BOOK REVIEW

William M. Bass,[1] *Ph.D., D.ABFA*

A Review of *Postmortem Changes in Human and Animal Remains*

REFERENCE: Micozzi, Marc S., *Postmortem Changes in Human and Animal Remains*, Charles C Thomas, Publisher, Springfield, IL 62794-9265.

This small volume (124 pages) contains nine chapters, 15 pages of references and an index providing increased means for answering questions about postmortem change. The book covers in approximate chronological order the action of taphonomic factors on human and animal remains.

Two chapters on postmortem preservation and modification of soft tissue discuss the natural processes such as desiccation, salt, water and adipocere, fixation, freezing and the cultural processes found in various cultures, around the world. Thirty excellent tables and graphs are included; for example, table 4 lists a chronology of Egyptian mummification practices. Much of the text in all chapters is illustrated in tables that summarize the data discussed.

The postmortem time interval is discussed in chapters concerned with the relative frequency of microorganisms, the average duration of decay phases by season and the arthropod succession sequences.

The types and functions of skeletal joints (fibrous tissue [skull]; partly cartilaginous [sacroiliac]; and synovial [knee and hip]) are discussed in their relationship to the skeletonization and disarticulation sequences and the differential survivability of bone in both the natural and cultural setting. The transportation and deposition of bones by carnivores, noncarnivores (bovids), weathering and the effect of soil processes on postmortem remains are documented by references to various worldwide studies.

The methodology and applications of taphonomy (the subdiscipline of paleontology devoted to study of the processes that operate on organic remains after death to generate archaeological skeletal deposits) are discussed in relationship to archaeological theory. The last chapter is devoted to the study of disease in antiquity with cancer being the major focus. The paleopathological evidence of cancer in human and animal remains in antiquity is questioned in a case by case and bone by bone re-examination. Micozzi concludes that good evidence for cancer in prehistoric populations is lacking. He ends by saying "ancient evidence for the modern so-called cancers of civilization" remains elusive or simply nonexistent in examinations conducted around the world over the past

[1]Professor and Director Anthropology Forensic Center, University of Tennessee, Knoxville, TN 37996-0720.

century. Understanding postmortem transformation of human and animal remains is important in interpreting the case for cancer in antiquity" (p. 103). I recommend this book for forensic scientists who are interested in or involved with problems of determining the time since death.