

Forensic Anthropology Workshop

'DEAD MEN DO TELL TALES'

Course instructor: Dr Annamaria Diana

1. A few introductory and historical notes

Forensic Anthropology is the application of the science of physical anthropology to the legal process. The identification of skeletal, badly decomposed, or otherwise unidentified human remains is important for both legal and humanitarian reasons.

- Forensic anthropology, though often presented as a relatively young discipline given its formal recognition only in the 1970s, has a rich history spanning most of the twentieth century.
- In the late 1930s, Wilton Krogman's series of articles in the FBI Law Enforcement Bulletin can be considered as the first renowned practitioner of endeavours with police that became known as "forensic anthropology."
- In the 1950s renowned physical anthropologists of the first half of the twentieth century provided human identification services intermittently for the police. Anthropologist T. Wingate Todd started expanding a small collection that had been started by Carl A. Hamann, his predecessor at the Case Western Reserve Medical School. The results of Todd's efforts came to form the basis of the Hamann-Todd Collection, the largest assemblage of modern human remains in the world, comprising more than 3300 individuals and currently housed at the Cleveland Museum of Natural History, in Cleveland, Ohio.
- New methods for biological profiling were developed on US war victims, and it was also at this time that new standards for determining adult stature were presented by Mildred Trotter (Trotter and Gleser 1952, 1958; Trotter 1970).
- During the 1960s and early 1970s police began to rely more and more on physical anthropologists to provide important information for their investigations regarding skeletal remains.
- During the 1980s and 1990s, forensic anthropologists began addressing the need for documented modern skeletal collections and new methods for the assessment of biological sex, age at death, and ancestry, essential for the determination of a biological profile of the recently deceased - some examples: pubic symphysis (Brooks and Suchey 1990 ; Suchey et al. 1986), cranial sutures (Meindl and Lovejoy 1985), auricular surface (Lovejoy et al. 1985), and rib ends (İşcan and Loth 1986 , 1989); assessing ancestry in modern individuals (Gill and Rhine 1990); stature estimation (Ousley 1995); and trauma (Maples 1986 ; Merbs 1989).
- From the 2000s, there has been an increase in documented modern collections and intensification in Forensic Anthropology research.

- The first recorded dissections of human bodies were conducted by **Herophilus of Chalcedon** and **Erasistratus of Cos** in the first half of the third century. In the Greco-Roman, Arabic, and early Judeo-Christian world, dissection as a practice was frowned upon because it violated beliefs about the afterlife.
- Skeletal studies were focused on both the exploration of human physiology and anatomy and on the study of human variation, adaptation, and evolution. Early anatomical work on human variation had its roots in the Aristotelian belief that Nature was organized hierarchically as a continuous chain.
- Between the fifteenth and sixteenth century, authorities in some countries allowed surgeons to take the bodies of hanged criminals to use for dissection.
- While the demand of medical schools and practitioners for bodies grew with time, the public were opposed, sometimes with violent displays, to the use of cadavers for anatomical research. In the 1820s, the infamous **William Burke** and **William Hare** in Edinburgh committed a series of murders with the aim of supplying study subjects to anatomist Robert Knox.
- Between the eighteenth and nineteenth century, Christian beliefs and Colonialism were instrumental in influencing theories about human 'species', 'sub-species' and 'races'.
- **Johann Friedrich Blumenbach** (1752-1840) suggested that human variation derived from a primordial type that originated from the Caucasus Mountains.
- In the United States, **Samuel George Morton** (1799-1851), a physician from Philadelphia, introduced studies on craniometry and the classification of people by typology.
- **Franz Boas** (1858-1942) strongly opposed simplistic, hereditarian interpretations of human variations.

2. Terminology and definitions

Human Osteology/Human Skeletal Biology/Physical Anthropology study human skeletal remains through the detailed analysis of the record of anthropometric, morphological, and pathological data from individual skeletons and the group/population they belong to.

Forensic Osteology/Forensic Anthropology is a sub-discipline of physical anthropology that applies the techniques of osteology and skeletal identification to problems of legal and public concern.

'Forensic anthropology is that branch of physical anthropology which, for forensic purposes, deals with the identification of more or less skeletonized remains known to be, or suspected of being human. Beyond the elimination of nonhuman elements, the identification process undertakes to provide opinions regarding sex, age, race, stature, and such other characteristics of each individual involved as may lead to his or her recognition.' (Stewart 1979 : ix)

'Forensic Anthropology encompasses the application of the physical anthropologist's specialized knowledge of human sexual, racial, age, and individual variation to problems of medical jurisprudence.' (Snow 1973 : 4)

'Forensic Anthropology is the specialized subdiscipline of physical anthropology that applies the techniques of osteology and skeletal identification to problems of legal and public concern.' (Kerley 1978 : 160)

'Forensic Anthropology is that branch of applied physical anthropology concerned with the identification of human remains in a legal context.' (Reichs 1986 : xv)

'Forensic Anthropology is the field of study that deals with the analysis of human skeletal remains resulting from unexplained deaths.' (Byers 2002 : 1)

Forensic Archaeology is the application of archaeological theories and practices to a forensic context.

Taphonomy is the study of the processes that lead to the decomposition of the body after death.

Funerary (or mortuary, burial) practices are aimed at destroying or preserving the body of a deceased.

Inhumation is the internment of a body in a grave.

A **primary burial** is the result of a 'simple funeral, single ceremony' where the body is laid in its natural anatomical integrity. In a **secondary burial** human remains are manipulated in two stages.

Cremation is the practice of deliberately reducing a body to ashes by burning it.

Mummification is a process that allows the preservation of a body's soft tissues in a dehydrated state.

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