

# Identifying the Asian Body

## Ancestry and Belonging in Forensic Anthropology

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**Abstract** *Forensic anthropology is characterized by the identification of deceased individuals through the creation of a biological profile from the skeletal remains. This profile includes the age-at-death, sex, stature, and ancestry of the skeleton. Ancestry, one way of describing human morphological variation, is often seen as being used as a proxy for social race, and the use of the tripartite of continental groups, Africa, Asia, and Europe, as the main stays of identification is still prevalent. The chapter attempts to critically explore the use of ancestry-related classificatory systems deployed in forensic anthropology by focusing on osteology collections. In doing so it engages two separate sets of problematics. First, it highlights deficiencies in the representation of Asian populations in forensic databases. Second, it addresses ethical challenges of teaching with collections of human remains derived from postcolonial contexts without alienating students of ethnically minoritized backgrounds.*

### Introduction

In this chapter we will address the topic of the diverse conceptualizations of human classifications in the life sciences by focusing on the problematics of the classification of human remains by ancestry in osteology collections. The authors are a forensic anthropologist (Trudi Buck) and a social anthropologist (Yulia Egorova), both based in an integrated department of anthropology where teaching and research are conducted in different fields of anthropological inquiry. The paper is an attempt to critically explore the use of ancestry-related classificatory systems deployed in forensic anthropology, as well as to start reflecting on the ethical challenges of teaching about ancestry classification with the use of osteology collections.

Our analysis in the paper will be two-pronged. Firstly, we will discuss the geographical biases inherent in the development of existing techniques for the estimation of ancestry and the mismatches of terminology used in forensic practice in different parts of the world. Secondly, we will reflect on the ethical challenges of teaching the available methods within forensic anthropology and working with human remains in classrooms

with diverse student audiences. In such an academic setting, talking about the ancestry of individuals whose remains are represented in the collection and the provenance of these remains may result in subjecting students of minoritized backgrounds to potentially alienating discourses of othering.

In starting this discussion, we will be contributing to the body of literature in social studies of science that has focused on the history and sociology of the development of ancestry classification methods in the life sciences (e.g. Abu El-Haj 2012; Egorova 2013; Lipphardt 2014; Lipphardt et al. 2021; Liu 2010; Reardon 2005; Schwartz-Marin and Restrepo 2013; Sommer 2016), and to the growing research in critical heritage studies which has discussed the problematic of the material representations of marginalized groups' histories (e.g. Burch-Brown 2022; Mookherjee 2022), colonial legacies of museums (Hicks 2020), and, more broadly, ways to address what Sharon Macdonald has described as "difficult heritage" (2009). It will also contribute to recent and ongoing conversations in biological anthropology about the situated nature of scientific knowledge production in this area (Athreya 2019).<sup>1</sup>

## Ancestry Classification in Forensic Anthropology

The main aim of forensic anthropology is to achieve positive identification of deceased unknown individuals for medicolegal purposes. This is conducted through the creation of a biological profile from their skeletal remains, including the estimation of biological sex, age-at-death, stature, and geographic ancestry. Ancestry, one way of describing human morphological variation or population affinity, can be perceived as a proxy for social race in forensic identification and on these grounds has been the center of debates as to whether or not forensic anthropologists should abolish the practice of ancestry estimation altogether (Bethard and DiGangi 2020; DiGangi and Bethard 2021; Stull et al. 2020).

One of the main areas of contestation around ancestry classifications is the historical use of the trifecta of continental groups, Africa, Asia, and Europe, to classify individuals, which still forms the basis of the main estimation methods today (Hefner 2018; Bethard and DiGangi 2020; Go, Tallman, and Kim 2019). These groupings are built upon the work of early physical anthropologists such as Aleš Hrdlička, although the aims of such work included the construction of racial hierarchies rather than identification (Blakey 1996; Caspari 2009). As with much methodology and theory in forensic anthropology, the techniques used for the estimation of ancestry originate in US academic institutions, and thus the terminology employed follows this geographic bias, with the earliest cranial discrimination method attempted by Giles and Elliot (1962) between "Whites," "Blacks," and "Indians."<sup>2</sup> The techniques that have subsequently followed this were also largely based on anatomical collections derived from US population groups (Albanese et al.

1 We borrow the term "situated knowledge" from Haraway (1988).

2 See Pilloud et al. (2021) for a discussion regarding terminology used to describe human morphological variation in forensic anthropology.

2022). In the Forensic Anthropology Data Bank<sup>3</sup>, originally developed by The University of Tennessee, Knoxville, in 1986, for example, the contemporary “Asian” subset consists exclusively of individuals of Chinese, Japanese, and Vietnamese descent. In contrast with these classifications, in the United Kingdom the term Asian would be understood to include individuals of South Asian origin. This geographic area, including India and Pakistan, is not well represented in the methods used to estimate ancestry.

At the center of the production of scientific knowledge in this discipline, there is, therefore, a bias often unacknowledged in the literature.<sup>4</sup> This bias is still included within the methods highlighted for ancestry estimation in introductory textbooks used for undergraduate teaching (e.g. Christensen and Passalacqua 2018; Byers 2024). The three-group model that forms the basis of historical research on ancestry in forensic anthropology thus has larger implications for the epistemology of ancestry studies and the discipline globally.<sup>5</sup> Acknowledgment should be given, but often is not, to the arbitrary and historical nature of these classifications of skeletal variation, which may lead to over-simplistic assumptions of morphological homogeneity.<sup>6</sup> The Macromorphoscopic Databank, for example, is designed to provide “large and appropriate reference samples” for developing identification standards in forensic anthropological ancestry estimation (Hefner 2018, 994). This ancestry estimation methodology uses morphological features such as the shape of the nasal aperture or the width between the orbits as classificatory variables (Hefner 2018). Identification starts at the large scale, using the three-group model of European, African, and Asian, then moves through tiers to finer levels of classification that end with geographic origin (Hefner 2018). The “Asian” group encompasses individuals as varied and disparate in geographical terms as Indigenous Americans, Thais, Australians, or Maori (e.g., Atkinson and Tallman 2020; Plemons et al. 2018). Out of thirty-five potential areas of “geographic origin” (Hefner 2018, 997) within the Asian group, only one of these is from South Asia, Sri Lanka. The Sri Lankan population data in the Macromorphoscopic databank are listed under the second tier of “ancestry (geographic)” as being of Pacific Island origin, together with populations of a wide range of areas including, for instance, Australia, Indonesia, Malaysia and Samoa (Hefner 2018, 997).

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3 [www.statsmachine.net/software/Fordisc/support/Help/Fordisc3\\_Help.pdf](http://www.statsmachine.net/software/Fordisc/support/Help/Fordisc3_Help.pdf), last accessed 5 December 2024.

4 Research has begun to address the issue of people with Latin American and Filipino origins within the United States (e.g. Go et al. 2019, Hughes et al. 2018).

5 Note that in this paper we are only specifically addressing the use of ancestry estimation in forensic anthropology, which is a specialized application of anthropological knowledge to questions about medico-legal significance. The wider discipline of biological anthropology across the globe has differing histories of how race has been studied.

6 For further discussion of assumptions of morphological homogeneity in inequality of identification in Black Caribbean populations, see Dwyer et al. (2023).

## Perpetuating Lack of Representation

The lack of representation of South Asian individuals in ancestry estimation is due to much research relying on the same anatomical collections and databases in the creation of specific methodologies without addition of new data from wider geographic areas, even when this is potentially available. Craniometric data from over 2000 individuals from thirty global populations is freely available to researchers based upon data collected by W. W. Howells between 1965 and 1980.<sup>7</sup> This dataset forms the basis of many ancestry estimation studies (e.g., Algee-Hewitt 2016; Dong et al. 2021; Navega et al. 2015). However, in this dataset, as well, the only extensive South Asian representatives are peoples of the Andaman Islands (Howells 1995). Howells acknowledges that due to limitations of collected material there are “spacious interstices” for which there is no information included, notably South Asia and Latin America (Howells 1995, 3). While the lack of individuals from South America in forensic anthropological databases is being addressed (see for example Spradley 2021), the lack of South Asian data continues to fall into this “lacuna” of knowledge (Howells 1995). One possible explanation for the underrepresentation of South Asian individuals is the historical and racial biases in the development of biological anthropology that are inextricably linked with the colonial ideologies of their time. In early typological studies (e.g., Hooton 1946; Coon and Hunt 1965), people of India were referred to as “Caucasoid” alongside European populations. While these typological studies are no longer considered acceptable in science, their legacy continues within the uncritical use of classifications they established.

Rick Smith and Deborah Bolnick remind us that biological anthropology, which has been instrumental in producing scientific knowledge about humans and nonhumans, has been historically shaped by majoritarian and settler colonial agendas. These epistemological biases created a flawed and incomplete scientific corpus about human variation and have continued to live on in some of the contemporary knowledge production practices, leading to the marginalization and exclusion of minoritized bodies and voices (Smith and Bolnick 2019, 465). For instance, they cite the example of genetic studies of Indigenous groups in North America that have for a long time been influenced by settler colonial preoccupation with the notion of biological purity, which did not take into consideration the social, political, and legal factors that determine belonging in these communities (Smith and Bolnick 2019, 465; TallBear 2013).

Addressing the broader context of biological and evolutionary anthropology, Sheela Athreya points out that Eurocentric biases in the models of human evolution continue to inform knowledge production in these fields, and “the seeming near universality of observations and assumptions upon which we rest our evolutionary models actually reflects the lack of diversity in paleoanthropology and the clear power structure that privileges Western knowledge” (Athreya 2019, 473).

The creation of biological profiles, including the estimation of ancestry, is a form of narrative, a literal interpretation of the trope of “reading the body.” The exclusion of the South Asian body from this narrative raises questions about whose voices are heard or bodies seen, and contrarily who are being diminished. In a call for a reflexive analysis of

7 <https://web.utk.edu/auerbach/HOWL.htm>, last accessed 5 December 2024.

such praxis, Sabrina Agarwal describes this as a form of biopower and highlights the need for the transformation and decolonization of the discipline (Agarwal 2024a; *idem* 2024b). Recognition of the United States as the “gatekeepers” of the state of the art of ancestry estimation and forensic skeletal identification is a step towards changing the status quo, which is required if human variation is to be classified in a truly global, meaningful, and inclusive manner.

Western bodies and Western scientific knowledge are being prioritized in the development of methodologies, but at the same time students are expected to learn from the bodies of the poor and from unclaimed bodies as subjects/objects that are not represented within the techniques of analysis that they study. It is not even possible to estimate the “ancestry” of such an individual from an anatomical teaching collection because the “test subject” data does not exist in the statistical programs available for use. This highlights the inequalities and lack of diversity encapsulated in the discipline. For the teachers of forensic anthropology, this presents a challenge of explaining accepted epistemological knowledge as it exists in the textbooks set as reading against the reality that is not present in the established literature.

The lack of the representation of the South Asian body in the modern forensic classifications of ancestry leaves South Asian populations outside of the forensic anthropological context as it currently stands. The obvious dangers of this academic structure are inherent in the possible misclassification of an individual within a forensic context who is not represented within the extant biological data. This has been already discussed in detail in a theoretical context, for example regarding individuals from Brazil (Jacometti et al. 2023; Fernandes et al. 2021) and Filipino individuals (Go et al. 2019) who cannot be correctly identified by the existing techniques such as AncestryTree and Forensic. Lorenzo Franceschetti (2023) highlights the more practical application and ongoing dangers of the lack of appropriate reference collections in published methods. His research into the attempts to identify 150 of the 500 people killed in the Lampedusa shipwreck showcases where anthropological methods fail to meet the diversity of individuals that attempted to travel to Europe. As we discuss in the final section, just as dangerous is how these inherent biases are built into the epistemology of the discipline being transmitted, often uncritically, to practitioners and students, including people of color who are excluded from the fundamental analyses.<sup>8</sup>

## Identity and Belonging in the Teaching of Forensic Anthropology

When it comes to the specifics of teaching forensic anthropology, Amelia Hubbard (2021) warns of the dangers of hidden curricula, and of unconscious and implicit bias when teaching forensic anthropology—concerns centering on the lack of critical reflection. Such hidden curricula are present in the skeletal remains of individuals that are widely used for teaching in global university classrooms, such as in one of the authors’ own laboratories at Durham University in England. Indeed, the pedagogical context of forensic anthropology is that while the South Asian body is excluded from accepted methods

8 Sabrina Agarwal (2024a) refers to this as the legacy and disposability of the brown body.

of ancestry estimation, it exists as a subject/object for osteological teaching, as many universities have anatomical teaching collections that have their origins in India. Agarwal notes that colonial India offered unique opportunities for the collection of human remains and that after the end of the British rule, too, export of human bodies out of India continued in complex ways (Agarwal 2024a; *idem* 2024b). Indeed, at its peak the once legal “Calcutta Bone Trade” was exporting over 50,000 bodies a year to universities and medical students around the world (Carney 2011). To use a concept introduced by Lawrence Cohen, populations and communities who were the source of these remains became “bioavailable” (Cohen 2004)<sup>9</sup>, as they did not have the means to resist the methods of acquisition of these skeletons, which did not provide channels of consent for the individuals involved, leading to the bodies of the poor often being collected by illegal means and/or without the knowledge of their families. The Indian Government criminalized the trade in 1985 but there is evidence that it continues in the present, albeit having gone underground. The earliest trade in human remains for medical teaching also ran out of France, Russia, Germany, and China though India became the main supplier from the mid-1930s (Jones 2023, 611).

Acknowledging the difficult truths regarding the existence of these remains in the undergraduate laboratory calls on us to reflect not only on the theoretical development of forensic anthropology but also on how we transmit this situated knowledge in the classroom. In the cases of using human remains in teaching laboratories like ours, we suggest that what needs to be assessed is not only the politics of ancestry identification practices, but also the ethics of presenting findings and hypotheses about the provenance of human remains collections that the laboratory holds. For instance, in a situation where students from the Global South or other parts of the world, where human remains may have originated from, constitute a minority in the classroom (and in the general population), accounts highlighting the violent histories that may have led to the generation and acquisition of these remains may be experienced by these students as traumatizing and alienating, even if these accounts are informed by liberal humanistic politics. In this respect, teaching forensic anthropology shares the problematics of the ethics of presenting material pertaining to the histories of minoritized individuals and groups with teaching in social anthropology and other social sciences and humanities.

Moreover, the very mention of the Indian origin of human remains collections is very likely to be traumatizing for students from the Global South. A poignant example is provided by Agarwal, a Canadian bioarchaeologist of South Asian descent, who recounts her experience in an undergraduate human osteology class. Upon learning of the Indian provenance of the skeletons used in her studies, Agarwal found herself identifying with the subjects presented in the collection more than with her predominantly White student cohort (Agarwal 2024b, 3). For such an experience, Watkins offers a theoretical framework for understanding anatomical collections, conceptualizing them as representations of the “anthropological other” (Watkins 2018). She demonstrates how these remains, integral to both teaching and research, are positioned within normative

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9 As Miriam Ticktin (2011, 155) explains, “in Lawrence Cohen’s (2004) terms, people must be understood as differently ‘bioavailable,’ a term he uses to describe the likelihood for a person or population that its tissues may be disaggregated and transferred to some other entity or process.”

scientific practices. Rachel Watkins contends that although such collections are foundational to anthropology, the lack of adequate social and historical contextualization obscures their relevance to broader debates about race, science, and inequality. In line with these critiques, we argue that the relevance of smaller-scale anatomical teaching collections, curated within university settings, is similarly obscured in these debates. While usually the “White body” is seen as standard while the “non-White body” is constructed as marked with difference, in this case, on the contrary, human remains from South Asia are generalized as the standard for all humans, but this can have negative implications for the identification of individuals of South Asian ancestry.

It is essential to understand these assemblages within their social and historical context, recognizing the ways in which they shape the perspectives of both researcher and students studying the remains. Within the UK, it is crucial to acknowledge not only the social and historical context of the anatomical skeletons but also the structural violence that their existence and use represent. Furthermore, the underrepresentation of the South Asian bodies in the praxis of forensic anthropology highlights a broader gap in the discipline. Addressing these issues requires ongoing reflection on the sensitivities associated with teaching about the historical and contemporary experiences of marginalization and inequality.

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