

A114 Adulteration of Ancestry: A Time for Reform

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Learning Overview: After attending this presentation, attendees will gain a better understanding of how ancestry has been used and misused over the past three decades.

Impact on the Forensic Science Community: This study will impact the forensic science community by offering suggestions on how to move forward with the practice of ancestry estimation and call for a reform of our current praxis.

In 1992, Norm Sauer called for a paradigm shift in forensic anthropology in which practitioners would move away from the socially loaded term “race” and replace it with “ancestry.”¹ This shift was meant to mark a move from social constructions of race toward recognition of geographically patterned human variation that could still be used within a forensic context. While many heeded the call and shifted toward ancestry in their research and reports, the actual approach to research and analysis did not change. This presentation provides an overview of the application of ancestry estimation and the debate surrounding race and ancestry over the past three decades as it applies to the work of forensic anthropologists.

The 1990s were witness to a resurgence of the study of race within biological anthropology. Lieberman and colleagues published survey results that showed that 50% of physical anthropologists accepted and 42% rejected the race concept, prompting Goodman and Armelagos to state that, “physical anthropology of the 1990s looks suspiciously like the physical anthropology of the 1920s and 1930s.”^{2,3} Amid this renewed interest in research on race, there were also large-scale humanitarian crises in Rwanda and the former Yugoslavia that highlighted the need for population-specific standards within forensic anthropology for many parameters of the biological profile.

In response to the previous decade, between 2001 and 2010, there was a large growth in ancestry estimation method development. There was some renewed reflection on ancestry estimation as this terminology is largely embraced in forensic anthropology replacing the term “race.” Yet, even with this shift, the practice of ancestry estimation does not adequately encompass evolutionary theory in biological analyses. Further, the practice is broadly defended and accepted within the discipline with little critical reflection.

In the past ten years, there has been an increase in the validation of methods largely in response to the National Academy of Sciences 2009 Report.⁴ In these publications that serve to validate ancestry estimation methods, there is little critique of the “race concept” or discussion of modern human variation or reference samples. Instead, the methods of ancestry estimation are tacitly accepted through the validation process. This decade has also seen an explosion of online (mostly unvalidated) programs in which ancestry can be estimated, further indicating the broad acceptance of the practice within our discipline and affirming its place in our practice.

Moving forward, forensic anthropologists need to reckon with the practice of ancestry estimation as it is currently envisioned. We are calling for another shift in the axiom that focuses on evolutionary theory, population history, and population-level reference samples. This practice can move to an analysis of population affinity and abandon the terms “ancestry” and “race” completely. Population affinity is a statistical estimate based on inherited phenotypic traits of the human skeleton that have been shaped by microevolutionary forces. This is not geographic ancestry, which all too often can be seen as interchangeable with social race and as a validation of the biological concept of race. It is time to acknowledge the social and scientific implications of the current practice of ancestry estimation and re-frame our approach to studying and analyzing modern human variation.

Reference(s):

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2. Lieberman L., Stevenson B.W., Reynolds L.T. Race and anthropology: A core concept without consensus. *Anthropol Educ Q.* 1989; 20(2):67-73.
3. Goodman A.H., Armelagos G.J. The resurrection of race: The concept of race in physical anthropology in the 1990s. In: Reynolds L, Lieberman L, editors. *Race and Other Misadventures: Essays in Honor of Ashley Montagu in His Ninetieth Year.* Dix Hills, New York: General Hall; 1996;174-86.
4. National Research Council (NRC), Committee on Identifying the Needs of the Forensic Science Community. (2009). *Strengthening Forensic Science in the United States: A Path Forward.* Washington, DC: The National Academies Press.

Race, Ancestry, Population Affinity