



Physical Anthropology Section – 2007

H106 Considerations in Differentiating Negligence From Deliberate Misconduct — Lessons Learned From Tri-State Crematorium

*Hugh E. Berryman, PhD**, Sociology and Anthropology, PO Box 10, Middle Tennessee State University, Murfreesboro, TN 37132; and *Carrie Anne Berryman, MA*, Department of Anthropology, Vanderbilt University, 2301 Vanderbilt Place, Box 356050, Station B, Nashville, TN 37235

After attending this presentation, attendees will gain insight into considerations needed to differentiate negligence from deliberate misconduct when examining commingled cremains.

This presentation will impact the forensic community and/or humanity by providing insight into considerations that must be made when examining possible altered cremains in order to differentiate negligence from deliberate misconduct. The presentation will provide a better understanding of the north Georgia, Tri-State Crematorium case where over 300 remains were recovered in what is the largest, most complex case of its type in U.S. history. Findings from an excavation of Tri-State Crematorium's retort floor, in which archaeological excavation techniques were used, will be presented.

Forensic specialists are often called upon to verify the identification of cremated human remains when funeral homes or crematory facilities are believed to have accidentally released misidentified remains or intentionally substituted foreign materials. However, the funeral home industry's use of increasingly effective mechanical bone pulverizers following cremation has left physical anthropologists with fewer methods for determining the physical attributes of the remains. Thus, forensic specialists often rely on the recovery of unique personal artifacts such as fragments of medical or dental implements to confirm or refute the identity of remains.

On February 15, 2002, news began to surface of the many clandestinely placed bodies being found at the Tri-State Crematorium located in northern Georgia. A total of 339 bodies were reportedly recovered from the site in what is the nation's largest crematorium related case. Based on work with the Tri-State Crematorium court case (Goins, Carpenter, James and Lockett law firm), this paper argues that unique, foreign inclusions do not always provide an adequate means of demonstrating deliberate misconduct or fraudulent activity on the part of a crematorium. Poorly maintained retort surfaces at some facilities may result in negligent contamination through retention of remains and artifacts from previous occupants. These articles may be raked into future cremations, potentially resulting in questioned identity and accusations of misconduct.

Pertinent data related to this problem were gleaned from photographic documentation of the undisturbed Tri-State retort floor, archaeological excavation of the retort floor, and analysis and interpretation of findings. The Tri-State retort chamber measured 27 inches high by 36 inches wide by 96 inches deep, and was in a poor state of repair when initially examined. The fire bricks that composed the wall and ceiling were damaged and the floor had a loose sandy surface with a moist oily composition separated in places by fissures, depressions and pits. A cursory examination of the floor revealed numerous bones, teeth, screws, and other articles scattered throughout. Before the retort floor could be excavated, it was photographed in its undisturbed state. However, the restrictive 27 by 36 inch retort opening required construction and placement of a device to facilitate documentation without disturbing the floor. The device was constructed to support an aluminum beam for attachment of a camera, and for the later placement of a platform from which to work. The device would only contact the floor in four areas, each the size of a small screw head. A 35 mm digital camera was attached to the beam and overlapping photographs were made of the undisturbed floor, the walls and the ceiling over the length of the retort. The beam and camera were run along five paths from front to back of the retort floor with two photographs taken every 14 inches. These photographs were later juxtaposed to create a composite view of the retort floor.

After photographic documentation, a platform was then set in place above the floor to allow entry whereby the retort floor was diagrammed, and undisturbed articles were identified and collected. The retort floor was then grid into sixteen 12 by 18 inch units and excavated. The initial, loose surface was excavated by brush (i.e., all material loose enough to be removed by a brush) while a subsequent, deeper and more solid surface was excavated by trowel. Material from each grid unit and each depth was screened through two U.S.A. Standard Test Sieves, sorted and identified. A total of 4507.4 grams/3545.0 milliliters of excavated material was examined from the upper (loose) excavation, and 5952.2 grams/6875.0 milliliters from the lower (more solid) floor.

In support of the negligent contamination hypothesis, excavation of the crematory chamber yielded human bones and teeth, hair, dental appliances (e.g., porcelain crowns, gold-colored tooth crowns), possible surgical wire, snaps/fasteners, staples, wood screws, etc. Duplicate skeletal elements indicated



Physical Anthropology Section – 2007

a minimum number of two individuals although it is likely that a larger number of individuals was represented among these bones and teeth. Due to irregularities in the poorly maintained retort floor, these articles were missed by the flat metal rake used to remove remains. In addition, a greater concentration of articles was found near the back wall of the chamber, an area more difficult to reach with the rake.

Finally, of the crematory operators surveyed, 10 of 13 responded that minor inclusions from previous cremations were possible, even in modern facilities. Thus, if John Doe had no teeth yet his urn contains a tooth fragment, it should not be concluded that the urn does not contain the remains of John Doe.

Although Tri-State provides an extreme example of facility neglect and mismanagement, it clearly illustrates the need for forensic scientists who are asked to testify in such cases to familiarize themselves with the type of retort used, method used for removal of remains from the vault, and the history of maintenance for the retort surface. Such knowledge is critical in differentiating negligence from deliberate misconduct when examining commingled cremains.

Cremains, Tri-State Crematorium, Forensic Anthropology