

BOOK REVIEW

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Review of: *Forensic Anthropology and Medicine: Complementary Sciences From Recovery to Cause of Death*

REFERENCE: Schmitt A, Cunha E, Pinheiro J. *Forensic anthropology and medicine: complementary sciences from recovery to cause of death*. Totowa, NJ: Humana Press, 2006, 464 pp.

The authors state one of the primary goals of this reference textbook is to bridge the gap between the forensic fields of pathology and anthropology. In the United States, where forensic medicine and forensic anthropology are well established, this goal seems attainable and is, in fact, accomplished in some regions of the country. However, in some European countries, forensic anthropology is just beginning to develop and forensic medicine's standards and procedures are minimal at best. Hence, while the text produces awareness, it is a bit premature for some European audiences. The authors agree that many anthropological societies in some European countries need first to "strive for education, certification, harmonization, and research in the field" (Schmitt et al. 2006). For the American audience, the book enlightens individuals to some of the practices of European countries, while giving a comprehensive overview of forensic anthropology. It also clearly illustrates how forensic medicine specialists and forensic anthropologists should continue to develop their symbiotic relationships.

The authors state that the book is written for postgraduates, researchers of both forensic anthropology and pathology, and for those in the areas of "law sciences and the police" (Schmitt et al. 2006). Although a resourceful book for anthropologists and pathologists, it would be of little use to law sciences and police professionals who were not trained in forensic medicine or forensic anthropology. Each chapter is written by different authors (both American and European) who specialize in these two disciplines.

The authors begin the text with an interesting and successful comparison of the history of forensic anthropology and pathology in various European regions, relative to their development in the United States. In chapter 3, the authors examine present-day practices and protocols of forensic anthropology and forensic pathology between some European countries and the United States and note that European countries do not have to comply with standards such as Daubert. While acknowledging inadequacies in training and standards in European countries, the authors do not discuss

how these countries could improve the standardization of their training and protocols.

They also discuss how the overall rate of student training exceeds the job opportunities, and that training in such subfields of forensic anthropology as determination of biological age of living individuals (as covered in chapter 4) is developing. Although interesting, this speaks more to a European audience where legal age of responsibility can be as early as 14 years and determination of a legal age limit can be deceptive. This chapter seems a bit out of place in the text, and may have been more appropriately placed where the authors discuss newly developed subfields of forensic anthropology, or placed as one of the chapters in part five where the authors discuss more recent approaches in the field.

Part three (chapters 5–8) gives a very detailed description of differences of rates of human decomposition, the causative factors affecting decomposition variation, and how forensic anthropologists and/or forensic pathologists investigate these various states. It is very informative, well written and provides adequate photographs and illustrations. Chapter 8 is generally informative and discusses various skeletal lesions that may affect the cause of death diagnosis.

Part four, which includes chapters nine through 15, gives a complete but general overview of some of the anthropological techniques used in building a biological profile. Chapter 9 discusses sex determination of the adult human skeleton in a general sense, and various techniques and problems are addressed. The limitations of population-specific discriminant function analyses are also reviewed and the authors discuss four discriminant function analyses that are useful for the inexperienced reader.

Chapters 10 and 11 review age-assessment techniques for subadults and adults. Chapter 10 cites many of the contributions made to assessing the biological age of subadults. At the end of the chapter there is a section on Guatemala that, although not giving specific applications of these techniques in determining subadult age, describes various circumstances surrounding cases, including taphonomic conditions.

Chapter 11 reviews the standard aging techniques used in the United States and stresses the author's preference (based on previous research) for utilizing the combination of the Lamendin technique and the Suchey–Brooks system. No method or technique is reviewed in detail, however.

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Chapter 12 reviews the determination of ancestry. It is an historical overview of metric and observation techniques used in the United States and gives examples of applying such methods to populations other than whites, blacks, Asians, or Native Americans. Chapter 13 diverges from utilizing the traditional means of determining stature for a biological profile and instead discusses the use of Bayesian methods when a probability statement about the likelihood of a correct identification is warranted. The explanation of the Bayesian method is more advanced and may require the reader to consult additional citations on Bayesian statistics.

Chapter 14 examines the use of skeletal pathologies that may be useful in identification. There are numerous illustrations of various skeletal pathologies, but condensed in the descriptions of various diseases and disorders. Adequate citations are incorporated into the chapter for additional reference. Chapter 15 reviews methods that are used to corroborate conclusions as to the identity of cadavers

and skeletal remains by pathologists, anthropologists, odontologists, and geneticists. Included are topics on fingerprint analysis, dental superimposition, sinus and cranial superimposition.

Part 5 discusses the increasing number of circumstances in which pathologists, anthropologists, and other forensic medicine specialists will need to work collaboratively, as in mass disasters and investigations of crimes against humanity.

Overall, the text is a general theoretical treatment of forensic medicine and forensic anthropology and the interrelationships of the two fields. It offers few suggestions as to how to develop and support collaboration of the two disciplines. Speaking as a forensic anthropologist, the text gave only a cursory discussion of anthropological methods and techniques. The real value of the text centers in the chapters that address the relationships between forensic medicine and forensic anthropology, and inclusion of very useful citations.