

BOOK REVIEW

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A Review of *The Human Skull*

REFERENCE: Rogers, S. L., *The Human Skull*, Charles C Thomas, 2600 South First, Springfield, IL, 62717, 1984, 108 pp., \$15.50.

A book on the forensic science analysis of the human skull should be a comprehensive, up-to-date summary of research, offering observations on the anatomy, morphology, metrics, and pathology of the skull. Such a volume would be a useful guide to the interpretation of a puzzling forensic science case, a “cookbook” of skull analysis.

Rogers’ *The Human Skull* samples many areas of skull analysis from the anthropological perspective: aging, sexing, racial characteristics, facial reproduction, assessment of trauma, and so on. Annoyingly, each topic is served up incomplete—and Rogers gives no hint as to which ingredients have been left out. This is no cookbook, and the inexperienced physical anthropologist, or the pathologist doing his own anthropology, is left with insufficient data and little in the way of interpretation.

Beginning with a 35-page chapter on “Mechanics of the Skull,” Rogers enumerates the bones, some of the musculature, sutures, and some injuries. He gives us little tidbits on hearing, the temporomandibular joint, some of the muscles of mastication, a cutaway drawing of the olfactory nerves. He alludes to bone dynamics, and dwells on bone strength, though he calls cancellous bone “soft and spongy” (p. 30).

Anthropometry is one of the major means of deriving data from skeletons, and Rogers correctly spends a great deal of time on the subject. The major landmarks are listed, along with 38 measurements, 13 indices, and some tooth measurements. He appears to regard all metrical data as equally valid, and equally useful. He assures that “the measurable and nonmetric features of a skull, when genetically determined, together from a body of valuable data, which when subjected to statistical analysis may yield important information as to the biological distance between human populations . . .” (p. 69). Unfortunately, he does not provide any examples, nor does he suggest any way in which the data he suggests collecting is to be interpreted.

Moreover, he does not offer any “decoding” of the indices, the manner in which races or sexes may exhibit particular metrical characteristics. Would the novice skull measurer—or the medical examiner—be thrilled to learn that a particular skull is, for example, hyperuryprosopic without being able to discover the significance of that conclusion? Why bother to do all this if only to list large numbers of figures with no demonstrated relevance, and to derive apparently meaningless polysyllabic classifications? Further, some of the

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means for arriving at these classifications are incomplete; if one should wish to calculate the metopic angle, which is mentioned, one might also need to know the location of the *metopion*, a landmark that is mentioned, but neither located nor defined (p. 65).

Concluding this chapter is a short section on nonmetrics. Of the vast array of anthroposcopic data derived from the skull, Rogers limits his list to the metopic suture (acknowledging a racial variability, but not providing it), multiple mental foramina, sutural bones, tori, and foramina. Also, he does not interpret these features in ways that would be useful in terms of identification of an unknown individual.

Nor does Rogers acknowledge the important matter of interobserver error in anthropometry, or warn the beginning anthropometrist about such errors and the necessity of repeating measurements, or the accuracy which should be expected. He does acknowledge that such features "might be of value in analyzing the relationships between hereditarily or environmentally modified groups in the human population" (p. 67), but provides no examples and few references. In some sections, however, there are a number of useful references. The book is quite uneven in citation quality. Of the 91 references cited, only 25 date from after 1970, thus bypassing much significant research in osteology.

Touted on the dust cover as being valuable to anatomists, physical anthropologists, forensic scientists, and others, this slim volume seems to be spread too thinly to provide maximum mental nourishment. Of course, one cannot expect a four-course literary meal in one 108 pages.

This book does fill a 15-mm gap in one's bookshelf. But it cannot be said to fill any discernible gap in our knowledge, to advance the analysis of skulls, to stand as a comprehensive source, or to act as the anthropologist's single source for medicolegal investigation. It cannot stand alone, and requires the aid of other sources, a number of which are far more comprehensive and useful for forensic science work. While this volume may suffice as a quick nibble, it does not constitute a meal.