

EDITORIAL

FORENSIC ARCHEOLOGY - AN EMERGING FORENSIC SCIENCE : IS THERE AN OPPORTUNITY IN SRI LANKA?

Dr. Induwara Goonerathne

Department of Forensic Medicine, Faculty of Medicine, University of Peradeniya.

Not many people in Sri Lanka have heard about forensic archeology. I had the rare opportunity to undergo a training program and an internship in the US on Human Identification in which I came across the nature scope and application of forensic archeology, in addition to studying all other disciplines on forensic identification. Although, I have perused papers written on forensic archeology aspect at that time, I did not have much insight into it until 2007 (I was on post graduate studies in the US by then), where I had the opportunity to study this aspect as well and network with professionals involved in this discipline.

When I informed my supervisor that my academic interest is on human identification for forensic purposes, he provided me with a short synopsis about the contemporary approaches to current human identification before my training and internship under him. Forensic Anthropology, Odontology DNA and forensic archeology were key areas that were highlighted in the introduction.

Unarguably all these areas of study are essential parts in human identification. One aspect that I came across was forensic archeology, a term I have heard and read about but was unsure as to what it exactly deals with. My supervisors' suggestion was to learn the aspects for forensic archeology also to fulfill the total requirements of a unique expert in forensic human identification (in addition to forensic anthropology odontology and DNA). Then, I started to read and study about it and met experts who in fact engage in this discipline.

On my return to Sri Lanka, I met then professor of Archeology at University of Peradeniya at a private function and informed him about the opportunity I had in the US. I

asked him about the situation of forensic archeology in Sri Lanka. He informed me that he has met several foreign experts who work in this important area and that this discipline is not developed "at all" in Sri Lanka. Then, at a later occasion I was invited by the department of archeology at university of

Peradeniya to teach osteology to archeology students which I undertook happily. Later, with my interactions with the Head/ Archeology at that time (towards teaching osteology for archeology students) and with the other academic staff in the department of archeology, I understood that there is a need and a scope to develop forensic archeology in Sri Lanka. I in my capacity as Head of Department of Forensic Medicine at university of Peradeniya, spoke to an academic member at the Post Graduate Institute of Archeology in Sri Lanka and explored the opportunity one may have in establishing this study area in Sri Lanka, having expressed my enthusiasm. I was informed that he would be happy to look in to the possibilities of having a course / unit offered on forensic archeology from their institute. According to him, there has been no one in Sri Lanka, who has officially enrolled and studied this area of study. Therefore, I attempting to fill this void, I officially enroll in a course in Forensic Archeology at a prestigious university in Australia as an internal student and successfully completed the course work and passed the examination conducted by the Australian university. This was in addition to my academic study and enrolments in forensic anthropology and forensic odontology training.

In general terms 'forensic archaeology' is simply the application of archaeological methods and theory to ancient forensic situations and into modern crime scenes. This

subspecialty of archeology/anthropology was first developed in the US and spread to Canada, Europe UK and to Australia. Several Universities in the US, UK and Australia conduct courses in this aspect. All forensic anthropologists in the northern America UK and Australia have undergone an archeology training: an essential part of exhumation excavation and recovery of bone and evidence.

According to the American school, archaeology is a subfield in anthropology. In contrast, in the British tradition archaeology was developed as a branch of history. In the British model, archaeology has two distinct divisions, the archaeology proper and anthropology. Anthropology is the study of humans. This diverse field is traditionally divided into three subfields: cultural (social) anthropology, archaeology, and physical (or biological) anthropology. Cultural anthropologists study the beliefs and customs of people in different (usually third world) societies. Archaeologists excavate and study the artefacts and architecture (i.e. the material culture) of ancient peoples. Physical anthropologists study the anatomy, growth, adaptation, and evolution of the human body (i.e. through the study of skeletal remains). All of anthropology is comparative in its approach, examining the difference and similarities between people across the globe and over time.

In essence, forensic archaeology is the application of archaeology methods and theory to crime scene investigations and recovery. On principle, this discipline attempts to study the past events using archaeological techniques, more specifically attempts to study past crimes using archaeological theory and methods by proper recovery of evidence and materials and then interpreting them. For example, ancient war crimes, genocides and ancient murders can be studied using these methods. Forensic archaeology can assist professionally to provide contextual information as to where, how and when evidence were recovered in the forensic site even in a contemporary forensic scene of crime.

Collecting and recovery of evidence is an essential part of any forensic excavation or exhumation. The need for controlled excavation by trained professionals becomes significant as there had been many instances where the total amount of bodies were not recovered or parts damaged due to unskilled personal involved in excavations. In many forensic instances the professional assistance of the forensic archaeologist is sought in the western world. For example in the 9/11 mass disaster, Rhode island nightclub disaster the contributions by forensic archaeologists / anthropologist significantly assisted to recover evidence and reconstruction of events which lead to administer justice. Increasingly, many international organizations employ forensic archaeologists to forensic teams especially those that deals with genocide investigations, war crimes, mass graves etc.

One of the most interesting instance of the use of forensic archeology was the recovery of the ice man and the reconstruction of the events proceeded with his life peri-mortem. In 1991 the world was alerted to a remarkable find in the Austro-Italian Alps of the mummified body of a 5300 year old local inhabitant. This find, trapped and preserved in glacier ice, was hailed by some as the most important archaeological find since the discovery of Tutankhamen's tomb in the Valley of the Kings in the 1920s. The 'Icemen' became known to the world as 'Ötzi' named after the Ötztal Alps where he was found.

It is in the context of the demands of a highly standardized but flexible approach to the crime scene that the trained archaeologist offers significant advantages. The application of a forensic archaeological approach involves systematic spatial and depositional documentation and data (evidence) collection through use of standard methodological principals of archaeological recovery. Rather than one or several crime scene specialists, this expertise may even lend weight to an argument for forensic archaeological procedural oversight of crime scene recording and evidence collection. Yet, internationally, the acceptance of the forensic archaeologist as a key player in crime scene investigation is greatly influenced by country-specific

trajectories in disciplinary background and linkages.

In conclusion, forensic archeology is an emerging science. This approach can be applied to both current forensic contexts as well as ancient/older contexts. The aim of forensic archeology is the scientific/proper recovery, documentation preserve and transport of evidence from a suspected crime scene. Determining contexts of human skeletal remains, identify and contextualize equipment/artifacts recovered and more importantly distinguishing forensic contexts from an archeological site or a shell midden or from a cemetery or from a war trophies is an essential skill in forensic archeology.

In the Sri Lankan context, the unidentified skeletal remains are treated and managed in a substandard manner. The police have had no training in archeological methods of excavation. The police along with unskilled villages often collect bone samples from various places without any skilled personal in archeology/anthropology being involved.

Such actions result in not only damaging the specimens (there by possible false interpretations), but also non recovery of essential evidence. It is apparent that similar substandard approaches are carried out in exhumations as well. The use of an expert trained in forensic anthropology and archeology will provide expertise in site identifications, site markings, opinion on the soil and the environment, approaches to excavation and detailed three dimensional recovery storage and transport of evidence. As all forensic anthropologists trained in the west, undergo a forensic archeology training invariably, a forensic anthropologist with a training in forensic archeology in the team can opine in regard to the archeological aspects. The application of archeological theory and practice was evident with the ideal site location and recovery of a skeleton of a suspected murder disposal in one of the excavations in Gampola area in Sri Lanka that I could assist with the forensic pathologist and the police. Therefore, as an area of study and practice forensic archeology has a scope and relevance in Sri Lanka.