



Physical Anthropology Section – 2004

H36 Playing the “Race” Card Without a Complete Deck: The Addition of Missing Asian Data to Aid Racial Determinations in Forensic Casework

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After attending this presentation, the viewer will understand: 1) the application of non-metric methods in race determination of human skeletal remains in forensic casework, 2) the necessary utility this affords the forensic scientist in determining an individual biological profile and ultimately, individual identification, and 3) improvements needed in the reference population data set.

This presentation will impact the forensic community and/or humanity by improving the accuracy in making racial estimations of human remains within the context of forensic identification casework, specifically addressing the problem of a lack of a true Asian population in the reference data used in the determination of Mongoloid remains.

The identification of human skeletal remains in forensic casework often requires both inductive and deductive observations. The process requires first the deductive capability of building a singularly clearer picture, or biological profile, of an individual from potentially a whole suite of smaller clues – in the case of the forensic anthropologist, specific bony landmarks. Inductive processes then take over in the comparison of specific characteristics from this unknown individual with like characteristics observed in medical and dental records of known individuals fitting the same general profile. This is a practical application of the science of anthropology to problems in the “real” world.

The forensic application of anthropology to the problem of racial estimation is often misconstrued as inconsistent with theoretical components of biological anthropology. However, basic tenets must be emphasized in the application of anthropological techniques towards forensic ends: (1) Forensic anthropologists do not place value judgments on their determinations of race, and unlike pure academic anthropology, which focuses on describing population groups and their life-ways, forensic applications of the science ultimately seek to identify the individual; (2) Race is an important social construct that can often be assessed through skeletal observation, and since the public that is served by forensic investigation requires descriptive diagnoses which can be applied to narrow the search for individual identity, forensic anthropologists would be remiss to disregard the ability to identify these skeletal traits. Forensic determinations of racial affiliation do not further notions of racism. At the same time forensic anthropologists must work within the framework understood by the living, applicable to how they perceive themselves. Genetically based, phenotypically expressed, or characteristically perceived, race determinations are a valid and important tool used in the forensic sciences successfully to help achieve positive identifications and bring needed closure to both loved-ones and the judicial process.

It is the nature of comparative methods that a reference sample representing a population be a true model of that group. For years, the broad reference population designated “Mongoloid” has been defined by studies almost entirely derived from “Southwestern Mongoloid” remains (Rhine 1990). The model in general has been developed by researchers most familiar with American forensic cases, skeletal series such as the Terry and Hamann-Todd collections, and a variety of Native American archaeological populations. Clearly, data specifically including Asian and Southeast Asian populations are under-represented. Our research involves an examination of non-metric cranial features in modern Southeast Asian skeletal populations. Skeletal collections from the Chiang Mai University Medical School, Thailand, the Mahidol School of Medicine in Bangkok, Thailand and a collection of remains stored in the Memorial Museum at the former Choeng Ek Khmer Rouge prison camp near Phnom Penh, Kingdom of Cambodia were subjected to nonmetric trait analysis. The results will be evaluated by critical comparison to the model for Southwestern Mongoloid as described by Rhine in his 1990 publication “Non-Metric Skull Racing,” in the edited work *Skeletal Attribution Of Race* (Gill and Rhine 1990). Standard criteria were used for assessing racial affinity in forensic contexts. It is hypothesized that the Southeast Asian remains will display some trait frequencies relatively consistent with the standard repertoire of Mongoloid traits, but that they will also display features and trait frequencies that contradict the commonly accepted model. The end result of this research will be presented here and will contribute to the important ongoing critical evaluation of forensic racial assignment, expand the overall database of non-metric cranial traits in human populations, and refine the criteria for assessing racial affiliation in forensic contexts.

The opinions and assertions expressed herein are solely those of the authors and are not to be construed as official or as the views of the United States Department of Defense, the United States Department of the Army, or the United States Army Central Identification Laboratory, Hawaii.

Non-Metric Race Determination, Human Skeletal Remains, Forensic Casework