Forensic Anthropology: An Overview

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Perspective

In a legal situation, forensic anthropology is the application of anthropology's anatomical science and its different subfields, such as forensic archaeology and forensic taphonomy. In the event of an aircraft accident, a forensic anthropologist can assist in the identification of deceased victims whose remains have deteriorated, been burned, mangled, or otherwise become unrecognisable [1]. In addition to investigating and documenting genocide and mass graves, forensic anthropologists play a key role in the investigation and documentation of genocide and mass graves. Forensic anthropologists, like forensic pathologists, forensic dentists, and homicide investigators, frequently testify in court as expert witnesses. A forensic anthropologist can potentially establish a person's age, sex, size, and race using physical evidence found on a skeleton. Skeletal abnormalities can be used by forensic anthropologists to detect the cause of death, past trauma such as broken bones or medical treatments, and diseases such as bone cancer, in addition to identifying physical traits of the deceased [2]. The methods for identifying a person from a skeleton are based on the work of numerous anthropologists and the study of human skeletal characteristics in the past.

Estimates based on physical traits can be made by the gathering of thousands of specimens and the examination of differences within a group. A set of remains can potentially be identified using these. During the twentieth century, forensic anthropology evolved into a fully recognised forensic specialty with trained anthropologists and various research institutes collecting data on decomposition and its effects on the skeleton. In today's forensic realm, forensic anthropology is a well-established science [3]. When other physical qualities that may be used to identify a body no longer exist, anthropologists are relied upon to analyse remains and assist in the identification of individuals from bones. To identify remains based on skeletal traits, forensic anthropologists collaborate with forensic pathologists. If the victim is missing for an extended period of time or is devoured by scavengers, the flesh marks required for identification are lost, making routine identification difficult, if not impossible [4]. Forensic anthropologists can offer physical characteristics of a missing individual to be entered into databases such as the National Crime Information Center in the United States or INTERPOL's yellow notice database.

Aside from these responsibilities, forensic anthropologists frequently aid in the investigation of war crimes and mass death cases. Anthropologists have been tasked with assisting in the identification of victims of the 9/11 terrorist attacks, as well as victims of plane crashes like the Arrow Air Flight 1285 disaster and the USAir Flight 427 disaster, where the flesh had been vapourised or mangled to the point where normal identification was impossible. Anthropologists have also assisted in the identification of genocide victims in countries all over the world, often many years after the occurrence. War crimes anthropologists have helped investigate the Rwandan genocide and the Srebrenica Genocide. Organizations like the Forensic Anthropology Society of Europe, the British Association for Forensic Anthropology, and the American Society of Forensic Anthropologists continue to establish guidelines for forensic anthropology's improvement and growth of standards. The acknowledgement of anthropology as a distinct scientific field, as well as the emergence of physical anthropology, led to the application of anthropology in forensic investigations of human remains [5-7]. During the early years of the twentieth century, the field of anthropology fought to gain acceptance as a valid science, beginning in the United States. Earnest Hooton established the field of physical anthropology and was the first physical anthropologist in the United States to hold a full-time teaching post. Along with its founder Ale Hrdlika, he was a member of the American Association of Physical Anthropologists' organisational committee. During the early twentieth century, Hooton's students established some of the earliest doctoral programmes in physical anthropology. Hooton was a proponent of criminal anthropology in addition to physical anthropology.

Criminal anthropologists believed that phrenology and physiognomy could link a person's behaviour to specific physical traits, which is now regarded a pseudoscience. The eugenics movement, which was prominent at the time, inspired the use of criminal anthropology to try to explain some criminal habits. Because of these concepts, skeletal differences were studied more seriously, eventually leading to the development of anthropometry and Alphonse Bertillon's Bertillon method of skeletal measuring [8-9]. The examination of this data aided anthropologists in their understanding of the human skeleton and the various skeletal variations that can exist. Thomas Wingate Todd, another early anthropologist, was largely responsible for the development of the first substantial collection of human bones in 1912. Todd got 3,300 human skulls and bones, 800 anthropoid skulls and skeletons, and 3,000 mammalian skulls and skeletons in all. Todd's contributions to anthropology are still being used today, and include studies on suture closures on the skull and the time of teeth eruption in the jaw. Kroghman was the first anthropologist to actively publicize anthropologists' potential forensic value, including placing ads in the FBI Law Enforcement Bulletin informing agencies of anthropologists' abilities to assist in the identification of skeletal remains during the 1940s. During this time, federal agencies, like the FBI, began to use anthropologists on a more formal basis. During the Korean Battle in the 1950s, the United States Army Quartermaster Corps used forensic anthropologists to identify war casualties[10].

Reference

7. Shapiro, Helen L. "EARNEST ALBERT HOOTON 1887–1954." Am Anthropol 6 (1894); 1081-1084.

How to cite this article: Dash, Manisha. "Forensic Anthropology: An Overview" *J Forensic Res* 13 (2022): 482.