Forensic anthropology research paper samples

Law, Evidence



The collection and processing of forensic evidence in the course of death investigation is an endeavor that requires different professionals from various disciplines. During death investigations, the specialist such as the forensic experts works in collaboration with the law enforcement, coroner officers, and medical practitioners. The forensic experts have the training to perform analysis of the forensic evidence that other personnel do not have. Forensic archeology is one of the disciplines that provide specialized expertise during a crime scene. A crime scene that has human remains can complicate the process of forensic evidence. The complexity in the issue leads to the law enforcement involving external experts in the process of crime scenes. Forensic Anthropologists aid the law enforcement in forensic consultations since the crime scene personnel have limited expertise in the death scenes that involve decomposing bodies and the skeleton remains. Forensic anthropology applies physically anthropological methods in analyzing the skeleton in the forensic context. Specialist in this field focuses on human osteology in a legal context as they examine the skeleton to provide analysis and examination. Homicide detectives consult the forensic anthropologist in the discovery of remains to enable in the search, recovery, examination of the remains, and make representation in the court of law. A forensic anthropologist assists in the recovery phase other than archaeological excavation. The specialist makes determination to ascertain if the remains are human or non-humans. The person will provide an on-site inventory and suggest the best search methods (Nakhaeizadeh et al. 2014). The missing of skeletal elements is an indication to the crime scene investigation to use other methods to enable the best recovery. One remains

are without the crime scene, the forensic anthropologist will perform an analysis to verify that the bone belong to a human victim in the medical examiner's office. The next step entails the determination if the remains are from a recent and a forensic context or a non-forensic context. Some of the non-forensic context includes war trophies, archeological, and historical remains. The examination and analysis from a forensic context star with the creation of a biological profile. The creation entails the determination of gender, age during death, ancestry, and stature. Additionally, the study entails identifying any injuries, anomalies, or trauma on the bones. The biological profile performs skeletal analysis on the permortem, taphonomic, postmortem, and trauma. In America, the forensic anthropologists excavate burials in the archeological and historic cemeteries as others receive trainings using other methods. The discipline of forensic archeology combines forensic sciences with other skills of skeletal analysis. The skill will enable the experts to excavate and recover the skeletal material in the context of the scene (Nakhaeizadeh et al. 2014).

A Forensic Anthropologist plays a crucial role in death investigations, in the entire sector of forensic science. Forensic Anthropology integrates theories and techniques of archeology and osteology with legal enforcement in the investigations. A forensic anthropologist can collect and perform analysis to the human remains in the process of identifying disfigured victims, provide an estimation of time since the demise, and the resultant cause of death of the victim (Nakhaeizadeh et al. 2014). Some of the victims under investigation are in the later stages of decomposing depicted in skeletons. One cannot recognize the identity of the victims due to injuries and fire

damage. One can engage the specialist in the initial discovery of the human remains to enable excavation, documenting, and cleaning the remains in preparation of the analysis (Nakhaeizadeh et al. 2014). The investigation entails the performing of many investigations as well as examinations helpful in the determination of the victim. The study of the skeletons will provide evidence to the cause of death, trauma before the fatal incident, and all the necessary information. The details of the analysis by the anthropologist occur in records and documentation useful piece of exhibits in a court of law. The forensic anthropologist can make representation in the court as an expert witness.

Anthropologists can engage in non-crime issues such as stampedes, natural catastrophes, explosions, and plane crashes. The cases mentioned involving masses of people that necessitate identification. The discovery of human remains is possible in the current legal proceedings (Nakhaeizadeh et al. 2014). The presence of certain artifacts suggests the historical or the prehistoric period to render the investigation immaterially. Some of the items in this category include coffin remains, scraps of dating clothing, and arrowheads. The Carbon Dating method enables one to determine the age of bones or the objects. The discovery of the species leads to a full investigation to establish that the bones are of human origin. It is easier to determine the non-human species from the larger bones than the smaller bones. Small bones have complexity and demand a lot of knowledge and experience in the investigation before the criminal proceedings (Ventura et al. 2013).

The specialist comprehends the different types of skeletal properties to apply

knowledge and derive conclusions after performing an investigation. A Forensic Anthropologist focuses on the crime scenes and human remains to assist in the development of a biological profile, compile the report, and make a representation in the courts. The specialist has a wealth of knowledge concerning the human body to assist in making judgment on the cause of death. The investigation on the death causes enables the law enforcement to derive answers and conclusions in the case (Garvin & Passalacqua, 2012). The specialist makes an immense contribution in the crime scene processing or the location that has remains of a human to provide the law enforcement with crucial information in the course of the investigation. The forensic anthropologist will perform an on-site identification of human remains to determine and verify they are human. Upon the realization that they are human, the specialist will perform revisions using the search strategy that will respond to the emerging anatomical patterns. The team leader in the search informs the rest of the members when to discontinue in a search or when the remains are complete. One should handle the crime scene apparatus in a delicate manner to prevent any contamination that can interfere with the results in the investigations. The destruction of the remains is due to the time or perpetration that renders the investigation ambiguous and some cases impossible. One can place grids in the crime scene to preserve the crime area. Afterwards, the forensic anthropologists will set up a screening area to sift the grave material and surrounding place to reveal the human remains, fibers, perpetrators, and artifacts. The anthropologist will organize a staging area to excavate and screen the plants, metals, earth materials, sediments,

and other associated items. The specialist does not process the screens while making enormous contribution to the discovery and preserving the human remains. The specialist has to distinguish the human and the nonhuman remains in the performance of taphonomic assessment in the tissue examination to process and investigate the remains properly. The specialist requires the ability of distinguishing the bone from the non-bone material in the evidence provided. The expert has to satisfy that the bones are in fragments in the human remains to perform the taphonomic assessment. The assessment considers all the interpretations that affect the remains between death and discovery. The discipline allows for estimation in the post-mortem interval due to environmental situations and any other differentiating evidence presented (Garvin & Passalacqua, 2012). Forensic anthropologist performs examination on the changes on the soft tissues that include decomposition rates and pattern. The experts disarticulate and disperse the body parts to establish the proper assessment of the remains presented. The distinction of the human and the non-human in the taphonomic assessment will assist in making crucial analysis during the investigation.

Forensic anthropologists offer unknown victims an identity by the development of a biological profile to depict the physical attributes. Professionals in this field rely on other methodologies to determine the victims' age, gender, and stature. A forensic anthropologist must first establish a victim's age in the application of skeletal knowledge and dental development in the analysis report. The ossification of the bones will help in the determination of the age of victims. The developments have a pattern

that depends on gender, hormonal status, nutritional, and bone element. The forensic anthropologists use odontological identification in the dental record to establish the age range of the individual. The hipbone will help in revealing the sex of the victim.

Experts can check on the pelvises to determine male or female since each has a unique sex-specific size and shape. The expert will establish the living stature of the subject using formulas (Garvin & Passalacqua, 2012). The evidence presented by a forensic anthropologist to the medical practitioner or the coroner officer will be crucial in the determining the cause of death during the investigation. Forensic anthropologist makes classification in the traumatic events that result in blunt force damage to produce fractures and fragmentation on the bone. The evaluations will assist the forensic experts to determine the entry and the exit of the wounds as well as commenting on the number of shots in the injured victim.

In America, the law enforcement, coroners, and medical practitioners consult the forensic archaeologists and crime scene archeology in the process of death scenes that have decomposing and skeleton human remains. The specialists in this discipline use theories, recordation, and recovery methods to process the criminal scenes. A criminal investigation will benefit from the assistance of a forensic anthropologist in the crime scene that has human remains to provide a detailed recovery and analysis (Garvin & Passalacqua, 2012).

The documentation of the evidence is instrumental to the law enforcement.

The spatial analysis and some of the patterns of events result in a crime scene assemblage to reconstruct an archaeological methodology in the

standard evidence collection. The processing of the crime scene is prone to destruction due to excavation in the archaeological site. The experts should adhere to proper archaeological methods in the reconstruction of events and the depositional events. The crime scene contains reliable inferences concerning human behavior such as recognizing a homicide situation in the context and association at the crime scene (Garvin & Passalacqua, 2012). The archaeological documentation provides techniques and methodologies to identify the spatial coordinates in the crime scene. The methods in use aid in the recovery of all the forensic evidence to ensure proper reconstruction and interpretation of events to determine the destruction of the crime scene through processing.

The absence of a forensic anthropologist in a crime scene that has the presence of human remains will lead in the destruction of evidence. The unavailability of the professional will make the work of forensic evidence difficult and hamper documentation of the recovered remains. A crime scene area that does not have proper excavation has a high chance of missing the evidence of skeletal material to affect the biological analysis of a person. Forensic anthropologist possesses all the necessary skills related to archaeology field and documentation (Schultz, 2008). In addition, the experts comprehend the application of the skills in the forensic context. Forensic archaeologists have to apply flexibility in their search and excavation approach, unlike traditional archaeologists. Currently, the specialists have to align themselves with the latest field methods in every crime scene. Some of the crime scenes do not permit the use of traditional archaeological methods.

The accurate determination of the age of the victim in an unknown adult skeleton challenges the forensic anthropologist and other skeletal biologists. The advancement of the field of anthropology is crucial in the methodological decisions since it is difficult to work with different skeletal regions to perform an estimate of the age in the same skeletal region. Every method in use provides different ages, phase forms, standard deviations, age ranges, and standard error in the production of the age estimate. The developed methods prove of inconsistencies in the temporal and geographical skeletal sample due to the tendencies to over or under estimate the age groups. The discipline does not have a standardized way of integrating information from the multiple age estimations in the final age in the report. The use of the methodological reports can lead forensic anthropologists deriving different age reports. Both estimates have the possibility of estimating the true range but the court raises questions concerning the methodological decisions on the most replicable method. Homicide and the CSI often encounter challenges in the search of large surrounding for bodies buried in clandestine graves, skeletons scattered in the ground surface associated with forensic evidence. A forensic search performed clears the suspected areas to direct investigations in other places. Forensic archaeologists offer assistance to the law enforcement agencies in the planning phase of the searches and the actual fieldwork. The success of the search will depend on the planning phase since it is crucial to consult the forensic archaeologist before starting the search (Dirkmaat et al. 2008). The forensic archaeologist suggests some of the applicable methods to the site depending on the environmental conditions. The planning phase demands a

prior visit to the location with the forensic archaeologist. Some of the search methods include the intrusive and the non-intrusive method. The nonintrusive search does not disrupt the soil formation since it applies line search, use of geographical tools such as metal detectors, and the use of sniffer dogs.

Intrusive methods entail the use of shovels to dig and excavate material, use of T-bar probes and the backhoe. Intrusive methods disrupt the soil formation and destruct the crime scene. The method can lead to loss of forensic evidence, limiting the possibility of reconstructing the events and the loss of context. The forensic archaeologist applies some of the recent techniques to determine the excavated regions before performing the excavation (Dirkmaat et al. 2008). The forensic archaeologist uses the T-bar to search the clandestine burial site. A forensic archaeologist uses a probe prior to digging to verify the extent of the disturbed soil.

The development of forensic anthropology arises in the molecular biology and the legal framework. The development of the Polymerase Chain Reaction (PCA) and the establishment of DNA analytical methods will require admissibility in the courts to verify the scientific evidence (Schultz & Dupras, 2008). The PCA method depicts a method in the modern forensic sciences and the biomedical sciences. The development of the PCA and the development of the DNA force a change in the entire practice of forensic anthropology. The primary goal of forensic anthropology entails the identification of goals in the discipline to ensure the field remains viable. The attainment of the goal is through the estimation of biological profiles and the antemodem bone modification.

The field of forensic anthropology has made an enormous contribution in the homicide investigation that includes local crime scenes, the violations of human rights and the mass disaster scenes. The death scenes that consist of decomposing human bodies and the skeletal remains involve the homicide victims in the process of anthropology search and excavation. The professionals in this field have the appropriate skills to assist in the search of human remains. The experts in this field play an instrumental role to establish the cause of death in the investigation. The professionals in this discipline focus on the crime scene, examining the remains, creation of a biological profile, and the provision of appropriate documentation that one can use to testify in the court.

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