flora and fauna.\(^{24}\) His system of classification, however, was not limited to botanical specimens but rather was expanded to include all living things including living cultures. He also pioneered the development of the concept of "race" proposing that within of the category of
Homo sapiens, there were four subcategories. These categories, Americanus, Asiaticus, Africanus, and Europeanus were based on place of origin at first, and later skin color. According to this theory, each race had certain characteristics that members supposedly possess. Not surprisingly, Linnaeus’s races were clearly skewed in favour of Europeans who were considered as a group to be white, gentle, and inventive. In part this system of cataloguing took root because it had come to seem increasingly important to have a broad series of specimens on which to base identifications. At the same time, when natural science and anthropological collections came to store objects in large quantities that were made from organic materials, it was quickly discovered that they were vulnerable to deterioration due to sunlight, pollutants, and bacteria.

One early and famous example of both collection and preservation arose out of the transcontinental expedition of Lewis and Clark, which took place in the opening years of the 19th century. Setting out to map large portions of the western United States, Lewis and Clark were also charged, as part of their mandate, with the collection of sacred and religious objects from the forty eight Native communities they encountered on their expedition. The amateur collectors and ethnographers who traveled with the expedition were equipped with only rudimentary, though prototypical preservatives, specifically arsenic and mercury crystals, intended for the preservation of natural history specimens as well as ethnographic artifacts. Unfortunately, the legacy of the Lewis and Clark expeditions and others from the same period was a long lasting and profound one. By the end of the nineteenth century, when collectors were sent out
specifically to systematically collect material evidence of Native cultures and ways of life, these practices had become much more commonplace.\textsuperscript{27}

This relatively early context accounts in part for a set of attitudes that would later come to authorize harmful conservational practices vis à vis the sacred Native art objects under study. Given the complex set of associations governing burial practices and early approaches to collection and cataloguing, it is not at all surprising that conservational methods took the direction that they did. But the age of ethnographic collection received a new infusion of energy with the work of Franz Boas, the cultural relativist, whose work began in the 1890's. Beginning with the assertion that all cultures were intrinsically equal, Boas argued that it was just as important to study the smallest most obscure tribe as it was to study the great edifices of western civilization. He further described the ways that the broad diversity of human cultures would soon be swept away by travel, war, and progress in general. These beliefs initiated a frenzied period of unearthing and collecting Native objects and human remains that would continue up through most of the twentieth century. It appeared to the anthropologists spurred on by Boas's cultural theories that certain Native traditions and societies were almost certain to vanish, and they felt that, if science was able to, it had a responsibility to assemble as complete a record as was possible of these cultures. Photographs were taken, plaster casts were made, measurements of physical characteristics were made and graves were unearthed all with the intention of ostensibly safeguarding a perceived dying culture.\textsuperscript{28}
At the same time, beginning in the second half of the nineteenth century, objects were treated with chemicals by both the field collectors and museum personal. Captain Charles Wilkes, an early 19th century field collectors describes his own formula to ensure the enroute survival of his anthropological and biological specimens, "I have thrown tobacco among the articles and hope it will keep until the collection can be unpacked in Washington." Field collectors like Wilkes regularly employed a range of chemicals in order to preserve their samples; pesticides such as fumigating tobacco, camphor, flour of sulphur, arsenic, and corrosive sublimate (mercuric chloride), were used to preserve specimens in transit as well as in the museums themselves where the specimens were eventually received. 

As if the problem were not bad enough, in the late nineteenth century, the realization that mercury and arsenic salts provided long term protection against pests led them to become widely embraced by collectors of all sorts. While this kind of chemical preservation was initiated by botanists for natural historical specimens, the method quickly came to be applied to Native art objects as well. An example of the elongated life trajectory of a culturally significant artifact is demonstrated by a selection of Native clothing and utensils that were collected by Louis and Clark and then sent by Thomas Jefferson to Thomas Wilson Peale for display in his museum in Philadelphia. Very few artifacts from this early period of contact remain. Peale's collection was passed onto many subsequent collectors after his death, and today they are still in excellent physical condition; many are being housed at the Harvard Peabody Museum in Cambridge,
Massachusetts.\textsuperscript{31} As it happens, Peale was an early proponent of the use of arsenic crystals as a preservative.\textsuperscript{32}

Other institutions across North America had similar preservation policies, and some institutions now admit to using mixtures that contain arsenic as late as 1940-1960.\textsuperscript{33} It should not be surprising that museums were using arsenic compounds as a preservative at this time. Arsenic compounds were often added to pharmaceutical tonics until after World War I.\textsuperscript{34} And, in the 1940s 40 thousand tons of arsenic trioxide compounds were sold annually to American manufacturers who added them to both agricultural and household pesticides. This was supplemented by tens of thousands of other arsenic compounds as well as four million pounds of Paris Green, a copper arsenic. As evidence of their widespread acceptance, mercury salts were also used as household insecticides, as antiseptics, as a teething powder for children, and as hospital disinfectant.\textsuperscript{35}

Within a museum context, the early usage of these kinds of chemicals was equally pervasive. In 1879, when the forerunner of the Smithsonian Institution in the United States, then known as the Bureau of American Ethnology, was established, it sanctioned the use of such chemicals as preservatives for the artifacts in its possession. As both Goldberg and Hawks point out in their analysis of pest control at the Smithsonian, arsenic and mercury were continually used in these and other ethnographic collections until beyond the turn of the twentieth century. From as early as the late 1700's and forward into the latter part of the twentieth century, arsenic compounds were frequently applied to biological artifacts and to other ethnographic objects in order to preserve them. This
application was sometimes in the form of a soap mixture and sprays that were often applied to taxodermalogical specimens.

Following Goldberg's examination of these measures taken at the Smithsonian we can see the general trends in pest control management as they have been taken by other North American museums in the period leading up to our own. Concerns over the effects of toxins on human health were sometimes voiced, as is made clear by Pierre-Jean-Claude Mauduy's recognition of the dangers of using mercury as a preservative: "Corrosive sublimate (mercury chloride) is a dreadful poison, which should be entrusted only to an artist... to place it into ignorant or reckless hands is to trust them with a weapon with which by merely touching it they can injure themselves."36 Sadly, however, very little attention was given to the long-term effects on the objects themselves. At the American National Museum of Natural History, for instance, such practices were just as widespread, though there is very little documentation available that would indicate what chemicals were used to preserve artifacts, since, at the time these substances were applied, they were considered to be just part of the general maintenance of the artifacts and therefore not worthy of being chronicled. However, as Goldberg explains a survey of the individual pesticides over the years indicates that a wide array of collections were treated with a range of harmful toxins and fumigants. In 1940, a lengthy memorandum was sent out to the associate director of National Museum of Natural History that documented the changes that were necessary in the methods of preserving artifacts that were housed in closed storage cabinets. This memo also served as a manual for the
treatment of insect manifestation. From 1940 to 1955 the archives contain some records of specific treatments for objects, recipes for toxic concoctions that had been applied to objects and examples of other treatments involving individual items.\textsuperscript{37} The problem is thus not only the fact of the application of these substances but also the fragmentary archival record as it relates to that application.

As they vary from museum to museum in response to shifts in the perceived needs and mandates of institutions, pest control measures became part of a larger picture related to the growing professionalization of collection and conservation itself. At the National Museum of Natural History in the late 19th and early 20th centuries, the managers of the actual collection were referred to simply as "museum aids" or "museum preparators."\textsuperscript{38} In "Studies in Conservation," George Stout claimed that the word conservation was first, "really definitely and firmly applied" to the domain of art and artifacts during The International Conference for the Study of Scientific Methods for the Examination and Preservation of Works of Art, organised by the International Museums Office in Rome in 1930. According to Stout, this conference "seemed to have occurred at, or near, the end of an indefinitely long period of complacency with respect to the conservation of works of art" during which time restoration and conservation had been seen as trades.\textsuperscript{39} In this way the history of the development of conservation as an academic and professional discipline is very much linked to the professionalization of the museum field generally.
As part of this process, renewed attention began to be paid to lax and outmoded practices of collection, preservation, and conservation. As part of a newly emergent group, by the 1930’s many art historians along with professional curators and collectors objected to the problematic standards of qualification and demanded more rigid standards for restorers and conservators.⁴⁰ According to a London Times report on the Rome conference, over one hundred and fifty experts and directors attended. Stout himself recalled that the company was fairly mixed and included a number of working, practicing restorers, a few of whom had qualified in the study of the physical sciences and had done some analyses of materials; museum curators who had, in relation to their duties, taken a more or less studious interest in the physical care and preservation of works of art; and a very small group of scientists who had followed investigations in art and archaeology concerning methods of construction that were followed in periods of history.⁴¹

Professional connections established at this conference led to the development of the International Institute for the Conservation of Museum Objects. And in a letter written by Stout in the spring of 1945, it becomes clear that the emphasis of the new professional domain of conservation will be on science and scholarship:

There is a decided risk of work of this kind becoming nothing more than picture-doctoring. Good in themselves but inadequate...[T]herefore, one should make sure at the very outset that there is a truly philosophical basis so that ‘conservors’ shall not only be good practitioners but scholars as well, knowing not only what they do but why they do it.... Embedded in this matrix should I think be an intensive ad hoc course of physics and chemistry — brief and circumscribed but entirely scientific and objective in its nature — given by scientists sensitive to art of course but not necessarily ‘picture men’. To sum up what seems essential to avoid from now on is the coexistence of 1) a class of curators, knowing no science and little philosophy and 2) a class of technical ‘conservors’ devoid of scholarship working in water tight bulkheads- without intercommunication. Can we start to overcome this evil?⁴²
The belief that conservation should be "entirely scientific and objective in its nature" had many adherents, and helps explain the direction that conservation would continue to take. In retrospect, in 1945 it seems to have been a relatively common belief that maintaining the physical integrity of objects was a favourable and constructive endeavour by any standard. The Native perspective on object use and preservation was never considered. At the same time, by the 1940's, the field of conservation was beginning to become more specialized and the caretakers of the objects were now assigned to the anthropology laboratory of the museum. In the 1960's at the National Museum of Natural History, for instance, a separate Anthropology Conservation Laboratory was created for the preservation and restoration of anthropological artifacts. Pest control and the application of toxic preservatives at this time was carried out at the NMNH using both heat and chemicals. This department was responsible for the maintenance of the objects as well as their loans and accessions. 43 Documents at the Smithsonian Institution Archives from this same period indicate a similar use of poisonous preservatives.

The problems facing contemporary Native communities in North America in the wake of repatriation efforts are thus rooted in a longstanding and complex history. In contemporary museum culture, the problem of toxins has been addressed in some significant ways. Currently, any museum in the United States that wishes to use pesticides on their collection must first register with the Environmental protection Agency and be granted specific licensing.44 Significantly, this is not the case for Canadian institutions. But the effort to thus
identify and address the problem of the material and cultural contamination of Native artifacts must confront the history as I have briefly enumerated it above. Such consideration alerts us to the methodological limitations which are often inherent in the perspectives we bring to the study of art objects. Too, this history has broad implications for the study of Native art, the examination of which often concerns objects having an at best problematic status, indeed whose very status as "art" remains somewhat in question. As I have outlined it, the challenges facing Native communities seeking to repatriate sacred objects and regalia are framed by a number of arguments—some outmoded, some not—regarding the classification, cataloguing, and conservation of Native art. Those challenges are inseparable from the changing cultural associations surrounding graves and grave-associated regalia. It is with such challenges in mind that policy initiatives such as NAGPRA have been developed in recent years. In the next chapter, I consider some of these developments along with some newly emergent recent theoretical frameworks on which we might draw in an effort to address the problematic history of contaminated Native art objects.

NOTES FOR CHAPTER ONE
3. Cash Cash, "Medicine Bundles, 143"
7. McCracken, Culture and Consumption, 102.
13. Hubert, "A Proper Place," 131
15. Kreps, Liberating Culture, 52.
Richardson, *Death*, 70.
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Hawks, "Historical Survey," 5.
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CHAPTER TWO

REPATRIATION AND ITS AFTERMATH: THE RECENT CONTEXTS

The complex cultural attitudes surrounding Native art objects have sustained implications for the study, preservation, and conservation of those objects within the disciplines of art history, Native studies, and museum studies. These implications are particularly felt in contemporary North American culture which has witnessed a political and social shift regarding the disposition of Native art objects and their associated proprietary rights. In this chapter, I address this climate of retribution and redress, paying particularly close attention to the issue of repatriation within the United States, and to a lesser extent Canada. Briefly put, repatriation has brought the issue of toxic contamination and preservation to the fore within both contemporary Native-American and Native-Canadian culture; the specific challenges relating to toxicity and arising out of repatriation force a thoroughgoing reevaluation of the role of the Native-art historian and conservator.

The issue of the toxic contamination of Native artifacts thus takes place within the larger context of repatriation. Repatriation, within the American framework, has largely been defined through NAGPRA legislation, first signed into law by George H.W. Bush in the fall of 1990. This legislation was the culmination of a series of federal laws over the prior century dealing with Native American remains and more broadly, with both cultural and archaeological resources. Embedded within the repatriation mandate are a number of concerns
that have seriously challenged the primacy of the will of the archeologist, the curator; currently, given the issue of the potential toxicity of artifacts, the conservator is being confronted and made accountable. These concerns call into question the 'absolute' value of science and force a critical rethinking of the relationships between conservators and Native communities. ¹ Too, the NAGPRA initiative within the U.S. stands as both the response to, and the culmination, of a long and sullied history of cultural conflict and distress.

Thomas Killion describes the repatriation process within the United States as both painful and culturally challenging.² He cites the many repatriation claims that forced both tribal members and museum personnel to revisit tragic, government-sanctioned injustices that had resulted in museums taking possession of sacred objects and human remains from Native communities. Examples of these injustices include the 1895 Apache massacre in Arizona, the 1864 Sand Creek massacre, and the 1890 Wounded Knee massacre in South Dakota. The return of remains from these events forced all involved to revisit some of the darkest moments of American history.³ Framing the debate in these terms however turns the repatriation discussion into a binary contest of religion verses science. Repatriation, perhaps because it began as a quest to rebury ancestral bones has often been viewed as a highly polarized debate with science (anthropologists, archeologists, conservators and museum staff) on one side and religion and spirituality largely of Native Americans on the other.⁴

It was during the Civil Rights movements of the mid 1960s that the initiative to recover human remains from museums began to take hold. Like other
disenfranchised groups at the time, Native Americans began to feel and express their growing resentment towards archeological excavation of their grave sites, public displays of their ancestors’ skeletons and the permanent presentation of sacred objects by museums. The central point of contention was whether it was ethical and legal for museums to display the human remains of Native people, and whether Native American spiritual and familial interests should take precedence over the scientific, anthropological, and perhaps even aesthetic interest in preserving and studying the excavated remains.

Another manifestation of this reawakening of cultural identity and political consciousness within Native Communities was the establishment of Native museums and cultural centers. The development of these centers had significant educational and economic consequences for Native communities. Whereas before, employment for Natives in the cultural sector almost exclusively required one to move to major urban hubs and leave the reservation, the development of cultural centers allowed skilled Natives to be able to work within their own communities. This combined with the increased interest in Native customs by tourists and federal funding being made available to tribal governments, resulted in Aboriginal cultural centers being viable and self-sufficient commercial ventures as well as a valuable educational and spiritual resource for the community itself.

Within this context, an organization called “American Indians against Desecration” (AID) was formed in 1974 with the intention of bringing political and social pressure to bear on the issue of the return of Ancestral Native remains. A
federal bill was initiated to a large extent to confront the enormous number of human specimens and related art objects that were being preserved in the storerooms of major American Museums. These relatively early initiatives then took legislative form in 1978 with the American Indian Religious Freedom Act. This statute protected the religious freedom of Inuit, American Indians, Eskimos and Native Hawaiians..."including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites." It acknowledges that, "laws and policies often deny American Indians access to sites required in their religion, including cemeteries and at times prohibit the use and possession of sacred objects necessary to the exercise of religious rites and ceremonies."

The catalyst for the eventual passage of more effective federal legislation occurred in the spring of 1986 when Montana Senator John Melcher invited a small group of Northern Cheyenne Chiefs to recover one of their tribe's sacred Sun Dance Songs from the store rooms of the Library of Congress. The Chiefs found the wax cylinder recording and in the time remaining they were invited to visit the Cheyenne Collection at the National Museum of Natural History. Clara Spotted Elk, the then legislative assistant to Senator Melcher recounts what they encountered in the store rooms:

As we were walking out, we saw there were huge ceilings in the room, with row upon row of drawers. Someone remarked that there must be a whole lot of Indian stuff in those drawers. Quite casually the curator who was with us replied, "oh that's where we keep the skeletal remains" and then he told us how many: 18,500. Everybody was shocked... I mean it was such a shocking thing to say that no one said anything. The Chiefs were quite alarmed because we had been sitting there all day with those restless spirits so we really beat it out of there. A few days later I
relayed this incident to Senator Melcher. He said, "young lady you've got to learn to get your facts straight. The Smithsonian couldn't possibly have 18,500 skeletons rattling around in the attic". So I checked into it and reported back that yes indeed they had 18,500 skeletons. He was outraged.\textsuperscript{10}

Shortly after this episode, Melcher and his staff began drafting the Native American Museums Claims Commission Act, which became known irreverently in Washington as "the Bones Bill". In January 1987, when Senator Melcher introduced this bill to the Senate, he stated:

There are several universities that that have the remains of Native Americans in skeletal form on display or just their bones collected in boxes without the consent of the families or the tribes. In addition to that, there are numerous artefacts of sacred nature to tribes of Native Americans that are in museums without the consent of the tribes. There are religious artefacts of a sacred nature of various tribes. To correct that, I am introducing this bill; it will set up a system of repatriation, and that means just as it sounds, the return of the remains of these people taken from their Native grounds and returned now with some dignity to the tribes or the clans or the families of Native Americans and Native Hawaiians, where they can properly be given respect and be cared for by the people.... I think this bill is absolutely essential. I think it is a shame on our country, on our people as a whole, that we have not corrected this problem. I believe respect is due; dignity is due and now is the time to do it. That is the purpose of the introduction of this bill.\textsuperscript{11}

Partly because of this Native initiative and Melcher's legislative response, public awareness about the controversy over the collection and display of Native remains was on the rise; at the same time, public opinion had been inflamed by articles in popular publications such as National Geographic and Science magazines, which had graphically illustrated the physical and ethical damage that occurs when Native graves are despoiled.\textsuperscript{12}
The issue of redress and repatriation took another turn in the mid- to late-
1980's with the drafting and eventual institution of the National Museum of the
American Indian Act, the precursor to NAGPRA. In its original conception, the
NMAI mandated that the Smithsonian Institution inventory, document and if
required, repatriate human remains and funerary objects to that were culturally
affiliated with federally recognized Native American Tribes. Initially this act did
not address culturally significant objects that were not associated with funerary
rite but the act was subsequently amended in 1996 to include these objects as
well. After the passing of NMAI, several Native tribes attempted to repatriate
their regalia citing this law, but in the end it proved an ineffective tool. In leading
court decisions it was interpreted in such a way as to grant Natives only the
same basic right to religious freedom as any other American citizen under the
First Amendment. But by the mid 1980s, there was a growing sense that
further federal legislation was needed to mandate the return of Native objects
from museums; instead the initial focus had largely been on human remains and
burial goods. Two powerful national Indian rights organizations, the National
Congress of American Indians and the Native American Rights Fund mounted an
effective campaign to ensure this legislation was passed, insistently demanding
the return of their ancestral artifacts from museum collections and storerooms.
While many tribes had successfully repatriated sacred objects from museums
prior to the passing of this ruling, the primary justification for this particular
legislation was that unless forced to do so, museums would not as a whole be
responsive to repatriation requests from Native communities, believing the
potential loss of material would be too great. NMAI, like its successor in NAGPRA then, was originally intended to redress some of these issues and "provide some small measure of justice for Native Peoples in the modern era for the generational suffering and hardship imposed by policies and practices that outlawed Native religions and violated fundamental rules of human decency."\textsuperscript{14}

It was out of this climate of shifting cultural, political, and legal values that NAGPRA emerged, the most comprehensive piece of legislation to date to deal with the repatriation of Native regalia and art objects within the American context. Indeed, by the end of 1990, it was clear that NAGPRA bill was going to be passed, notwithstanding intense lobbying efforts of various American museum communities. The argument continually launched by those museums opposed to the bill was the now familiar assemblage of contentions that argued collections were an integral component of the research function of the museum, that these collections had a high market value and were a public asset, that it would not be feasible to determine the community of origin of much of the collections. Beyond this, they argued more practically, that a fixed date implementation of the law would be extremely costly for museums which are already under-funded.\textsuperscript{15}

Such resistance, unfortunate as it was, has to be understood within the specific context of intentions and objectives surrounding the drafting of NAGPRA and its predecessors. In its scope and dimension, NAGPRA was essentially a federally sanctioned reversal of the 1906 Antiquities Act, which had been intended to protect the cultural and archaeological resources of the United States, defined almost in opposition to, and disregard of, the actual Native
groups and communities from which these objects had been taken. In actuality, this earlier 1906 Act, drafted and implemented at a much different stage in the relationship between the art historical, museum, and Native communities, had been a dramatic reversal of common law, which had protected graves from looting and had stated that there can be no property interest in a deceased human being. Simply stated, the 1906 Act was a clear reflection of the dominant anthropological and conservationist ideology of an earlier period which viewed Native remains as a source of academic and scientific knowledge.

At its core, NAGPRA was intended to overthrow the injustices perpetrated by this 1906 act and to restore a more nuanced and sensitive approach to the cultural ownership of Native-American grave regalia and art objects. For the first time, in any systematic way, NAGPRA legislation required federally funded institutions to catalogue their holdings of human remains and objects found in Indian graves and required that, if a repatriation request was to be made, these objects must be returned to their original owners. Tribes are able to request the return of objects even if their prior acquisition by museums, displays, or other cultural institutions had been entirely legally sanctioned.

Given the challenges posed by such a whole scale shift in value and perception, as well as the attended practicalities, NAGPRA granted institutions five years to complete an extensive list of their Native artifacts. As a result, it has only been since 1995 that tribes have known where their cultural patrimony lay. The repatriation process is a long one and so most Native tribes have only begun to receive their cultural artifacts in the last decade.16 In the United States, Lee
Davis, consultant to the Hoopa Tribe and professor of anthropology at San Francisco State University estimates that as of 2003-2004 perhaps only one hundred objects of cultural use have been repatriated to Native tribes since NAGPRA was initiated in 1990.¹⁷ The number is particularly small, when one considers that at the time that the NAGPRA Bill was passed, some estimates placed the number of human remains in the possession of American museums in the hundreds of thousands.¹⁸ Indeed, according to the National Center for Cultural Resources sponsored by the National Parks Service and the American Department of the Interior, the statistics as of late 2004, regarding the ongoing process, reveals that vast numbers of catalogued objects remain waiting to be repatriated:

- Human remains: 27,863 individuals
- Associated funerary objects: 576,383
- Unassociated funerary objects: 91,494
- Sacred Objects: 1220
- Objects of cultural patrimony: 271
- Objects that are both sacred and patrimonial: 656.

As these numbers indicate, despite several decades of legislative, legal, and cultural efforts, the repatriation process is only now in its initial stages.¹⁹

Moreover, in its design and implementation, NAGPRA legislation is fraught with myriad issues, conflicting perspectives and motives, prolonged by an extensive history of distrust between Native American communities and museum professionals. But, despite this reality, NAGPRA has been perceived as a
significant step forward in the development of a relationship between all those who value historical and Native objects. One of the first NAGPRA successes took place in Larsen Bay on Kodiak Island, Alaska. In 1991, the Smithsonian Institution returned the remains of 765 people to Larsen Bay where they were reburied in the same Russian Orthodox cemetery they had been removed from in the 1930’s by archeologist Ales Hrdlicka. Their return marked what was felt to be the beginning of a long healing process in Larsen Bay and the other communities throughout Alaska and the United States. And Robert Cruz, a member of the Tohono O’odham community in Arizona and the South West Coordinator for American Indians against desecration, has described another early outcome of NAGPRA, specifically the reburial of ancestors from the Tohono O’odham held in the mountains near Sells, Arizona. This was the community’s first reburial ceremony, and so there was no ritual precedent for the Native community to follow. Cruz describes the community as singing songs as the bodies were placed back into the ground. Hundreds of members of the community were present. This first reburial by the Tohono O’odham was an occasion of immense spiritual significance.

In contrast to the situation in the United States, where NAGPRA has mandated the return—as yet incomplete—of Native objects, the situation in Canada is perhaps even less clear. Nevertheless, though many Native communities reside on either side of the national boundary—a jurisdictional divide which further complicates the issue of repatriation—the challenge for Canadian Native groups and the art historians, conservators, and museologists
who are primarily concerned, is at least broadly similar. While comprehensive 
statistics such as those cited above for the as yet unrepatriated objects in the 
American context are not available for Canada, Tom Stone, senior conservator at 
the Canadian Conservation Institute estimates that since 1998, objects have 
been returned to Native communities in Canada under a mandate less 
homogenous and more decentralized than NAGPRA. Notwithstanding this 
contrast, the issue of repatriation and cultural sensitivity is of course relevant 
within the Canadian context as well, particularly within the current climate of 
Native land claims and proprietary rights.22

As they are in the United States, museum conservators within Canada are 
increasingly aware of the demands for and challenges of repatriation, but are 
only now beginning to address the related issue of natural deterioration. As a 
practical response to the issue of pesticide residue on Native objects, the 
Canadian Conservation Institute recently initiated the “Pesticide Database 
Project” which aims to gather and organize information on the application of 
pesticides to museum objects. This database will be a resource for museum and 
conservation professionals.23

While it is unfair and perhaps impossible to generalize about a broad, 
“museum perspective” within Canada, just as it is erroneous to propose a 
universal “First Nations perspective” there has been a noticeable change in the 
ways museums consider artifact preservation. In her 1992 analysis of museums 
and collections, Susan Pearce stated that museums’ holdings “will always be and 
should always be at the heart of the museums’ operation.”24 Given the
widespread acceptance of such a stand, it should come as no surprise that
Canadian institutions, like their American counterparts, have been somewhat
resistant to repatriation. More recently, George MacDonald, the former director
of the Canadian Museum of Civilization, asserted that there is a, "fundamental
fear that the threat (repatriation) to their cornerstones—their collections—would
undermine museums." Evidence seems to suggest that today this kind of
"artifactcentricity" is slowly being replaced with a new, more holistic
understanding of the role of cultural objects within a collection, as well as an
increased sensitivity to the proprietary claims over Native art objects.

This movement away from the models of the past is indicated through the
mission statements of conservation associations, taken internationally. For
example, as recently as 2000, The Canadian Code of Ethics of Conservators
stated that, "The purpose of conservation is to study, record, retain, and restore
the culturally significant qualities of the object with the least possible
intervention." This statement has since been amended to read, "culturally
significant qualities of the cultural property as embedded in its physical and
chemical nature." The declaration is significant in that it now indicates that it is
only the physical properties of the artifact that are within the ambit of potential
protection and restoration by the non-Native museum curator.

Further evidence for this growing recognition of the cultural heritage—along
with the rights that go along with that heritage—associated with ethnographic
collections can be found in an even earlier modification of the Canadian Code of
Conservators. In 1989 their mandate expanded beyond the simple preservation
of the physical and aesthetic qualities of the art object to also include the preservation of an object's "cultural integrity." Indeed, within the context of this contemporary re-examination of the traditional museum paradigm, renewed attention has turned to the issue of cultural deterioration and decay. For example, in the 1995 book *Durability and Change, the Science Responsibility and Cost of Sustaining Cultural Heritage*, deterioration is described— in a way that it is increasingly becoming the norm within conservation circles—as "We [heretofore] described deterioration as those changes that we regard [as] undesirable." Statements such as these, like the NAGPRA initiative which emerges out of them, reflect a move away, albeit at times marginal, from a conventional museum model which continues to hold enormous sway. The values of that conventional model are partly rooted in a line of thinking stretching back to the enlightenment and finding much legitimation within capitalist ideals. This model is integral to the issue of contamination here at study, because as seen in the previous chapter, it is the model of conservation and preservation that was in use during that period of the 19th century and the early 20th century when toxic preservatives were applied to Native artifacts in order that they might maintain their new sense of "value." Central to this system of value is the concept of "authenticity". According to Susan Pearce, this describes "the real objects, the actual evidence, the true data as we would say upon which in the last analysis the materialistic meta-narratives (of European Culture) depend for their verification." When an object is bestowed with perceived "authenticity" the
object becomes imbued with high value; as long as this object survives intact, the
perception is that there is a unique and direct relationship to the past and the
culture that created this object. The object as the center of the function of the
museum derives from the belief that the artifact, as the creative product of
members of a particular community, accurately reflects the beliefs of this
community.31 From the conservator’s perspective then, the object is a tangible
and precious source of cultural knowledge. Indeed, as Alyce Sadongei states,
“once museums believe that an artifact is authentic, the object(s) it may be
imbued with even greater value.”32

Of course, from a contemporary perspective, now widely available within
both American and Canadian contexts, such a model legitimizes what Baxandall
calls “cultural contamination.” For, once an object has been collected by a
museum, it loses its original function within the culture that produced it; the
museum then generates a new museological meaning around the object,
permeating it with an alterNative cultural value. Further, once an object is a part
of the collection, museums have a vested interest in its physical preservation and
preservation is still one of the primary mandates of most museums. Among other
things, it maintains that the value of the artifact lies in its role as a specimen, to
be looked at and studied. Thus it is that the artifact recedes from view, and the
theory of culture asserted by the museum becomes privileged and declares its
own constructed meaning ahead of the intended meaning of the object by its
maker. Not surprisingly, it is within this ideological framework of the consumption
and dissemination of Native art objects that collecting and conservation in
general and preservation using toxic chemicals specifically was endorsed. In keeping with Baxandall’s terminology, museum practices have often, in theory and effect, contaminated the object and largely forestalled its reception and reintegration into the Native community. Clavir describes this as a self-fulfilling cycle of value making that often stands in opposition to the value the object may originally have and may even still retain elsewhere: “Museums have the power to designate which objects have cultural value by choosing them for their collections. Conservators then assert that these objects must be preserved since, being in a museum’s collection, they have cultural value.”³³

At the same time, the preservation of objects that are perceived to constitute a direct link to a disappearing culture become essential as resources to be drawn upon for future empirical use. If the objects are perceived to be the only source of this particular cultural knowledge, then any permanent damage to or loss of the object would functions as a permanent break with the past and the destruction of an irreplaceable source of learning. It was in part as a response to the fear of these kinds of losses, that salvage paradigms had become so immensely widespread within museum culture, so much so that they at times dominated the sense of a museum’s, or a collector’s, or a conservator’s self-appointed mission. Taken by a belief that traditional indigenous communities were being so transformed by contact with Europeans that they would disappear as distinct cultural entities within a few generations, anthropologists and collectors adopted a salvage approach. In doing so, they ironically contributed to the perceived deterioration by gathering up the very materials that Native tribes
needed to survive and regenerate as living cultural communities. Although some objects were procured through legitimate trade and purchase, the vast majority was acquired illegitimately.

Both Canadian and American anthropology and ethnography were dominated by this approach to Native American culture during the late 19th and early 20th centuries when many Native communities were undergoing rapid change as a result of foreign expansion and domination. With the support of the Bureau of American Ethnology, hundreds of “collectors” sought to gather Native material culture and document their way of life. These acquisitions have made up the bulk of the collections in America’s most preeminent museums. As Cash aptly puts it, “a vast inventory of Native material now housed in Western repositories is eloquent testimony to the larger historic realities and colonial processes through which Native lifeways were suppressed and cultures disenfranchised.”

Today, salvage ethnology is almost entirely denounced as paternalistic and intolerant of cultural difference. Despite this change, and the increasing number of Natives who are themselves in positions of control and management in museums that house their artifacts, the effects of this pervasive attitude continue to mark the relationship between Native people, museums and their cultural objects. According to Cash, “no matter how benign or socially responsive the anthropological project has since become, its cumulative impact across time and space has been significant. Even so, Native communities today, through their collective efforts, are beginning to transcend the history and are
now attempting to reconcile the past with the future through self-determined strategies of cultural renewal and preservation.\textsuperscript{38}

Such efforts are facilitated not only by the kinds of repatriation efforts enumerated above, but also by new ways of thinking about the function of museums, art collections, and even art objects themselves. Indeed, the integrity of cultural artifacts and many of the fundamental values of conservation such as the perception of deterioration are now being redefined by the standards collectively grouped under the rubric of the "new museum." This "new museum" paradigm, in which the status of the Native "art object" as art object is rendered problematic focuses not so much upon the pure physicality of the artifact but rather emphasizes a more holistic cultural experience. MacDonald describes museums that would follow such a model as being "presenters of culture, not of objects."\textsuperscript{39} Artifacts in these progressive institutions tend to be recontextualized in simulated environments; curators seek to animate these surroundings and display the artifacts in such a way that the museum visitor can understand some of the surrounding culture that produced the artifact.\textsuperscript{40} Indeed, in order to reach their fruition, Canadian initiatives such as these, like NAGPRA and associated repatriation mandates, depend upon the successful restitution and reintegration of Native art objects and regalia into the indigenous context. But, as we shall see in the ensuing chapter, there remain many barriers before those goals can be met. Still, the new museum movement which sees reintegration and recontextualization as its goal has gained significant momentum within the international museum community. And, for a fuller sense of the challenges now
facing North American collections of Native art, the story of that movement is significant.

Like repatriation, it is rooted in the social movements of the late 1960's and 70's, and it reflects sweeping dissatisfaction with conventional interpretations of the museum and its functions.\textsuperscript{41} According to Kreps, this new museology emerged from a series of roundtable discussions that were initiated to confront the growing dissatisfaction with the museological status quo of the early 1980's. In a paper presented at the 1995 general meeting of International Council of Museums (ICOM), Dr. Peter van Mensch claimed that in the history of museology, there have been two major revolutions, both of which seemingly involved Native art objects. According to van Mensch, the first took place between 1880 and 1920, and the second was between 1960 and 1980. The first revolution ushered in what is now referred to as the "museum modernization movement" and it was at this time that western museums began to realize that they shared similar goals and challenges and they began to come together as a more cohesive community.\textsuperscript{42} With the museum community now recognized as an "umbrella discipline" it began to be recognized as a field of interest carrying its own distinct professional identity.\textsuperscript{43} Subsequently, in the period between 1960 and 1980 there was a related paradigm shift, but this second adjustment turned on a desire to move the focus of the museum away from an internal, inward looking policy and instead to direct it towards the community that sustains it, to develop them as educational and "social institutions with political agendas."\textsuperscript{44} This new social agenda espoused in many of the more recent mission
statements of museums in both Canada and the United States is what constitutes “the new museology”. Inherent in this perspective is the notion that the museum is not confined to the building that houses its physical objects. Rather, the presentation of these objects is to be considered within the context of “social action and change.”

As van Mensch elaborates, “The people themselves have to take care of their own heritage, hence the term “‘popular museology.” This development, broadly aimed at democratizing the museum and addressing, at least theoretically, proprietary rights, has been promoted by the ICOM at general conferences, and in committee, and by the Committee on Museology which began in the 1970’s. This movement’s tenets were expressed in the “Declaration of Quebec” of 1984. In it, the Committee declared its view of new museology as concerned with community development and social progress, reaffirming the social mission of the museum as a fresh point of departure and the primacy of this more integrated and culturally sensitive function over prior established museum functions. This represented a shift in recognition of the museum as a potential agent of social change. Once again, the new museology movement was heralded as stressing the value and importance of letting people control their own cultural heritage. Like von Mensch, Bray describes this kind of museum model as, “people’s museography,” a term he defines as “a body of techniques and practices applied by a population to the conservation and enhancement, in a museum or otherwise, or the collected heritage of the community and its territory”. This approach acknowledges the worth of preserving the objects and
documentation that represent a community's heritage but also the vital elements of its living cotemporary culture and its inevitable change and progress.\textsuperscript{48} The negotiation of what has long been a divide in circles of art history, museum studies, and Native communities, and the reconciliation of the competing claims that emerge from those groupings lies behind much of the conception of new museology.

Such beliefs do undoubtedly begin to address the rights and concerns of Native groups across North America for whom "conservation and preservation" means not the exhaustive maintenance of the physical state of their historical objects but rather the cultural preservation and maintenance of the aboriginal values and beliefs that have always formed part of their community's identity. MacDonald elaborates, "Cultural tradition (according to aboriginals) is not something that belongs to the past and is amenable to being shut up in what they consider to be the 'dead environment' of museums."\textsuperscript{49} For many Native Peoples, museum collections stand as practical evidence of this imposed and fictionalized, "cultural deterioration."\textsuperscript{50} Many of these objects now housed in museums ironically were taken from First Nations communities by people who adhered to the erroneous 19\textsuperscript{th} century anthropological canon declaring that aboriginal cultures were disappearing and the best way to preserve this heritage was to seize and preserve their regalia.

Cash Cash has recently addressed this sense of a heightened awareness of the responsibilities of the museum vis a vis the object under study as well as cultural sensitivity more broadly. Remarking on some of the recent success
stories of repatriation, Cash Cash points out that "in recent years communities and museums have reached an unprecedented level of interaction. The nature and import of this interaction is beginning to transform the way anthropologists and museum professionals view and treat Native American material culture, particularly as it relates to the enduring cultural status of the objects in their care. Clearly the present situation is quite different from what it was around the turn of the [20th] century when the intellectual interests of anthropological sciences and museums merged in a concerted effort to "salvage remnant Native cultures."  

As Cash Cash makes clear, the imperatives outlined by new museological and other similar initiatives initially at least represented a great deal of hope to Native communities across North America. Like the repatriation process that it in part helped to sanction, the reconceptualization of the cultural role of the museum and the collector seemed to offer a means whereby Native groups could reclaim their patrimony and reintegrate art objects into their community. Indeed, the countless hours spent drafting legislation such as NAGPRA, and the financial capital necessary for its implementation was justified on the grounds of reintegration and redress. And for Native Peoples, the repatriation process initially offered the potential for cultural renewal and the return of their ancestral remains and ceremonial material. Its procedures seemed to both acknowledge and reject the cultural conquest and racism that had for so long permeated western culture, and specifically, the museum industry. The sentiment from many Native community leaders when NAGPRA was passed was that this bill would usher in a new and anticipated era of cooperative engagement between First
Nation and Museum communities. But, as the following example reveals, many of those hopes have been dashed and the corresponding objectives thwarted, almost before they could begin.

Summing up many of the hopeful expectations of Native groups upon the passage of NAGPRA, David Hostler, former curator of the Hoopa Valley Tribal Museum in Northern California, remembered, “We were really excited, and we felt that this was going to undo a lot of the bad feelings that existed between museums and Native tribes. It was a huge effort to get (the regalia) back; we felt we were bringing the living spirits of these objects back home where they could be danced.” But in his first hand experience as one of the leading participants in repatriating Hoopa regalia from Harvard’s Peabody Museum of Archeology and Ethnology, Hostler’s excitement soon turned to disillusionment:

I was naïve I guess. They (Harvard Peabody Museum) had about 500 Hoopa items, I only chose about 52 to repatriate, I picked items that I thought we could use, I didn’t want to be a take-it all. The process to get these back took about two and a half years of negotiation and begging. We had to hire an attorney, finally only 17 items were released, so that in itself was a disappointment. But when we found out that the items that we could get, that they were poisoned and could not be used at all, that was very disappointing...depressing. Especially for the older people in the community, they didn’t understand why the objects could not be used.

Indeed, as it happened, when Hoopa representatives went to the Peabody Museum to take custody of the seventeen objects that they were able to repatriate from the collection, the conservators warned Hostler that there were chemicals on the artifacts. The curators did not specify what was on them, but, as Hostler recalls, he and the others were told to wear masks when they entered the storerooms where the regalia were housed.
In the wake of NAGPRA and similar Canadian initiatives, and in
disappointing encounters like Hostler’s, Native communities are just now
realizing what was previously the exclusive knowledge only of museum workers:
Virtually every Native object with any kind of organic element that was collected
before the second half of the 20th century has now been contaminated with
some kind of hazardous pesticide. The implications of this discovery and its
bearing upon the Native community itself, as well as in its relationship to
professional scholars and conservators is profound. For one thing, because this
discovery is so recent, no data yet exists on the correlation between
contaminated artifacts and health defects, especially among the little-studied
Native American population.\textsuperscript{55} Concern would seem warranted, if we judge the
situation by Hostler’s experience. He described the rooms where the regalia
were housed as having a pungent odor, but points out that he was not warned of
the potential contamination until he returned to take possession of the objects,
two years after his initial visit. Lee Davis, an anthropologist at San Francisco
State University, was present when Hostler received the artifacts, and she
described the pesticides as, “visible, if you opened the bag (that contained them)
they would fly around the room, we had to brush it off our clothes.”\textsuperscript{56} She
explains that the Peabody conservators had known all along about the dangers
of handling these artifacts, “It’s no secret; conservators know what is on their
artifacts, but they don’t always tell the repatriation people, and so the repatriation
people have not, in the past, been able to tell aboriginals.”\textsuperscript{57}
And Hostler is not alone in feeling frustrated with the consequences of the well-intentioned NAGPRA legislation. "Their gods, their ritual objects, their means of communicating with their gods have been poisoned," says Niccolo Caldaro, one of a team of San Francisco State experts who are working with the Hoopa Community. "So how are they going to function? Can they still function in a ritual sense? The tribes' reaction is, "Jesus, we just want to use them in our religion. And you guys have poisoned us and you can't help us. This is just the same way we've been oppressed forever."58

Thus, while repatriation and a context of enhanced sensitivity and cultural awareness have sought to address a longstanding tradition of silencing, erasure, and subjugation, their implementation has also foregrounded a heretofore marginalized, but crucial issue: the toxic contamination of Native art objects. And in the next chapter, I address further, and even more troubling instances of this contamination; moreover, before the issue can begin to be addressed, we must also have a clearer sense of just what it is that is at stake in the theoretical and material dimensions of a now contaminated Native material culture.

NOTES FOR CHAPTER TWO
1 Bray, The Future of the Past, 4.
2 Killion, Reckoning with the Dead, 151.
3 Killion, "Reckoning with the Dead," 155.
4 Bray, The Future of the Past, 5.
5 Bray, The Future of the Past, 2.
7 Simpson, "Repatriation," 131.
8 Merrill, "Return," 547.
9 Kreps, Liberating Culture, 101
10 Preston, "Skeletons," 68.
11 Melcher, "Native American Rights."
12 Nason, 297.
13 Merrill, "Return," 542.
Nason, 300.
Davis, in conversation with author, July 2003.
Nason, "Beyond Repatriation" 299.
National Parks Service, "Conservogram."
Tom Stone, Senior Conservator, CCI, in conversation with author, Jan 10, 2003.
Canadian Conservation Institute, "Preservation."
Clavir, *Preserving What is Valued*, 47.
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vан Mensch, "Museology," 7
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Davis, in conversation with author, July 2003.
Davis, in conversation with author, July 2003.
Cited in Palmquist, "Poisoned Gods" 11-12.
CHAPTER THREE

THE SCOPE OF TOXIC CONTAMINATION

For all of their ostensibly good intentions, then, objectives like NAPGRA and the concomitant attempts to redefine museological practices vis a vis Native art objects, have illuminated particular threatening issues that threaten to undermine both the purpose and the scope of repatriation across North America and even beyond. In this chapter, I turn specifically to this issue of toxic contamination within the contemporary North American museological landscape. Emerging out of the contexts which I have discussed in previous chapters, the toxic contamination of Native art, in both its practical and theoretical dimensions, raises a range of academic, conservatorial, and political consequences, issues which both Native communities and contemporary North American Museums in particular must now confront. This thesis is primarily intended to clarify those issues as well as what is at stake in addressing and potentially resolving them.

The relationship between North American Native groups and the academic community has often been a troubled and agonistic one, marked by conflicting claims of interpretation, meaning, and ownership. As it was originally conceived, repatriation was meant to address most of these conflicts, handing over ownership of many Native art objects to the groups themselves even as it found ways for the academic community to remain actively interested in their interpretation and disposition. But, as the Hoopa/Peabody example reveals, repatriation opened up another chapter in the effort for Native groups to reclaim
their culture. Having been fought on many fronts, the conflict which Native communities have had to fight for their material culture has now shifted to a new and unforeseen battleground: the chemistry lab.

It is only in recent years that several museums around North America have begun to acknowledge the problem of the potential contamination of their Native collections and have taken steps to inform and update their conservators about the problem. But while museums have only recently discussed the problem of toxic materials on their artifacts, it has been known for much longer that the chemical substances present on these objects are harmful to humans.¹ Even within this context of heightened awareness, attention has been directed almost exclusively towards the museum community itself, and in only isolated instances towards the Native communities which have now begun to reclaim and repatriate those artifacts into their daily lives and cultural ceremonies.

Still, in its general contours, the problem has been manifest for over a century. According to Thomas Kearney, the Managing Director of the San Francisco Division of the California Poison Control System at the San Francisco General Hospital, “During the nineteenth and early twentieth centuries, tobacco, camphor, strychnine and carbolic acid or phenol ‘flour of sulphur’ or elemental sulfur, ‘corrosive sublimate’ or mercuric chloride, thymol, naphthalene, carbon disulfide, and several forms of arsenic were used.”² Compounds which generally contained heavy metals such as arsenic and mercury were rubbed, painted, brushed, sprinkled or sprayed onto the artifact. At the same time, some conservators concocted mixtures of various elements such as arsenic and
carbolic acid into which the object was immersed; many of these were later sealed in wax.\textsuperscript{3}

While the use of arsenic has, by the present day, largely been discontinued; its application in the preparation of specimens has been documented even as late as 1980. Arsenic was mixed with solvents and applied to damp specimens in order to inhibit the growth of micro-organisms. Arsenic, more than other chemicals retains its toxicity over time, and according to Kearney, once arsenic has been applied to the surface of an object, it is likely that it can never be completely removed. This is particularly true for organic materials such as hair and feathers. The arsenic is sometimes even visible on the objects as a white powder. These items pose a health risk to both curatorial staff and to the public who come into physical contact with the objects unless proper precautions are taken.\textsuperscript{4} As early as the 1880's, however, when it had been discovered that the mercury used in certain cosmetics was making women ill, attention turned to similar practices within the conservation field. Museum conservators began to suspect that pesticides such as mercury, lead and arsenic that had been applied to certain organically-based artifacts were having a harmful effect on those who handled the object. Thus, as an alterNative to these preservatives, insectisides, and pesticides, other combinations were developed. Indeed, these changes and developments were most often the product of chemical and technological discoveries or "advances," which in their original guise were thought to mitigate or even reverse the harmful consequences of previous compounds.
In actual effect then, from a contemporary perspective, the problem is not just the fact of toxic contamination itself but also the layering and the variety of toxins that have been used over a now long history as well as the diverse ways in which they have been applied. After 1930, for instance, newer forms of chemicals were developed, such as DDT, derivatives of which quickly gained widespread acceptance and usage as a preservative. Widely praised for their superiority to the outmoded mercury and lead-based pesticides, these new DDT based combinations proved extremely effective in combating organic deterioration and infestation and were thus widely applied as late as 1987. But, of course, as we now know the problem was thereby exacerbated rather than resolved. Studies reveal that exposure to DDT can result in lung and throat cancer, brain damage, damage to the central nervous system and can increase the likelihood of certain liver diseases. And the kinds of health-related consequences now widely related to DDT are particularly relevant to the museological context. For while DDT does in some cases eventually lose its toxicity, its 35 year half-life is extended significantly if the object onto which it has been applied has been stored in a cool, dark, unaired room.

Starting from the mid-twentieth-century, DDT was just one of many chemical compounds in widespread usage within this context. In seeking to mitigate potential deterioration, conservators also turned to combinations such as dieldrin, lindane (a medically-oriented compound), benzene hexachloride, fumigants such as ethylene dichloride, ethylenedibromide, methyl bromide, ethylene oxide, p-dichlorobenzene (mothrepellant) and sulphuric floride. Many
of these compounds have continued to be commonly used, up until the last few years. Too, the associated problems now surfacing with these chemicals is exacerbated by the efficiency with which they were applied. As these compounds gained widespread acceptance, small fumitororiums were built which allowed fumigant pesticides to penetrate artifacts with highly toxic preservatives. The fumigant pesticides, carbon disulfide, ethylene dichloride, ethylenedibromide, and methyl bromide were highly volatile and were often mixed further with other solvents.

Given this history, it is not surprising that, in a bulletin published in 2004, the American National Parks Service stated that the older the artifact, the greater the likelihood that it has been poisoned. Similarly, the Canadian Conservation Institute, having completed one of only a handful of studies examining the levels of pesticide residue on ethnographic collections, has made some disturbing findings. Jane Sirois of the CCI states that between 1998 and 2003, she and several colleagues visited 13 museums in various regions across Canada. Artifacts were examined with either a portable x-ray with fluorescent spectrometry, which tests for arsenic, mercury and lead, or with gas chromatography and mass spectrometry, which tests for organic compounds such as DDT. Investigators found that many of the artifacts did contain quantities of mercury, lead and DDT and that the levels of contaminants for organic-based animal-derived compounds were higher than they were for ethnographic materials. The issue, Sirois claims, was made more complex because of the fact that in some cases compounds such as mercury had not been applied to the
artifact by collectors or conservators but rather was inherent in the making of the artifact. In some cases, mercury was a compound that was mixed in the original pigment that was applied when the artifact was created.\textsuperscript{9}

In an initial response to this broad set of issues, the Artifacts Analysis Laboratory at San Francisco State University, with the aid of funding from NAGPRA, tested several items reclaimed from the Peabody. They all tested positive for chemical pesticides and nearly every sample had moderate to high levels of mercury, while others also revealed thymol, p-dichlorobenzene, naphthalene, lindane and DDT.\textsuperscript{10} In response, Former Hoopa curator, David Hostler says he cannot imagine how he could raise funds for more tests, let alone for detoxifying the objects, should a non-destructive method ever be discovered.\textsuperscript{11} Currently the objects are heavily insulated in layers of sealed plastic and are housed in the attic of the Hoopa Valley Tribal Museum.\textsuperscript{12} Such measures are merited, given the very real and tragic events which have surfaced since the Hoopa claims were initiated. Having received a NAGPRA grant in 2000, with these funds, Hostler, along with Lee Davis and Shawn Kane traveled to the Denver Art Museum, The Chicago Fields Museum, the University of Pennsylvania Art Museum, and the Peabody to examine the artifacts housed in storage facilities in order to determine the scope of possible repatriation. Since these visits Shawn Kane suffered a third trimester miscarriage, and her second child survived for only one week before he died from respiratory problems. Kane has since suffered serious respiratory problems and has taken months off of work to recover from her respiratory problems.\textsuperscript{13} During my telephone interview
with him, Hostler had to stop several times to catch his breath and began to cough extensively; he has since retired from his curatorial position at the Hoopa Tribal Museum because of these respiratory difficulties. His doctors, according to Hostler, have indicated that his lungs have been badly damaged... "I'll never improve, I can't really talk on the phone, and sometimes I cough for 15 or 20 minutes straight."¹⁴ Lee Davis has also suffered severe respiratory problems since her visits to the anthropological storerooms, exacerbated by twenty years working with ethnographic collections. Davis explains, "If you're a staff member at a museum you can't go around all day wearing a mask, you are at so much risk, it's a public health issue really. I mean, it's mostly young women who are working in these environments, and these chemicals are going to do a job on them... Now most of the big treasure house museums have policies that train their repatriation people on these hazards, but in the past, if you got sick after working with artifacts and you were coughing or wheezing then your superiors would tell you that you were not fit for museum work. Some colleagues and I were sitting around talking about this and we discovered that we had all been told this by our supervisors, it was as though it was their policy for dealing with the effects of the chemicals, back then it was their dirty little secret."¹⁵

Examples such as the Hoopa's alert us to the problems now faced within the Native communities as well as by organizations like the Canadian Conservation Institute and the American National Parks Service. Conditions such as outlined above have significant and deleterious consequences for the repatriation of the Native artifacts. Repatriated artifacts are now recognized as a
serious health risk both to both aboriginal communities and conservation personnel. All of this is particularly problematic, given the intentions of repatriation and the directions that the process typically takes. Within the United States, most of the objects that are repatriated under the mandate of NAGPRA are returned because they fall under the definition of “cultural patrimony,” which defines sacred objects as, “items that are specific ceremonial objects needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present-day adherents...Objects of cultural patrimony means items having ongoing historical, traditional, or cultural importance central to the Indian tribe or Native Hawaiian organization itself.”

Ideally, Native remains and grave objects that are repatriated back to their community of origin would be re-consecrated and reburied. The reality however is much different. Ancestral bones and materials that have been contaminated with DDT or mercury could leach toxic chemicals into the groundwater. As Tsosie argues, when these objects are burned or reburied, as is consistent with the cultural traditions of many Native communities, this act brings the toxic substances into proximity of air and water resources.

AlterNatively some Native communities had intended to burn sacred cultural objects in order to have them fulfill their perceived destiny as living parts of a greater life cycle. But when the artifacts in question are contaminated with lethal toxins, their incineration could potentially scar the lungs of those members of the community who are present at the burning ceremony. In fact, breathing air that is contaminated with burning pesticides such as those found on
contaminated artifacts would exceed the legal limits for hazardous exposure for a healthy man by 25 or 30 times.¹⁹ In another example, of thwarted intentions, the Hoopa Tribe had meant to put the objects repatriated from the Peabody back into use during their traditional dance ceremonies, held about four times a year.²⁰ But while federal law mandates that artifacts be repatriated if they are used in religious ceremonies, these objects have been so badly poisoned by the institutions that are returning them that Native people risk illness if they even handle these objects.

The problem becomes even more acute when one takes into consideration the fact that objects made with organic materials are particularly absorbent of these kinds of toxins. In the case of sacred regalia, when members of a Native community wear headdresses or clothing that have been treated with toxic preservatives, the compounds easily seep from the contaminated organic material into the skin of the person wearing the regalia. Gloria Cranmer Webster explains how these costumes are worn in the Kwakwaka culture: "In English you say 'put on the mask' but the term in the Kwakwala language is 'to be inside'. You are inside the mask. The mask isn't 'on' you; you are inside."²¹ On an even more practical level, often during dance ceremonies dancers wearing the headdresses are perspiring and so their pores are open, making them extremely susceptible to toxic poisons being absorbed into their skin from the artifact. As Hostler has noted, masks and sacred headdresses make up a substantial portion of artifacts repatriated to the Hoopa under the purview of NAGPRA, for the crucial role they play in the cultural ceremonies of that group.²²
The implications of the issue extend far beyond the practical, however, and indeed touch the very heart of many Native cultures. The Hoopa’s two most sacred rituals of world renewal, the White Deerskin Dance and the Jump Dance, are performed to protect the public health and to aid crop growth. Dancers wear elaborate regalia of deer hide or cat kilts, dentalia-shell necklaces, wolf-fur headbands, and woodpecker-scalp headdresses, and carry deerskin-draped poles mounted with stuffed deer heads. The spirit of the creator is thought to be embodied in the regalia, whose ownership rights lie only with the immortals and not with the tribal members who wear them. Pacifying the spirits of their regalia, the Hoopa believe, will guarantee them luck in hunting and fishing, safety from death and destruction, and success in everything from weaving to gambling. However, if the ceremonies are not performed and the regalia are not prayed over, the natural and spiritual worlds will fall out of balance, bringing ruin to the Earth and death to the tribe.23

Of course, virtually every Native American group’s belief system is unique, and the purpose of regalia and ceremony varies from group to group. But in general, artifacts are viewed as irreplaceable vehicles of prayer and ritual, linking tribal members living and dead with their creator. And when an artifact is ‘put down’ because it can no longer be used, the interment or burning ritual is often as emotional and elaborate as that for a human being. Given the spiritual strength ascribed to sacred artifacts, some tribes have stubbornly insisted that their gods are powerful enough to overcome the pesticides. Others have even suggested that whites invented the issue to keep tribes from reclaiming their
artifacts. Tsosie offers only a slight further mitigation when he points out that the kinds of cultural constraints enforced in many Native cultures prohibit the handling of funerary objects or human remains. This fact makes it less likely that the repatriation of these kinds of items, should they contain contaminants, would pose a significant risk to human health. Notwithstanding either such vain beliefs or cultural realities however, the problem remains a deeply troubling one; as Hostler has it, the issue of contamination is a long-lasting and in many cases irreversible one. In their reading of the aims and incentives of repatriation as they bear specifically upon the Hopi people, Odegaard and Sondagei explains the cultural consequences that have followed upon the now-emergent awareness of these contaminants:

At this point the Hopi have placed a moratorium on repatriation, they will do the paperwork but they won't have a physical transfer into their community until the object has been tested. Once readings are interpreted they have to decide at a community level what to do. Of course, they (these objects) wouldn't have been returned at all if not for NAGPRA but this new wrinkle is a cause for concern but it won't necessarily stop repatriation from happening.25

As Odegaard and Sondagei point out, the very real consequences of toxic contamination, though oriented towards practice, have their roots in not only the processes by which preservatives were applied but also in the theoretical and ideological perspectives that legitimated those processes. For, the ways in which museums treat and consider Native objects is in marked contrast to the place of objects within Native culture. Sondagei argues that Native concepts of use are born from religious and culturally specific theory and practice and are therefore
often not understood by the western museum worker. Valuable to any attempt to address the realities of toxic contamination, Sadongei's elaboration on the concepts of use allow for a better sense of the misunderstandings which have led to the current toxic situation. Sadongei proposes three simplified definitions for categories of use within Native cultures: Physical Use, Symbolic Use, and Life Ending Use. Physical Use occurs when participants come into bodily contact with the object. This does not happen in an arbitrary fashion in most Native communities; instead it usually occurs during tribal community settings when objects are put into use during a ceremony, sometimes as a container for other objects or for people, but more often worn as head gear, a mask, or as ceremonial apparel. Often, only religious leaders or those with specialized knowledge are allowed to handle or activate religious objects. Symbolic Use, according to Sandongei occurs when a tribe enters into a partnership with a museum much like that of a researcher, in order to have access to an object, so that the tribe can use the object as a model for replication or so that it might enhance their artistic traditions. Physical contact with the object is neither assumed nor necessary and this type of use almost never involves objects which are the possible subject of repatriation claims. Rather with Symbolic Use, the object symbolically represents a connection to either a cultural legacy specific to the community or a tribal ancestor. Life Ending Use is described as the act of ritually disposing of an object thereby nullifying both the life energy with which it has been imbued and its spiritual qualities. This decomposition is believed to facilitate completion of the life course for which the object was created; objects
may be ritually burned or left to succumb to natural decay.

Sadongei's heuristic facilitates a better sense of both the causes and consequences of toxic contamination. In particular, the concept of Life Ending Use alerts us to the ways in which museum culture, in seeking to fulfil its own culturally appointed mandate, has often nullified the wishes and intentions of the indigenous culture from which the artifacts originated. Many Native groups argue that the disintegration of bones and cultural objects is an expected and necessary part of the life cycle. Thus, toxic contamination can be seen as an instance of a kind of double violation. The issue related not only to the potential health effects of the contamination, but also to the way that contamination has irrevocably compromised the cultural integrity of the objects. For instance, Hoopa faith centers on the understanding that the world will perish unless there is a constant cycle of renewal. David Hostler explains this further, "We feel that objects were made to be used; when they wear out we are obligated to create new ones, it's a part of our (cultural) tradition. As Don Bain explains, such a view is at odds with the mission of the vast majority of contemporary museums:

I guess what it comes down to is there are two worldviews... two world views that sort of collide within the museum. You have the museum point of view that these objects should be maintained, and these objects should be protected, that these objects should not be thought (of) in terms of ten years down the road but more like one hundred years down the road. But it's like the traditional Native belief structure is that these objects were made for one purpose, and that's to be used within the community. And these objects are alive in the sense that they do not have a fixed period of life, and when they go, they go. You may replace that object with another object but that object takes on, is born, and forms its own identity... I guess I see the museum perspective as very linear. And what you're trying to do is cheat the end; you want to elongate the life of that object. Whereas the Native view is circular, it all comes
back. The knowledge that is contained within the object is important, but that knowledge can be transferred to another object.  

Bain’s argument for the futility and indeed irresponsibility of “cheating the end” resonates across the history—both long and short—of the relationship between Native groups and North American museum culture. Conservators have very typically approached the maintenance of an object only through the preservation of its physical integrity. This approach has enduringly compromised the cultural function of Native artifacts. As Clavir, conservator of the Museum of Anthropology at the University of British Columbia explains, for many aboriginal communities, “the preservation of the cultural significance of a heritage object is inseparable from the preservation of traditions, oral history, community and identity as first nations; preservation is about people.”  

As many Native groups see it, their cultural artifacts were created for a specific purpose, to perform a precise cultural function, and the natural deterioration of the artifacts is a part of this intended life cycle. Many Natives feel that a lifetime of use is the intended function of these artifacts; they were made to deteriorate through wear. Sackler clarifies the issue further and concurs with Bain, arguing that the attempt to forestall deterioration constitutes yet another act of misunderstanding and, worse, violation.  

Sackler argues that in the very effort to preserve objects, one risks perverting the intended spiritual function of the object within its community of origin: If you use another set of eyes, smothering certain items with plastic in airless storage vaults is harmful. Disintegration in nature perpetuates life’s circle. Protection from physical disintegration is the interference.”  

By artificially
preserving these objects and extending their physical forms indefinitely, museum curators have destroyed the perceived living energy of the object and displaced them from their natural place in the received cycle of disintegration and renewal.

The kinds of interference and misappropriation outlined by Hostler, Bain, and Sackler do, however, have an important, and enlightening, counter-example in the case of the Zuni war gods, Native artifacts successfully repatriated and reintegrated under the auspices of NAGPRA. As it unfolded, the case suggests some possible ways out—though the implications are limited by the specifics of the case—out of the current landscape of contamination and conflict.

Sandongei provides some background on the case. The Zuni artifacts in question are called "ahayu:da" and are wooden carvings of the twin figures of Masewei and Ooyoyewi. They are believed to safeguard the Zuni people and to provide harmony and steadiness to the entire world. In the past, ahayu:da were found by non-Zunis and removed from the shrines, ending up in the collections of museums and private collectors. Removal of the ahayu:da is believed by the Zuni to be the cause of extreme weather conditions, natural disasters and other misfortunes affecting the well-being of the Zuni people and the wider world.

Though for many years, the Zuni had campaigned for the return of all ahayu:da. During the 1980s and 1990s, the Zuni were successful in achieving the return of over sixty-five ahayu:da, representing all those identified in the collections of American museums. In their campaign for repatriation, the Zuni argued that these objects were items of cultural patrimony, communally owned by the tribe as a whole and therefore, whatever the means of acquisition, their removal from the
Pueblo was illegal. To the Zuni, ahayu:da represent far more than their physical properties as inert wooden carvings; they are believed to be living beings and their creation is analogous to the birth of a human. Indeed, the intent and use behind them is clear from the outset. They are carved by members of the Deer and Bear Clans and placed in shrines on Pueblo land with the intention that they will eventually decay; this process will return them to the earth and so completing a natural cycle of creation and decay.33

When, under NAGPRA, the ahayu:da were returned to the Zuni, they were placed in secure outdoor shrines where wind and rain caused their eventual decomposition enabling them to fulfill their intended function.34 The intention was for the gods to be exposed to the elements until their natural life cycle could be completed and the objects would thus succumb to natural decay in the way that had always been intended.35

Sandongei’s model of use also helps to shed light on another set of issues which further complicate any solution to the history of toxic contamination. Given the reality of that contamination, the artifacts must—for ethical, legal, and practical reasons—be tested for pollutants before they can be repatriated. But the process of testing is itself a fraught one. Testing and the associated analysis is an often sensitive procedure and requires a religious leader to designate where in the object the sample should be taken.36 For instance, when the Hopi wanted to test masks that had been repatriated spiritual leaders had to decide if samples from three Kachina masks - called Kachina friends - could be cut away and taken for testing.  "We must have a working relationship of science and
cultural interests," Leigh Kuwaniwiswma said. "While they (sacred objects) may be of material substance, they carry the living essence". In this particular case, the subsequent testing found that the Kachina friends had been contaminated with arsenic but only after they had been in the possession of families and in one instance were stored alongside their corn supply.37

The struggle to negotiate the realities of toxic contamination, while prevalent in North America, resonates beyond, carrying dramatic implications for European Native communities and museums as well. Indeed, the challenges recently faced by the National Museum of Denmark over this issue help to clarify further the extent and associated costs—financial and otherwise—of both testing for and addressing toxic contamination. The Danish Museum first became aware of the contamination of its ethnographic collection in the early 1980s.38 In 1983, artifacts drawn from the Inuit Community were being repatriated from Denmark's collection to the Lands Museum in Nuuk, Greenland, now the Greenland National Museum and Archive. At this time chemists at the National Museum of Denmark took a number of samples from the artifacts and analyzed them through gas chromatography; all of them were found to contain DDT in various concentrations. In response, the museum, in conjunction with the Danish Working Environment Authority, developed innovative procedures for the testing of the artifacts. In 1987, a major museum expansion project, the National Museum of the Future was underway; it required workers to spend extended amounts of time in areas that were potentially contaminated. It was discovered after subsequent testing that not only were the artifacts themselves contaminated
but also spray agents containing DDT had been used almost everywhere in the national museum, and the storerooms that were used to house artifacts were particularly contaminated with carcinogens. By early 1988, all work ceased at the museum until the potential health risks of working in these rooms and with these artifacts was identified. An impartial, outside firm was consulted and asked to examine the exhibition rooms and store rooms that had once housed the polluted artifacts. Samples were taken and analyzed and the rooms that were found to be contaminated were closed until a method for cleaning the artifacts could be developed.39

The museum then hired a firm that specialized in removing asbestos from buildings to clean the rooms that were most heavily contaminated. Throughout the cleaning process, breathing masks, disposable suits, gloves and boots were worn by the specially trained conservators from the conservation department and the technical staff that assisted them. Vacuum cleaners were designed for this specific use and were fitted with micro-filters.40 Representatives from the outside firm took dust samples from all of the exhibition spaces and storerooms at the museums that could potentially have been sprayed with toxic insecticides. These were analyzed for methoxychlor, Lindane, aldrin, dieldrin, DDT, and heptachlor. The samples were collected using a high-flow pneumatic pump fitted with a glass fiber filter and set for a flow of over 10 liters per minute, the rate at which people breathe during moderate work. The vacuum collected samples over 15-30 minute durations, and in certain places dust was intentionally raised using controlled compressed air and collected through the pump. The dust was stirred up more
strongly that it would likely be during normal work, but the specialists wanted to cover every conceivable workplace inhalation scenario.\textsuperscript{41}

Most of the artifacts were micro-vacuumed, and the dust that was collected inside the micro-pore filters was then analyzed. Some artifacts were scraped from a surface area of ten square centimeters using a small glass slide. The scraped material was collected on inert tissue and then placed in test tubes with Teflon lids. Those artifacts that were determined to be contaminated were cleaned using various methods. Specially trained conservators from The National Museum of Denmark Conservation Department carried out the cleaning process aided by outside technicians. Courses were held at the museum to teach the staff how to use the personal protection aids and how to clean to contaminated areas correctly.

The contaminated dust that was collected as well as all suits, gloves and cloths that had come into contact with the contaminated dust was disposed of. All of the surfaces of the room were thoroughly vacuumed, and then the surfaces were washed with disposable cloths with water and detergent and were then thoroughly dried. The spaces that had been cleaned went through an ongoing examination to insure that they remained under one-tenth the Danish threshold limit for pesticide residues. Even then, random dust samples collected during the normal vacuuming of the room were examined and tested for contamination. Materials such as feathers or baleen were impossible to clean and so objects that contained these were sealed in polypropylene plastic and were labeled “Very Toxic, Poison.”\textsuperscript{42}
This exhaustive and expensive task was completed in 1989, and the museum felt it had gained useful experience in detecting and removing insecticides from artifacts. The conservators at the National Museum of Denmark acknowledged at the time that future problems might arise in their own collection because while the surfaces of the artifacts were thoroughly cleaned the chemicals inside the artifacts may eventually work their way to the surface of the object.43 Recently, Jens Glastrup wrote a report on the issue and submitted it to the 2001 conference at San Francisco State University. He concedes that after 15 years of study, the extensive measures the Danish National Museum took to decontaminate its artifacts has proved quite disappointing and much of the pesticides have remained in and on the objects.44

Notwithstanding, the groundbreaking measures taken by the National Museum of Denmark, the process, in its unfolding and immediate aftermath, indicate that, even within the context of repatriation, toxic contamination is an issue that confronts both aboriginal communities and the museums that have housed—and in many cases continue to house—ethnographic materials. While examples like the Hoopa are particularly challenging and heartbreaking, the provenance of many of these associated artifacts means that toxic contamination carries serious consequences for museums and Native groups who manage collections cooperatively and even for collections which are not necessarily under the purview of repatriation. These consequences affect museum workers and the viewing public alike. While in the past large museums only permitted the public to access perhaps five percent or less of their holdings, today, in part because of
the increased interaction between First Nations and the museum community, this is changing and museums are becoming significantly more accessible. In the past thirty years there has been a noticeable and substantial shift towards a greater democratization of the museum itself and its holdings. As Michael Ames explains:

Museums now compete to serve wider populations in an increasing number of ways, and to make their collections more accessible and useful to the general public. More space is being devoted to exhibits, exhibits are becoming more elaborate, more temporary exhibits are mounted, more loans are made to other institutions, and more attention is given to repatriating objects that were illegally removed from other countries.45

Museum democratization can also take the form of increased access to the collection so that storage facilities are more open to the public.46 While these strategies do enhance the popular function of the museum, they are seriously undermined and even thwarted because of the dangerous effects of the toxins embedded in many of the objects on display. According to Odegaard and Sadongei, the routes and targets of exposure are inhalants, dermal, and indirect contamination with contaminated artifacts.47 Goldberg expands on this when she considers the potential problems for this could pose for children if they are exposed to parents who work in with contaminated regalia through ceremonial use or in repatriation or museum programs.48 Odegaard and Sadongei amplify this point, with specific implications for the viewing public. According to them, the actual access, examination, and handling of these treated objects may pose ongoing and serious health threats to individuals. Some examples referring to the human health hazard of preservative residues on objects include:
sources of toxic particles that may be ingested or inhaled through the nose or mouth such as biocidal treatments to objects of feather fur, buckskin, or textile with commercial pesticides: fungicidal treatments to the backs of paintings, documents, and textiles: syberizing (use of arsenic-based mothproofer); and ancient biocidal treatments including copper and lead pigments) sources of toxic vapors from pesticide repellants and fumigants that may be inhaled through the nose or mouth, or irritate the eyes such as residues. 49

As all of these instances illustrate, the issue of toxic contamination is one which, even as it continues to unfold, carries troubling implications for a range of cultural communities. The roots of the problem are both practical and theoretical, and the challenges which they present are exacerbated by the reality of the constituencies involved, whose interests both overlap and conflict with one another. As the latest chapter in the attempt to negotiate an equitable solution to the thorny issue of Native rights vis a vis the museum world, toxic contamination illustrates both the foundations of that struggle and the extent of the challenges which remain.

NOTES FOR CHAPTER THREE
1 Schmidt, “Contamination,” 92.
2 Kearney, “Contamination,” 44.
3 Kearney, “Contamination,” 45.
4 Kearney, “Contamination,” 42.
5 Schmidt, “Contamination,” 93.
6 Schmidt, “Contamination,” 95.
8 National Parks Service, “Conservogram.”
12 Kane, in conversation with author, Aug 2003.
13 Kane, in conversation with author, Aug 2003.
16 United States. NAGPRA legislation.
18 Tsosie, “Collections,” 27.
Hostler, conversation with the author, July 2003.
Webster, "Conservation," 8.
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Odegaard and Sadongei, *Old Poisons*, 117.
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Odegaard and Sadongei, "Reflections," 9.
Simpson, "Repatriation," 217.
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Odegaard and Sadongei, "Reflections," 9.
Goldberg, "History," 41.
Odegaard and Sadongei, *Old Poisons*, 120.
CHAPTER FOUR

SEARCHING FOR A SOLUTION

In the immediate wake of repatriation initiatives across North America, the issue of toxic contamination constitutes the next chapter in the relationship between Native communities and the various organizations and institutions which remain intimately involved in the study, preservation, and interpretation of Native art objects. The challenges posed by toxic contamination are complex, having their roots in the theoretical and practical dimensions of the various institutional histories at work. Too, the problem is a multi-sided one, marked by the often conflicting and competing histories of the many groups who are affected by the realities of toxic contamination. While comprehensiveness may be as yet unachievable, several tentative steps, some carrying more potential than others perhaps, can now be taken to begin to address both the scope and the consequences of toxic contamination. This chapter is concerned with outlining some of those steps.

At the outset, there is an immediate need for the dissemination of information regarding the risks of handling these artifacts in their current state. Lee Davis explains that while the larger museums in the United States all have their own internal policies regarding the safe handling of artifacts there is still no formal policy at many of the smaller American museums, and many museums outside the United States may not even be aware of the problem.1 As an important measure in this regard, Nancy Odegard and Alyce Sandogei have published a book entitled, Old Poisons New Problems: A Museum Resource for
Managing Contaminated Collections, designed as a practical guide to addressing these potentially contaminated materials that may be held in museum collections. Odegaard and Sandogei explain the intentions behind the text: “We hope that this is the most complete information any source has on this right now to begin museums to have conversations with tribal representative we hope that they learn what to ask and help tribes know what they need to ask, resources and background info and practical a resource to use internally.²

The situation in Canada is somewhat similar as described by Tom Stone, senior conservator at the Canadian Conservation Institute: “It’s still pretty ad-hoc and is tied to the repatriated artifacts, people are more or less trained but there is no formal policy in effect.”³ Jane Sirois, one of Stone’s colleagues at the CCI, explains that, though not created to address this issue specifically, there are some Canadian laws and regulations, mainly within the purview of the Canadian labour code, that do provide museum workers some protection against the dangers of working with potentially toxic artifacts. In the near future, the Canadian Conservation Institute hopes to work with Health Canada to jointly address the problem.⁴ But while this is a good start, a voluntary and informal approach may not be the best course of action for a problem of this magnitude and complexity. As Patricia Capone, repatriation coordinator at the Harvard Peabody Museum explains, “The scale of this issue seems best addressed nationally rather than piece-meal by individual interests with no oversight or connection to one another.”⁵ Given the scope of the problem and the intersecting histories of the various institutions involved, an international effort
might be more appropriate, though it would inevitably be fraught with jurisdictional overlap and conflict. Capone suggests that while NAGPRA’s support so far has come in the form of federal grants, the next step in the United States may be an overarching policy, perhaps one initiated by congress that would address the hazardous materials issue systematically with NAGPRA taking the lead.⁶

In part because these issues have arisen out of repatriation, NAGPRA itself is indeed one logical place to begin. But as it is conceived, NAGPRA addresses only superficially the practical corollaries that flow from the concrete and theoretical problems associated with toxic contamination. NAGPRA requires that the museums that are handing over cultural artifacts to Native communities disclose if an object may be contaminated, but it does not compel them to perform any tests for the presence of contaminants, since such testing is both expensive and most likely inconclusive.⁷ Still, through the National Parks Service, NAGPRA has given grants to universities such as San Francisco State and the University of Arizona, who are seeking innovative ways to remove pesticides and contaminants once they have been detected. Indeed, in the winter of 2000, The Arizona State Museum at the University of Arizona in Tucson was awarded a NAGPRA to conduct a workshop entitled, “Contaminated Cultural Materials in Museum Collections”.

The purpose of the workshop was to raise awareness of this issue within the academic and museum communities and also to begin a special pesticide detection project that could potentially be used by all museums with ethnographic
collections. The Arizona Poison Control Center, the Arizona State Museum, the Arizona State University Chemistry Department as well as members of many southwestern First Nations' communities were involved in this production. Tribal representatives were present from the San Carlo Apache, White Mountain Apache, Yavapai–Apache, Hopi, Navajo, Tohono O'Odham, Ak-Chin Indian Community, Gila River Indian Community, and Salt River Pima-Maricopa Indian Communities. All were selected to participate because the Arizona State Museum has a significant number of their artifacts in its collection.\(^8\) As a partial follow-up to the workshop, the Arizona State Museum has subsequently received NAGPRA funding to hire a special conservator who expanded on previous studies to produce a comprehensive history of pesticide use in its aboriginal artifacts in their collection. Through this initiative, conservation files, curatorial journals, contract agreements and museum receipts were examined and interviews were conducted with both former and current museum staff in order to develop a comprehensive history of pesticide use, the techniques of the application, the specific chemicals that were used and the time frame of their application.\(^9\)

Instances like this one suggest some promising possibilities for at least mitigating, if not resolving, the problem of toxic contamination. But, of course, an isolated example such as this one should not blind us to the recurrent challenges. One of the most daunting of these is cost—and, by close association, liability. Currently one of the most innovative research projects investigating the potential removal of toxic contaminants on artifacts is being
conducted at the Institute for Pure and Applied Sciences at the University of California at San Diego. Led by John Asmus, the project involves laser removal of pesticides, chemical compounds, and other toxic residues. The researchers here have previously worked on removing materials that had attached to NASA equipment while in orbit and for the United States Department of Defense in the removal of toxins from tanks that had been exposed to hazardous materials in combat. One of their current projects is to develop non-destructive techniques for the removal of contaminants from Native artifacts. At the same time, researchers at San Francisco State and the University of Arizona are testing the most reliable and efficient detection methods.

Currently in both museum and Native communities there is a realization that any future testing must rely on additional funding from the Federal Government. Because NAGPRA at present does not require museums repatriating cultural artifacts to perform tests for the presence of pesticides this has been taken up independently by scholar like Peter Palmer at San Francisco State. Dr. Palmer undercharges Native communities for his work. Palmer claims that while many academic labs are capable of performing artifact testing, few are willing. He admits that the issue of cost is prohibitive for many universities; an atomic absorption spectrophotometer and a mass spectrometry unit are both necessary to conduct these tests and these costs approximately $60,000 (USD) each. It seems clear, then, that the task of detecting and removing these toxins is going to be costly; therefore the issue at hand is not only the development of removal and discovery methods but also the related
question of accountability must be addressed.

Rebecca Tsosie, executive director of the Indian Legal Program at Arizona State University explains that this issue falls within a fairly complex legal framework and she believes that a restructuring of the existing law is necessary and likely in order to achieve any coherent legal solution. Many Native groups expect the museums to pay for the testing, but the museums feel that the use of pesticides was warranted and they were perfectly within their rights as the legal owners of the artifacts at the time the toxins were applied. Many institutions argue, understandably, that they were using the best technology that was available to them at the time. In addition, most institutions that now own contaminated artifacts did not themselves apply the preservatives; the collections were purchased or exchanged from other museums or private collectors. Moreover, some conservators assert, had the contaminants not been applied, the objects would have disintegrated over time and would not exist today. As Catherine Hawks succinctly puts it in her historical survey of the contamination of Native artifacts, “One reason we can discuss repatriation today is because there is something to repatriate.”

The issue is rendered even more complex within the United States and Canada by the fact that many of the contaminated artifacts lie, by virtue of their provenance, outside of the ambit of either NAGRPA or the mandate of the CCI. With regard to NAGPRA specifically, Tsosie believes that while some resolution may eventually come from the existing and enhanced NAGPRA legislation, even this would not address the many objects that have been repatriated outside of
the mandates of either NAGPRA, or the associated polices of the National Museum of the American Indian. Many objects were repatriated before the passing of NAGPRA and, further, there are various objects from private collections which have been repatriated willingly and do not fall under the scope of the NAGPRA and NMAI acts as they are or may become relevant to the issue of contamination. Tsosie does feel that, given the high level of chemical toxins involved, existing regulations related to public health and embodied by U.S. federal environmental statutes might apply to the issue of contamination of Native objects because of the levels of chemical toxins that have been detected.15 But the path to resolution, already strewn with obstacles, becomes even more difficult to negotiate when we consider the jurisdictional and institutional overlap that such considerations entail.

Even so, stories such as those involving San Francisco State and Arizona Universities suggest that answers—partial and problematic as they are—do exist if the political, economic, and cultural will is there. But beyond the more practically oriented issues such as cost and liability, any solution to the issue of toxic contamination must include an understanding of the ways in which those practices were legitimized by the kinds of “ideological contamination” elucidated by Baxandall and others. Until museums and art historians alike address the history of intervention and appropriation, the larger political and cultural issues which partly allowed for the toxic contamination of Native artifacts, and which have since forestalled their repatriation and reintegration, will remain with us. But, even these kinds of resolutions should not be thought impossible. Some
potential for resolution and redress is evident, for instance, in the recent policies and procedures undertaken by the the National Museum of the American Indian (NMAI). In the years since its inception, the NMAI has been a leader in establishing standards which other museums follow in their policies regarding the repatriation, collection, curation and treatment of Native cultural materials. In 1999, five years before it opened its doors, the Smithsonian National Museum of the American Indian began to reposition its collections from its former site in the Alexander Hamilton U.S. Custom House in lower Manhattan to the Cultural Resources Center in Suitland, Maryland. Because of the enormous scope of the collection, relocation alone was a challenging undertaking that took five years to complete. In preparation for the move, a large scale inventory was made of the collection, and information regarding each object’s condition was documented and a description and a digital image was recorded for each artifact in the collection.

Because the provenance of the majority of the collection is already known, this comprehensive inventory is particularly useful. The majority of the Smithsonian’s Native American collection was bequeathed by George Gustav Heye the controversial collector and philanthropist who devoted most of his life to the acquisition and collection of Native artifacts. This collection of almost a million items, which is now within the Smithsonian’s National Museum of the American Indian, is the largest assemblage of Native American artifacts ever gathered by a single individual. The extensive collections encompass a vast range of cultural material—including more than 800,000 works of extraordinary aesthetic, religious,
and historical significance as well as articles produced for everyday, utilitarian
use-spanning the Western Hemisphere from the Arctic Circle to Tierra del Fuego.
Because the collection of the NMAI almost entirely comes from one single
collector, it is an ideal collection to homogenous nature of the preservation
methods.\textsuperscript{18}

Today the museum has distinguished itself for including in all of their
activities the presence of "a Native voice."\textsuperscript{19} Richard West, the founding director
of the NMAI since 1990 states, "From the start our new museum has been
dedicated to a fresh and some would say radically different approach... We insist
that the authentic Native voice and perspective guide all of our policies, including
of course, our exhibition policy."\textsuperscript{20} Since the NMAI was established in 1990 it
asserts that it has upheld the Native worldview and standards in all aspects of its
policy. Rosoff, a former staff member at the museum writes that the collections
policy at the NMAI "respects and endeavors to incorporate the cultural protocols
of Indian people that define: cultural and religious sensitivities, needs and norms;
the utilization of cultural knowledge and information; and restrictions outlined by
specific tribal groups."\textsuperscript{21} The museum staff frequently consults with Native
community leaders about the nature and function of the museum. In addition to
procedures for repatriation, documentation, acquisition and exhibition, the
NMAI's highest priority has been a comprehensive repatriation of all human
remains in its collection. Such principles, in combination with the kinds of testing
and removal procedures undertaken by other North American institutions hold a
great deal of promise for the Native groups and related constituencies which
continue to grapple with the after-effects of toxic contamination.

In order to be truly effective, such paradigm shifts within the museological and art-historical contexts, must, it is often argued, take place within an atmosphere of redress and reparataion. Amareswar Galla, Director of Studies of the Sustainable Heritage Development Programs, Research School of Pacific and Asian Studies at the Australian National University, feels that in order for the ongoing issues between museums and First Nations to be resolved, some act of recognition needs to be made on the part of the museum. As an example of this, he cites the public acknowledgement recently made by the Prime Minister of Australia at the launch of the International Year of the World’s Indigenous Peoples. Galla states that

The starting point might be to recognize that the problem starts with us non-aboriginal Australians. It begins I think with the act of recognition—recognition that it was we who did the dispossessing. We took traditional lands and smashed the traditional way of life. We brought diseases and the alcohol. We committed the murder. We took the children from their mothers. We practiced the discrimination and exclusion. It was our ignorance and our prejudice, and our failure to imagine these things being done to us.22

Whatever sociological and psychological benefits that such a recognition might bring, there is a more practical side to this kind of inclusiveness. Following on the Native model of use as elaborated by Sandongei and others, Native groups themselves have some means, less costly than those outlined above, to address the issue of toxic contamination. For instance, Shawn Kane of the Hoopa Tribal Museum explains that the Hoopa community has items in their possession that are hundreds of years old, preserved as well at the items that were preserved with arsenic, and the only method of preservation the Hoopa
tribe has ever used is the placement of Pepperwood or a Bay Leaf in the cases that store the artifacts. Such anecdotal evidence is in keeping with the findings of Wolf and Mibach, who write that some museum conservation approaches mirror closely those traditional techniques used by Native communities. For instance Mibach in her work with the Northern Cree reports that skunk oil was frequently used to dress rawhide containers that housed sacred objects. Skunk oil was the preferred choice because even in cold temperatures it does not change consistency and unlike fish or goose oil it does not yellow over time.

Throughout their study, the authors assert that the ethical systems and maintenance procedures sometimes used by conservators are closely paralleled and preceded by those used by Native people. Some of these procedures include annual inspection by trained people and regular fumigation with smoke smudge of sweet grass or other aromatic substances. Many aspects of traditional maintenance are thus very similar to preventative conservation techniques; they had after all, preserved the objects, often for a century or more in unfavorable environments, until they were transferred into the holdings of modern museums and collections.

Notwithstanding its potential, such a partnership is not easily forged. Emerging out the agonistic history that defines their relationship, Native communities and public museums across North America, must somehow transcend a culture of recrimination and loss. Attuning us to one of the many ironies of the battle between Native Americans and Museums, Douglas Preston asserts that “for the First time, the traditional defenders of Native American
Rights and culture—the anthropologists and the museums—suddenly find themselves and their values under attack by the very people they have devoted themselves to observing, researching caring about." Preston goes on to defend the wider museum community against charges of contamination and desecration:

Between 1880 and 1930 when the American Indian society and culture were being decimated, the anthropologists and the museums were the only forces in our society working to protect—or at least to save what remained of—this heritage. So as a result, many in the museum community feel that in fact rather than contributing to the loss and decimation of cultural heritage the collecting institutions ended up preserving many aspects of Indian Culture (such as the Cheyenne Dance Song) that otherwise would have disappeared.26

Against this view, many Native Americans feel that contrary to the position argued by Preston and others the collected information on Native culture is not as accessible to aboriginals as one is led to believe; in fact access is routinely restricted. To simply address the basics of the debate, it is clear that Native groups, conservators, and institutional and academic professionals have conceptual and practical differences in the ways that they relate the past with the present.

Nevertheless, the integration of Native voices, perspectives, and professionals into the museum community continues to hold promise. Professionals like Kane and Hostler bring with them cultural knowledge that augments and possibly contradicts established museum practice. For of course, non-Native curators are not necessarily in a position to know how to preserve the spiritual integrity of an object from an aboriginal community. As the history of toxic contamination attests, there is a significant difference between caring for an object and the simple preservation of an object. Cash Cash explains:
Traditional religious practitioners are now beginning to explore greater freedom to introduce and apply indigenous forms of curation within the museum. As indigenous curators, they bring to the museum a newly added dimension of human potential and experience that is testimony to the immediacy, vitality and power of objects to mediate the lived, everyday world that we have now come to share.  

Indeed, in many cases, Native curators are in a position to be able to provide the spiritual care and maintenance that sacred objects frequently need. According to Hostler, ceremonial maintenance for the Hoopa Valley Tribe ranges from prayer ceremonies with religious bundles to the feeding and correct positioning of false face masks.  

Given the complex history which lies behind the current reality of toxic contamination, it should not be surprising that any effort to resolve those issues will also be complex and inevitably multifaceted. Together, Hostler and Cash alert us to issues not just of sensitivity but of inclusiveness, the kind of inclusiveness that is vital to redress and to repatriation, considered for its broader intentions. And yet many hurdles remain ranging from the economic and the legal to the cultural and the environmental. As an investigation into the history of this particular issue and an explanation of what is at stake in addressing and resolving it, this study remains merely preliminary and exploratory in its intent and scope.

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NOTES FOR CHAPTER FOUR

1 Davis, conversation with author, July 2003.
2 Odegaard and Sadongei, Old Poissons, 2.
3 Stone, conversation with author, Jan 2004.
5 Capone, Personal Correspondence, July 2003.
6 Capone, Personal Correspondence, July 2003.
8 Odegaard and Sadongei, *Old Poisons*, 7.
9 Odegaard and Sadongei, *Old Poisons*, 11.
10 Davis, conversation with author, July 2003.
14 Hawks, “Historical Survey,” 8
17 NMAI, “Collections.”
18 NMAI “Collections.”
21 Rosoff, “Native Views,” 40.
23 Kane, conversation with author, July 2003.
26 Preston, “Skeletons,” 70.
27 Cash Cash, “Medicine Bundles,” 141.
CONCLUSION

PRESERVATION OR DESTRUCTION?

This problem of toxic contamination thus raises both scientific and ethical questions. Certainly the need to detect toxic chemicals non-destructively and then subsequently to remove them is paramount. At the same time, however, there are other, more subtle and complex issues like object use, liability, and the ethics of disintegration and preservation which need to be addressed as well. If, assuming testing and removal efforts are successful, policies must still be developed that confront these issues in their larger contours and that are attuned to the competing jurisdictional demands at work. Simply put, museums with a vested interest in the preservation and continuity of living Native communities across North America must develop policies and procedures that respect the varied needs of the many diverse Native communities involved. Inevitably, whatever methods are discovered for the testing and removal of chemicals will have to be modified on a case-by-case basis, given the varying protocols of First Nations as well as their diverse collections of cultural regalia.

Over the last decade and a half, the homecoming of repatriated objects has been bittersweet. Currently, Native groups are faced with the possibility that their cultural patrimony may never be fully recovered and reintegrated into their communities. And yet, perhaps as one of the more positive legacies of NAGPRA, the increasing contact between First Nations and museums has resulted in the subtle merging of their views regarding display practices and preservation. As more tribes seek testing of their objects for contaminants, consultation as
required under NAGPRA legislation will enhance the kinds of deliberations that will hopefully lead to a more holistic cultural understanding of objects and their meaning. (Sadongei 116). Emerging from this shift in perspective, for instance, is the current motto of the Paleopathology Association: Mortui Viventes Docent, which means "the dead are our teachers."²

At the same time, as repatriation continues and the struggles to resolve the still relatively localized issue of toxic contamination unfolds, the role of the curator is being reevaluated and attitudes about deterioration are changing within the field of conservation. For some conservators, it seems, science is no longer the overriding determining consideration. While this progressive outlook has helped to facilitate many valuable changes in museums regarding the display practices of sacred objects and success of repatriation efforts, the conservatorial zeitgeist of the last century may linger in regard to these artifacts for some time to come. Davis, for example, believes that polluted objects will never be successfully decontaminated. If this is the case, then, the toxic chemicals have in effect seeped into history. They have looted the spiritual value of these objects of the past, and, consequently, these objects are culturally impotent now and for the foreseeable future.

Still, it remains vital that art historians and museologists concede that these objects still transmit meaning within the aboriginal community. For David Hostler, whose efforts to repatriate 17 items from the Harvard Peabody resulted in the relocation of these sacred living objects to plastic garbage bags cautiously wrapped and now stored indefinitely in the attic of the Hoopa Valley Tribal
Museum, the spiritual loss experienced by communities like the Hoopa Valley Tribe need to be acknowledged. Hostler describes the meaning that his community now attaches to these objects, as veneration mitigated by an awareness of fragility and mutability.\textsuperscript{3} This meaning, while unintended and unimagined by the Native makers of the objects can be used as a springboard for academic discussions revolving around the prospect of conservation as another potentially injurious socially constructed domain of procedure and belief. When we begin to untangle the inherent biases in western conservation methods, we can start to acknowledge that the same candid discussions that have dramatically altered the landscape of museum exhibitions involving Native cultural material must now be addressed towards museum conservation and restoration methods. For, while museum culture has evolved in its policies and cultural perspective regarding the objects in its ethnographic exhibitions, museum professionals are faced with a new accountability. They are now answerable not only to the professional and scientific community but also to the cultures whose objects they held in "perpetuity."\textsuperscript{4} But, for the foreseeable future, the intended spiritual meaning of these sacred objects remains usurped by a now dated and discarded system of conservatorial values which has legitimated in part the theoretical and practical contamination of the objects it purported to "preserve."

\textbf{NOTES FOR CONCLUSION}

\textsuperscript{1} Clavir, \textit{Preserving What is Valued}, 126.
\textsuperscript{2} Simpson, "Repatriation," 240.
\textsuperscript{3} Hostler, conversation with author, July 2003.
\textsuperscript{4} Kreps, \textit{Liberating Culture}, 87.
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