

BOOK REVIEW

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Review of: *Advances in Forensic Taphonomy: Method, Theory, and Archaeological Perspectives*

REFERENCE: Haglund WD, Sorg MH (editors). *Advances in forensic taphonomy: method, theory, and archaeological perspectives*, CRC Press, Boca Raton FL, 2002, 507 pp.

This book is an extension of and supplement to the editors' previous volume, *Forensic Taphonomy*. It consists of a series of chapters contributed by some of the leading lights in forensic anthropology and forensic taphonomy (if this can now be considered a distinct discipline): the editors themselves, William Haglund and Marcella Sorg, Don Brothwell, Wayne Lord, Jon Nordby, William Rodriguez, Paul Sledzik, and Douglas Ubelaker. The chapters by the less-well-known contributors are uniformly excellent. The chapters are of two types: expositions of general principles and case studies. Case studies by their very nature are narrowly focused and frequently contain unique features that cannot be generalized to other investigations. However, the case studies presented in this volume are particularly apposite and illuminate more general principles.

The 25 chapters are grouped into four sections: theoretical perspectives; the biogeographic context; mass fatalities and mass graves; and modification of bone, soft tissue, and associated materials. The opening section, covering theoretical perspectives, serves to set the stage for what follows: editors Sorg and Haglund review the conceptual framework of forensic taphonomy (the basic unit of analysis, taphonomic time and taphonomic context, the history of taphonomic data collection in forensic anthropology, the problem of determining whether damage to skeletal elements reflects perimortem or early postmortem events, humans as taphonomic agents, models of taphonomic change and the distinctive terms of art of forensic taphonomy), biogeographical contexts (terrestrial and aquatic) and the special problems attendant on the investigation of mass fatalities and mass graves. Jon Nordby concludes the section with a discussion of the need to strike a balance between theory and the mere accumulation of empirical observations.

The second section focuses on the biogeographic context in which human remains are found. The eight chapters in this section consider the fates of human remains exposed to insect attack, buried in soil and immersed in bogs and estuarine environments.

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Gail Anderson and Valerie Cervenka provide a concise introduction to forensic entomology. Michael Hochrein's "Autopsy of the Grave" is an excellent guide to the excavation of graves. The author lays particular stress on the need to document stratification of evidentiary materials within the grave, tool marks produced in digging the grave, mixing of evidentiary materials by bioturbation, sedimentation in and around the grave, impression type evidence in and around the grave and soil compaction within the grave (likely caused by the movements of victims buried alive). Hochrein concludes his chapter with a detailed discussion of appropriate excavation techniques. Two other chapters in this section are worthy of note: Robert Morton and Wayne Lord present the special problems involved in the detection and recovery of the bodies of abducted and murdered children and Don Brothwell and Heather Gail-Robinson discuss bog bodies from the taphonomic and forensic perspectives.

Section 4 is devoted to mass graves and mass fatalities (what may, unfortunately, be the signature taphonomic contexts of the 20th and 21st Centuries). The time span of the case studies in this section is daunting: chapters by Tal Simmons and Mark Skinner, Heather York and Melissa Connor detail investigations of mass graves in Bosnia-Herzegovina, while Sally Graver, Kristin Sobolik and John Whittaker present a case study of evidence of cannibalism at the Grennell Site (a small Anazasi site in the American Southwest). Paul Sledzik and William Rodriguez review taphonomy in mass disasters such as air crashes, bombings and other explosions, fires, natural disasters (earthquakes, floods, landslides, tornadoes and hurricanes), disease outbreaks, mass suicides and warfare. Douglas Ubelaker reviews the literature on commingled remains (obviously a significant factor in mass disasters) and evaluates the various methods proposed for associating commingled skeletal components.

The final section of the book examines the action of taphonomic processes on bone, soft tissue and material culture remains (with an emphasis on natural fibers and metallic objects). R. C. Janaway has contributed a detailed discussion of the degradation of wool, silk, cotton and linen, with illustrative archaeological case studies; the author also reviews various experimental burial studies involving

textiles, leather goods and other objects. This reviewer came away from this chapter with a number of ideas for research projects on the degradation of trace evidence. Two chapters in this section deal with the examination of human remains that have been subjected to high temperatures: both cremains and fire victims. A chapter on DNA profiling updates the DNA chapter in *Forensic Taphonomy*

with discussions of the application of PCR-based DNA profiling techniques (HLA, STRs and mitochondrial DNA sequencing) to the identification of human remains.

This is an excellent book that should be in the libraries of every forensic anthropologist, every trace evidence analyst, and every crime scene investigator.

ERRATUM

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Erratum/Correction of *J Forensic Sci* 2002 Nov;47(6):1407
On page 1407, in the second column, first paragraph, line 14,
Heather Gail-Robinson should read: Heather Gill-Robinson.
The Journal regrets this error. Note: Any and all future citations

of the above-referenced paper should read: Review of: *Advances in Forensic Taphonomy: Method, Theory, and Archaeological Perspectives*. [published erratum appears in *J Forensic Sci* 2003 Mar;48(2)] *Forensic Sci* 2002 Nov;47(6):1407–1408.