

BOOK REVIEW

J Forensic Sci, May 2011, Vol. 56, No. 3 doi: 10.1111/j.1556-4029.2011.01781.x Available online at: onlinelibrary.wiley.com

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Review of: *Grave Concerns: Locating and Unearthing Human Bodies*

REFERENCE: Powell K. Grave concerns: locating and unearthing human bodies. Bowen Hills, Queensland: Australian Academic Press, 2010, 179 pp.

This is an interesting little book that professes to address "the physical and cultural anthropology of clandestine graves" (p. 2), but more usefully analyzes the issues that surround locating buried murder victims. The subtitle "locating and unearthing human bodies" is slightly misleading given that the recovery process is barely covered and would require a separate volume.

It is a book almost entirely about searching for graves modeled in an Australian context and consisting of a number of chapters that take the reader through an excellent background of how burials can manifest themselves in a variety of different ways. The first two chapters provide a readable background on the subject, a brief history of the factors that allow a grave to be recognized, and the main techniques that can be applied. The next two chapters consider the surface and subsurface features of a grave, respectively, and how both the ground disturbance and the decay of the buried victim can create diagnostic signals that are detectable. This is good theory backed up by a comprehensive literature review and case studies, particularly in the use of ground penetrating radar (GPR). Students of forensic science will find the first four chapters valuable as a broad introduction to the subject backed by interesting observations on Australian police search statistics and disposal case studies (Chapters 5 and 7). Police readers will find much merit in Chapter 8, which sets out guidelines on constructing a search, although the framework is rather pragmatic.

The book is 179 pages long; the sixth chapter dealing with the author's experimental graves takes up almost half the volume. The intentions are laudable and the results interesting, but this chapter has a tendency to lack the scientific rigor that would place the findings on a much higher level of credibility for forensic application. The experimentation involves the burial of two donor humans (a remarkable achievement for which the author should be congratulated), three pigs, and three kangaroos. Control graves are provided

for the human burials. However, there are different burial environments and depths; burials occurred at different times over a period of years, and all were subjected to various types of detection method at different times since burial. There are no doubt good practical reasons for some inconsistencies, but there are also problems of comparison and evaluation of data.

Various observations and techniques are applied (faunal and insect activity, surface appearance, upcast, the use of GPR, resistivity, and electromagnetic survey), but there is little that allows the reader to assess the data across more than one field of interest, or provide a conclusion that draws the threads together. There are, for example, some excellent resistivity data for the kangaroo graves that show low resistance features (after 22 months), but the data for the two human graves show high resistance anomalies (after 24 months and 1 month, respectively). How are we to reconcile this? The text is supported by numerous illustrations, but I would have welcomed a greater use of scale markers and, in the case of the GPR data of the human graves (surely the most informative for police purposes), more legible images. The techniques applied are reasonably comprehensive, although temperature change (effected by the human decay dynamic) is not included as part of the strategy. Temperature has been the focus of much interest in similar experiments and would have provided a valuable parameter for comparison.

There are, however, some fascinating outcomes worthy of mulling over: namely that many of the graves were more easily detectable from animal scavenging than from scientific methods; the importance of grave upcast as a vegetational indicator (although the context is one of a semi-arid environment); the length of time it took for graves to settle to produce a topographical expression; and the fact that the grave decay products appeared to have little effect on the surface vegetation, to name but a few.

The volume certainly has much to offer: it is handy, easy to read, and contains much useful information, some of which is hidden and hard to find, but it is frustrating that the full potential of the experimentation may not have been fully realized.

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