# THE ETHICAL DILEMMA FACING CONSERVATION: CARE AND TREATMENT OF HUMAN SKELETAL REMAINS AND MORTUARY OBJECTS

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ABSTRACT—The ethical treatment of corporeal materials is confounded by the dual cultural and scientific values ascribed to human bone. The cultural concerns for the sacred significance of human remains often come into direct conflict with scientific investigation. The authors have been involved in a number of difficult situations between the professional communities who have responsibility for the scientific investigation of human remains and the lay communities who have been concerned for the sacred and spiritual aspects of these materials. This paper addresses a variety of professional approaches to the treatment of human skeletal materials and the need for interdisciplinary cooperation among the professions that study and care for these materials. It also addresses the need for AIC to recognize human remains as a discrete material deserving of considerations that are distinct from any other materials we treat as conservators.

RÉSUMÉ—Le traitement éthique des matériaux corporels se heurte à la double valeur culturelle et scientifique attribuée aux os humains. L'importance culturelle du sens sacré des restes humains entre souvent en conflit direct avec l'investigation scientifique. Les auteurs se sont déjà trouvés dans un certain nombre de situations difficiles entre les communautés professionnelles responsables de l'investigation scientifique des restes humains et les communautés profanes, plus concernées par l'aspect sacré et spirituel de ces matériaux. Cet article discute diverses approches professionnelles pour le traitement des squelettes humains, ainsi que les besoins d'une coopération interdisciplinaire entre les professions qui étudient et prennent soin de ces matériaux. En outre, les auteurs soulignent la nécessité, pour l'AIC, de reconnaî tre les restes humains comme un matériel différent qui mérite des considérations qui sont distinctes de tout autre matériel traité par les restaurateurs.

RESUMEN-El tratamiento ético de restos humanos se enfrenta a una compleja dualidad: una, los valores eminentemente científicos y la otra, los valores eminentemente culturales que se le atribuyen a los huesos humanos. El elemento cultural que atribuye valor sacro a los restos humanos entra frecuentemente en conflicto directo con aquellos intereses que son unicamente de investigación cientifica. Los autores han estado involucrados en algunas de situaciones dificiles entre las comunidades profesionales, responsables por la investigación científica de los restos humanos, y las comunidades laicas preocupadas por los aspectos sagrados y espirituales de estos materiales. Este ensayo enfoca una variedad de acercamientos profesionales con respecto al tratamiento que se le debe dar al material oseo humano y ademas llama la atencion sobre la necesidad de que exista una cooperación interdisciplinaria entre los profesionales que investigan y los que cuidan de estos material. Igualmente, se discute la necesidad que el AIC reconozca este material como un material distinto y que merece consideraciones diferentes de las otorgadas a cualquier otro material tratado por nosotros como conservadores.

#### 1. INTRODUCTION

The ethical dilemma facing the conservation profession in the treatment of human remains is due largely to the dual cultural and scientific values of human bone. It is this duality that frequently leaves professional and lay communities at cross purposes. Cultural concerns for the sacred, spiritual, and metaphysical significance of human remains can be antithetical to the scientific approach, which subjects the remains to physical and chemical analyses.

This article will address the need for introducing stronger language into the AIC Code of Ethics and Guidelines for Practice for the responsible treatment of corporeal materials. We will also discuss the difficulties encountered in the professional approaches to the handling of human remains that stem from a failure to recognize the validity of the disparate components of human bone and from professional posturing that compromises interdisciplinary cooperation. The visual images of reliquaries, mortuary objects, and skeletal remains that accompany this article are intended to illustrate our points and are not representative of the variety of cultures affected by the concerns we have expressed.

## 2. CULTURAL AND METAPHYSICAL PROPERTIES

Historically, human bone has had cross-cultural and religious significance that diffuses through a mosaic of reverence with primordial connections. Human remains have evoked, and continue to evoke, impassioned discourse and responses. For more than 30,000 years of human history, death has been an occasion for the outpouring of human emotion (Wenke 1990, 151). Many cultures have long viewed human remains as a pinnacle of sacredness, capable of possessing and imparting great power. This point is exemplified by the grandeur with which remains have been displayed and entombed (figs. 1a, 1b).

Human remains represent a venerated element of the highest form, the power and sacredness of which command the use of precious and unique materials in the execution of mortuary objects. Excellence of style and execution, in conjunction with the rarity and preciousness of materials associated with human remains, often commend reliquaries and associated artifacts to collections of institutions and museums (fig. 2). In reality, however, repositories intended to house remains often have held far greater interest than the remains themselves.

It is this esthetic that contributes to the dissociation of the original reverential intent of the mortuary object.

To many groups, human remains have a metaphysical integrity that is of foremost concern. From such a perspective, removal of skeletal remains from their mortuary context is a violation and an extraordinary lack of respect for the dead. This removal desanctifies and nullifies the talismanic properties of the remains by displacing the spirit, while deconsecration renders the sacred object secular. Numerous cultural taboos, grounded in the metaphysical, surround human bone. Lewis (1986, C-3) writes that

a fundamental belief among many [Native American] tribes is that a thin veil separates the living and spirit worlds, and if the human remains are disturbed, the spirit becomes trapped in the living world, where it can do evil. Disturbing or preserving the remains is thus sacrilege. Cremation is considered "spiritual suicide."

Decontextualization of the remains is an attempt to mitigate these taboos and allows museum professionals, scientists, or art dealers to treat once-sacred mortuary objects as artifacts in a fine art context, thereby divorcing them from their original cultural intent (fig. 3). This practice contributes to our inability to relate to the sacredness or to perceive the religious power or holy importance of objects outside our own experience. The mortuary artifact, devoid of associated human remains, is then perceived solely as cultural property, free of spiritual integrity.

## 3. ARCHAEOLOGY AND PHYSICAL ANTHROPOLOGY

Within archaeology and physical anthropology, there is a similar tendency to disregard the metaphysical as the data inherent in human remains become paramount (fig. 4) (GSA 1993; Cook 1993; Echo-Hawk and Echo-Hawk



Fig. 1a. Reliquary bust (front), Hispano-Flemish, early 16th century, oak with polychromy and gilding, 20½ in. H. Collection of the Metropolitan Museum of Art, Cloisters Collection, Bequest of Mrs. Stephen C. Clark, 1967, acc. no. 67.155.23. This reliquary is one of four depicting Vestal Virgins. The skull has been preserved in situ due to the difficulty of removal. The bones from the remaining three have been removed.



Fig. 2. The funerary mask of Tutankhamen is so widely recognized that the image is within the public domain. The original function of the mask has been completely obscured.



Fig. 1b. Detail of the top of figure 1a, reliquary bust with bone in situ

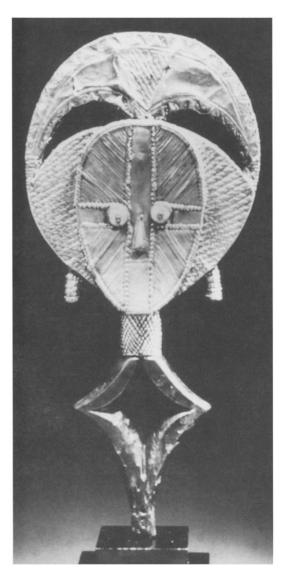


Fig. 3. Representative of widely recognized Kota reliquary figures, Gabon. The fact that the figure would have originally been inserted into a box or basket containing the skull and bones of ancestors (Bascom 1973) is often unexplained as the mortuary object is transformed into a fine art object.

1994). Once these data, in the form of measurements and chemical analyses, for example, are extracted from bone, the physical material may retain little importance. Klesert and Powell (1993, 348) point out that archaeologists "have taken for granted that their scientific

pursuits were reason enough to assume a proprietary interest in and control over those remains, in perpetuity, for the general good of humankind." While the recovery of data inherent in human bone is of primary concern to the archaeologist and physical anthropologist (Krogman and Isçan 1986, Isçan and Kennedy 1989), retention and care of the physical bone should be no less important.

Within physical anthropology and natural history, Aleš Hrdlička, the first curator of physical anthropology at the United States National Museum (Blakey 1987), codified the early treatment of modern skeletal collections and outlined the scope and aims of physical anthropology. His original intent was to make available for study within the National Museum the broadest possible collection of human skeletal remains in order to advance the study of differences among the world's races (Stewart 1940). Physical anthropology, he stated, was intended to have practical application through racial eugenics (Blakey 1987).

Yet the treatment of human remains is an evolving topic, subject to updated and revised philosophies. In recent times groups outside the scientific establishment (Robinson et al. 1985) have been demanding greater sensitivity to and respect for the sacred values of their ancestral cultural heritage, leaving many historic collections and much of physical anthropology and archaeology in disarray. Repatriation legislation, which is an outgrowth of these demands, recognizes that scientific rights of inquiry do not automatically take precedence over religious and cultural beliefs (Monroe and Echo-Hawk 1991). Demands for the reburial of skeletal and cultural remains, particularly those of Native Americans, is considered an expression of greater sensitivity and respect for the dead. In 1981 Dr. William Bass, noted physical anthropologist, stated, "From the viewpoint of a skeletal biologist [reburial] is similar to burning the books in our libraries" (Bass 1981). Bass's attitude is in direct opposition to the Native American belief that "respect for the

Fig. 4. Partially excavated remains from the Trinity Church site, Newark, N.J. Photo taken before the coroner's method of excavation was implemented

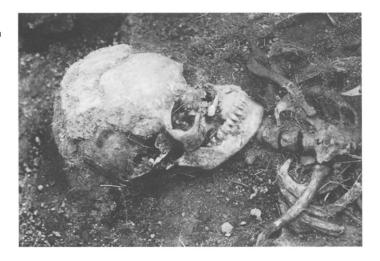


Fig. 5. Temporary archaeological storage facilities intended for the duration of a project often lack environmental controls. These facilities can become long-term storage solutions.



Fig. 6. Bones of Capuchin monks, Capuchin Chapel, Rome. Bones are curated for a variety of purposes. Cultural beliefs surrounding human skeletal remains vary widely and complicate systematic treatment strategies.



dead is more important than any knowledge of the past that might be gained by digging up graves" (Echo-Hawk and Echo-Hawk 1994, 27).

#### 4. LEGISLATION AND ACTIVISM

In the past, our society identified the remains of Native Americans as acceptable subjects of experimentation and research while according others a respect for religious and cultural beliefs in the burial of their loved ones (Echo-Hawk and Echo-Hawk 1994). In addition, anthropologists were quite slow to embrace a concept of cooperation between the scientific and descendant communities. Consequently, the 1980s were characterized by considerable conflict between archaeologists and physical anthropologists on one side and various tribal groups on the other. The net result of the more than 20-year "territorial struggle" over cultural data is that the U.S. Congress in 1990 enacted the Native American Graves Protection and Repatriation Act (NAGPRA) and has amended the National Historic Preservation Act (NHPA) (Roberts and McCarthy 1995).

Native Americans have strong religious concerns about protecting their dead from disturbance (Echo-Hawk and Echo-Hawk 1994). Since cemetery sites frequently are not adequately protected by section 106 of the Preservation Act or by NAGPRA, staunch positions toward the excavation of burials are often adopted by descendant communities. Indeed, the impetus for NAGPRA came as a reaction from the lay community, in this case tribal groups, which forced the government to recognize their concerns for the protection of burial sites. The combination of the Preservation Act, embodied in federal regulations, and concerned activists coalesced to become a vocal conscience for the protection of the sanctity and integrity of burial grounds and the protection of the graves of their ancestors (Inouve 1994).

In 1993, for example, at the Performing Arts

Center/Trinity Church site in Newark, New Jersey, there was no adequate voice for preservation. A concerned African-American descendant community, which was independent of the church, was powerless to intervene, and the site was largely destroyed (fig. 4). Skeletal remains were removed by the "coroner's method," which consists of the excavation of graves by backhoe, and any large bone identified in the soil was retrieved and cremated. Skeletal remains not immediately visible were dumped in the adjacent landfill on Newark Bay.

More than any other cemetery excavation, the African Burial Ground site in lower Manhattan, New York City, highlights the need for broader legislative protection and spiritual sensitivity. Between the fall of 1991 and the summer of 1992, the U. S. General Services Administration funded excavations of more than 400 burials from a historic African-American cemetery that may have dated from the late 17th century. The cemetery was excavated under extreme time constraints.

As with Native American sites, the excavation of the African Burial Ground engendered a passionate and angry reaction from the descendant community. This reaction rested largely on the fact that the human remains of their ancestors were being exhumed. An outraged descendant community, in combination with political and scholarly activists, pushed to have the excavations halted.

According to Roberts and McCarthy (1995), the African-American community is presently the most conspicuous group not represented by NAGPRA, which pertains primarily to Native American groups and functions on the ability of the descendant group to claim direct tribal affiliation. The legislation requires "cultural affiliation," meaning a "relationship of shared identity which can reasonably be traced historically or prehistorically between a present day Indian tribe or Native Hawaiian organization and an identifiable earlier group" (Native American Graves Protection and Repatriation

Act 1990). NAGPRA is powerless and inapplicable for other groups (McKeowan 1994).

While Native American groups have been successful in demanding sensitive treatment, repatriation, and reburial for their ancestral remains, it is the authors' position that legislation inclusive of all ethnic backgrounds would be more appropriate rather than legislation that specifies protection for one highly vocal and reactive ethnic group. This point is extremely important because the foundation of NAGPRA, which is identification of cultural or tribal affiliation between the descendant group and the historic mortuary population, is an impossibility for most African Americans. Because of the realities of the slave trade. African Americans can rarely know or claim direct cultural affiliation with a particular African country or group. The claim to ancestral remains by African Americans is made despite the fact that no specific cultural affiliation between the African-American descendant community and the remains from the African Burial Ground can be identified or proven. If similar legislation was enacted for African descendant groups, the structure and requirement for specific affiliation to ones' predecessors would necessarily be different.

The Newark and African Burial Ground sites can be contrasted with specific areas of Jamestown, Virginia, where skeletal materials have been preserved undisturbed and where the descendant community has historically retained power and control. According to archaeologist Bill Kelso, "It has been felt that Jamestown has been largely off limits to archaeology because the enshriners there do not want the burials disturbed" (Kelso 1995).

#### 5. PROFESSIONAL IMPLICATIONS

Frequently, conservators must contend with time constraints and budgetary demands inherent in archaeology conducted under the auspices of section 106 of NHPA. Therefore, optimal conservation and archaeological practices often must be compromised, sometimes to the detriment of the resource. More often than not, archaeological sites do not receive an adequate level of attention and are minimally sampled or investigated. Whatever the constraints, we argue that the disciplines of archaeology, physical anthropology, and conservation have an all-encompassing responsibility to pay attention to the spiritual aspects during excavation and subsequent study.

Current reinterpretation of section 106 pertaining to cultural resource management may further diminish the archaeological resources available for study. Given this potential situation, when conservators are included in the recovery process it is incumbent upon our profession to endorse the proper handling of corporeal materials in the language of the *Code of Ethics* as well as to provide collegial support for the community of conservators concerned with such issues (Koob 1995).

It is clear that in the present political environment, the anthropological profession can no longer afford to insist on the strictly scientific approach to human bone for the sole purpose of data recovery that has traditionally characterized the discipline. While the profession has customarily viewed itself as possessing sole domain over the care, treatment, and disposition of human remains, this approach is no longer viable, for it provides no ethical or spiritual accountability, issues central to repatriation and reburial. Reinterment, repatriation, and deaccessioning currently are among the most daunting concerns within the philosophical debate. These issues highlight the differing philosophical approaches that complicate systematic treatment strategies.

While the Society for Historical Archaeology, the Society for American Archaeology, and the American Anthropological Association, among other professional associations, have discussed these issues, the silence of the conservation community has been conspicuous. Many museums and institutions, however, have also

been forced to face some of these issues because of the requirements associated with repatriation (Monroe and Echo-Hawk 1991).

# 6. CONSERVATION AND SCIENTIFIC CONCERNS

#### 6.1 PROPER STORAGE

The proper storage and treatment of human remains serve the interests of both an engaged descendant community and the scientific community. For instance, New York City's descendant community was outraged that skeletal material from the African Burial Ground was wrapped in newspaper and stored in cardboard boxes in a closet. (Literally, there were skeletons in a closet.) The introduction of acid-free paper, appropriate storage cabinets, and environmental controls at least partially allayed these concerns and communicated a degree of respect that the remains deserved (Yamin 1995), in addition to conforming to sound conservation practices.

For conservation professionals, passive or nonintervention conservation measures are the preferred treatment strategies for stabilization (AIC 1995). Unfortunately, the lack of adequate environmental controls in many institutions hastens degradation. Too often, the level of storage reserved for human remains is represented by substandard conditions (fig. 5). As an advocate for skeletal materials, the conservator must provide a certain level of monitoring, since often there is little management for the preservation of the materials and a disinterested third party, such as the state or contracting entity, may control the collection.

#### 6.2 CHEMICAL ANALYSIS

For the archaeology, conservation, and physical anthropology professions, human remains have extraordinary analytic potential and scientific value through a variety of assessments and tests such as deoxyribonucleic acid (DNA), carbon-

14 dating, and trace element and stable isotope analysis. These tests result in the generation of data pertaining to genetic markers; dating; bone histology and pathology; foodways; mortality; dietary, nutritional, and environmental stresses of skeletal populations; and identification of blood proteins. Often, these diseases and stresses manifest as unique pathological lesions or anomalies on the bone. Osteomyelitis, periosteal manifestations of localized and systemic infections, and tubercular lesions, for example, are among the external indicators of these diseases and stresses. Often, their presence and effect on the bone are subtle and tenuously preserved and can be easily overlooked, mishandled, or damaged during excavation, conservation, and subsequent study.

Although currently the ability exists to conduct a wide range of sophisticated archaeometric and bioanthropological tests on bone, it is not always prudent or ethical to jeopardize the physical characteristics of bone for potential future analysis based on elements that have not necessarily survived in the sample. Moreover, analysis of the physical properties of bone is not exclusive to anthropology and may be applicable wherever human bone has been curated or preserved.

Ongoing scientific advances have allowed biochemical and immunological data to be extracted from diverse materials such as mummies, relics, and osteological collections (fig. 6). Unfortunately, the chemical analytical potential is often tenuous at best, and to serve up the physical aspects of the skeletal material as a sacrificial offering without careful consideration of both the spiritual concerns and the scientific consequences of sectioning bone for sampling and analysis can be naive and unconscionable.

Earlier in this century, Howard Carter and his team demonstrated little regard for human skeletal material as the bones of Tutankhamen were shattered and fractured in the pursuit and extrication of treasure. Similarly, modern scientists can be seen as the new treasure seekers, cutting human bone in the quest for scientific "gold"—DNA (Geberth 1990; Howard University et al. 1993).

#### **6.3 CONSERVATION PRECEPTS**

A precept within our discipline requires that when conducting analytical testing and sampling, conservators be responsive to artistic intent and to the integrity of the object. Unfortunately, a limited perspective toward human skeletal material often clouds our ability to perceive the importance of human bone in comparison to fine and decorative art. Similarly, this sensibility toward skeletal material is frequently not realized within the anthropological profession, where the attitude of "acceptable level of damage" has been expressed (Peer Review Committee 1992). Analytical sampling and treatment strategies need to be particularly sensitive to the physical and metaphysical properties of human bone.

Furthermore, the hygroscopic nature of bone renders it highly reactive to fluctuating RH levels and other environmental conditions. The resulting warpage, cracking and distortion, spalling, and abrasions of the cortical layer can obscure or invalidate the analytical potential of the bone and may necessitate intervention and/or treatment. Bone is also susceptible to attack by pollutants and other environmental contaminants. Infestation of biological agents and pests forces the conservator to postulate the efficacy of biocides and pest management systems that may inevitably alter bone chemistry.

Additionally, human remains are curated and treated for a variety of purposes that will often dictate treatment strategies. Archaeological bone may simply need consolidation to facilitate excavation and subsequent handling or display (Koob 1992). Archaeologists and conservators have devised techniques and materials using polymers to give structural support to deteriorating, fragile bone (Johnson 1994). Consolidants and adhesives selected by archaeologists for strength and visual properties, such

as Butvar (Kres and Lovell 1995), may be inappropriate if chemical testing is anticipated (Johnson 1994) or may have properties that conservators find objectionable (Johnsson 1987). Even the use of detergents can contaminate bone, making it useless for various chemical and analytical investigations (Sease 1994).

The morphological structure of the bone may need to be preserved. Fragmented bones often require reconstruction or consolidation before viable anthropometric analysis, one of the cornerstones of physical anthropology, can occur. The properties of the adhesives and consolidants used for these purposes should be clearly understood. As we know from our work in other areas of conservation, certain adhesives expand during the curing process or are subject to other dimensional changes. These changes can alter precise anthropometric results.

Our profession advocates nonintervention whenever possible. For human skeletal materials this policy would ensure the most untainted data and would most likely be less offensive to affected descendant communities and concerned groups. Frequently, however, compromises pertaining to chemical analysis must be made between the preservation of fragile, friable physical attributes and nonintervention strategies (Johansson 1987). The nonintervention approach must be viewed partially as a response to the realization that often reversibility is a myth, "illustrating the gap in the field of conservation between practice and theory" (Appelbaum 1987, 69). The "principle of reversibility" as discussed by Appelbaum (1987) and Horie (1987) is more appropriate for objects and artistic works than for anatomical collections that have different considerations and criteria for reversibility. As Horie (1987, 6) has observed, once a polymer has been applied to porous material, such as bone, "it may be impossible to remove more than a small proportion of the same polymer. . . . Techniques for examination are increasingly sensitive and require uncontaminated samples. It is unlikely

that many treatments can be reversed to remove every trace of the polymer applied yet make no alteration to the object."

Bone is a discrete material composed of organic and inorganic material with a hard, impervious exterior and a permeable, porous, and spongy interior (Johansson 1987). It is the mineral component that contains many of the relevant chemical elements (Crist 1995). Much of the data to be retrieved rely on the inherent nature of pristine physical condition. Realistically, many times we are forced into situations where the attempt to mitigate the further degradation of the materials requires difficultto-reverse stabilization treatment (Appelbaum 1987). Invasive treatments may also be required to facilitate excavation or to enhance data retrieval, necessitating a trade-off between nonintervention and the physical needs of the object.

#### 6.4 CODE OF ETHICS

Pursuant to the language contained in the AIC Code of Ethics (1995), the role of the conservator is to act as an advocate for proper care of cultural property that may be of artistic, historical, scientific, religious, or social significance. While some archaeologists and anthropologists have argued that human remains are outside the purview of the conservation profession as defined by the Code of Ethics, archaeological conservators are nevertheless concerned with these materials (Pye and Cronyn 1987; Peer Review Committee 1992; Koob 1992; Johnson 1994).

Within that capacity, we should present our concerns to allied professions to prevent mishandling or reliance upon antiquated methods (Johnson 1994). Bones continue to be wrapped in newspaper, adhered or consolidated with materials such as Butvar (Kres and Lovell 1995), shellac, Duco Cement, Elmer's Glue, hot glue, or polystyrene without understanding the ramifications of these applications. Johnson (1994, 223) reports that "the oral history of

bone preservation includes stories about the use of materials such as plastic tent windows dissolved in acetone and acrylic floor finish, techniques not often described in published accounts."

Although further research into conservation and treatment of human remains is necessary, anthropological professionals should be kept abreast of our continued abilities to assist them in responsible technical support. Conversely, we must remain aware of the continuing needs of their profession and of the ways adhesives, testing, and handling techniques may affect their ability to extract data from the materials. Proper handling and an in-depth understanding of the chemical reactions and properties of coating materials are critical to successful extraction of DNA or carbon-14 dating. Adhesives and consolidants chosen for properties that provide immediate solutions to a variety of archaeological problems may prove inappropriate for long-term research considera-

Our expertise is understanding the material (Pye and Cronyn 1987): how it will react not only to the environment but also how it will respond to the methods and materials used in preservation or stabilization (Johnson 1994). Knowing the working properties and longterm aging properties of one brand of adhesive is not a predictor of these properties in another brand (Johnson 1994). The understanding of these complexities and the symbiotic reactions of associated materials is what conservation contributes to the interdisciplinary dialogue. This unique understanding of materials is often misinterpreted by other related professionals who may feel that conservators are outside their professional bounds (Pye and Cronyn 1987; Peer Review Committee 1992; Johnson 1994), particularly since the Code of Ethics pertains to works of art, historic materials, and cultural properties (AIC 1995). This attitude can lead to misunderstanding and suspicion, which are counterproductive to the interdisciplinary process. To date, conservators have not

normally been treated as key members of interdisciplinary teams. Our understanding of the properties of bone, as well as mortuary objects, may contribute to better science and better relations with concerned descendant communities.

The solutions to the ethical dilemmas associated with the treatment and handling of human remains are not linear. This complex tangle of issues demands an interdisciplinary approach combined with awareness of spiritual and philosophical belief systems. Ideally, the Code of Ethics should be responsive to the multivariant concerns by recognizing human remains as a discrete material requiring unique considerations that are separate and apart from any other materials we treat. The Commentary section, as a valuable addition to the Code of Ethics, could delineate a number of conventions necessary for the proper handling and treatment of remains. The sacred aspects of skeletal materials should also be taken into account

#### 7. CONCLUSIONS

Our concern is to suggest how our profession can respond appropriately to today's politicized environment and contribute to creating a climate that includes sensitivity to both scientific and spiritual concerns. It is not our intention to be judgmental, only to illustrate the complexity of the issues associated with the treatment of corporeal materials.

The *Code of Ethics* should address human bone as a discrete material. It is incumbent upon the conservation profession to contribute to the interdisciplinary guidelines that could further reduce conflicts between professional and lay interests. Because the circumstances surrounding each site or project vary, the wording must be appropriately flexible.

Although we may never successfully resolve questions such as who should be the steward of the material or whose concerns should come first, a multidisciplinary collaboration could better address and define the philosophical, political, cultural, ethical, and scientific con-

cerns that complicate the treatment of human remains. We can only expect these issues to escalate as the relentless encroachment on cemeteries continues, as mortuary art becomes ever more collectible, and as analytical testing of human bone becomes increasingly technologically advanced. This once most venerated material must acquiesce to the needs of modern society, as the dictum "rest in peace" no longer applies.

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