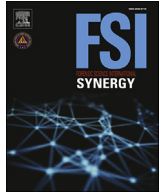




Contents lists available at ScienceDirect

Forensic Science International: Synergy

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Book Review

Cole, Paul M. POW/MIA Accounting: Vol. 2: J*P*A*C and the Politics of Human Skeletal Identification. Palgrave Macmillan. ISBN-13: 978-9811364655; ISBN-10: 9811364656. XXXI pages; 1002 pages

Dr. Paul M. Cole is an angry scholar. While he attempted to hold in his anger and frustration, he wasn't always successful. This book, unlike Vol. 1 (detailing Dr. Cole's involvement with the Cold War POW/MIA issues and his involvement in archival and policy decisions), is a more personal account of Dr. Cole's participation in the former Joint POW/MIA Accounting Command (JPAC). JPAC was a military command within the Department of Defense that was the sole authority for the identification of missing US service members from past conflicts, particularly World War II, the Korean War, Southeast Asian Conflict, and the first Gulf War (Cole, Chapters 1 and 5; [1]). Why is Dr. Cole angry? He is angry because he documents a denigration of science as well as personal attacks within and outside the command for doing what he was paid to do.

This is a hefty tome and weighs in over 3 pounds with over 1000 pages of text. Its style ranges from a detailed discussion of legal statutes and congressional mandates to something that reads like a novel, full of intrigue, conflict, and gossip. There seemed to be little editorial work as there appears to be at least one typographic error on every page. The poor quality of reproduction of many of the photographs and diagrams often distracts from the text, which often describes the colors of the original diagrams (which are reproduced as gray-scale documents). However, these should not detract from this important story. The book is fully documented with quotes and details from various sources, statutes, and emails obtained through a legal discovery process. The book refers to a series of chronological events, but it is organized by themes. It is difficult to say which would have been better, but the thematic seems to work, although it seems to suffer from the definitions of terms or groups coming after the initial use of the term (for example, the term "Secret Blog" is used almost from the beginning of the book, but the term isn't defined until much later in the book). The book is available from [Amazon.com](https://www.amazon.com) and Barnes and [Noble.com](https://www.noble.com) and ranges from US\$140 to US\$170.

Dr. Cole's book is an incredibly personal journey into the unravelling of what many scientists regarded as the largest skeletal identification laboratory of its kind in the world as well as the "gold standard" of forensic anthropology in the nation. This unravelling occurred as a result of internal conflict, poor leadership, and scientific illiteracy. While an important part of this is an autobiographical story, this book review does not deal with his ORISE/ORAU termination, lawsuits, defamation, etc. that are part of his journey and the

source of much of his anger. Be forewarned, the reader may be distracted by some of the more sardonic comments that are liberally peppered throughout the volume. Dr. Cole compares much of what happened with various Cold War entities in the Soviet Union related to control of science and politics. This current review focuses on specific failures of upper non-laboratory leadership related to whether or not to follow congressional statutes as well as a "battle against science".

Weak Senior Leadership and Lack of Accountability. Dr. Cole covers the legal mandate of working on "pre-enactment" cases, that is, cases before the enactment of National Defense Authorization Act (NDAA) 1996, which became law in 1997. In [2]; there existed three methods of accounting for deceased personnel, but a rewrite of the law with [3]; only a single method was deemed as the legal standard, according to this bill passed by Congress. Thus, the only accounting method mandated in [3] was Paragraph B, Section 1513 (Definitions) Title 10, USC of [2]:

"(B) the remains of the person are recovered and, if not identifiable through visual means as those of the missing person, are identified as those of the missing person by a practitioner of an appropriate forensic science ..."

This became the only legal form of identification of US missing personnel as of 2010 (see Cole Chapter 1 for a more detailed discussion). Other non-laboratory individuals in different sections followed other lines of inquiry for identification and effort. These efforts were in direct violation of federal law and guidance as outlined above. These other methods were put forth and supported by the Command as a rationale for continued work on cases; thus, a narrative or story developed by a non-scientists was deemed as important as the forensic work by the professional scientists of the laboratory and served as a means to continue investigating cases that yielded no or few remains in the past instead of working on other cases that could be more fruitful.

The War Against Science. "Anti-intellectualism has been a constant thread winding its way through our political and cultural life, nurtured by the false notion that democracy means that 'my ignorance is just as good as your knowledge.'" *Isaac Asimov, Newsweek, 21 January 1980.*

Dr. Cole, who does not claim to be a forensic anthropologist, does a very good job in outlining the basic science process at JPAC of the Central Identification Laboratory as well as various historical and statistical projects (Solvability/Resolvability) that became essential aspects of the research in the laboratory (Cole Chapter 2). These include basic forensic anthropological techniques that are the staple of undergraduate and graduate education.

Starting with the history of the Central Identification Laboratory, research into innovative scientific methods was part and parcel of the Laboratory's mission since World War II (see [4] for an early example). This type of research remains as mandate of the Laboratory, but not without its challenges.

One of the most egregious things that Dr. Cole documents is the anti-science aspects of the politics of human skeletal identification (Cole Chapters 6 and 12). This anti-science attitude permeated JPAC and manifested itself with major conflicts between the historical and intelligence analysts and the CIL scientists. The scientists were seen as arrogant, special, elitist, etc. This was because, legally and according to [3]; the forensic science “trumped” any stories as the only legal method of identification. However, no one was held accountable for ignoring the legal statute on what constitutes an identification of an individual. Dr. Cole refers to this anti-science attitude as part of a much larger attitude that exists in the US, usually referred to as the Dunning-Kruger (DK) effect. The DK Effect is a cognitive bias in which individuals, who are unskilled at a specific task, believe themselves to possess above-average ability in performing the task. A major corollary of this effect is that uninformed opinion is elevated to the same level as scientific fact or process. Other examples within the media include the anti-vaxxer scandals, which permeate the idea that a Google search is equal to a lifetime of research by a scientist. At JPAC the DK effect manifests itself in that the scientific process would be usurped by just-so stories.

Most scientific laboratories have a hierarchy of effort or tasks, with lower-level tasks being the foundation and the highest portion of the hierarchy being the most specialized. While this idea goes against this reviewer's sense of equality, to state that all tasks at JPAC were equal in their contribution to the identification process seems ridiculous; in other words, following congressional law that an identification is only done through a practitioner of an appropriate forensic science, the main contribution to the identification (science) should receive the bulk of the resources. This philosophy really damaged the morale of the scientific staff and ignored Department of Defense policy (DOD Instruction 3003.1) which created a hierarchy of information – circumstantial and contested information was at the lower levels and forensic factual and scientific information was at the top. JPAC senior leadership ignored this and instead adopted an attitude that everyone made an equal contribution to the identifications, even the grounds-keeping staff.

According to Dr. Cole, a former commander of JPAC, even admitted to needing to “take the lab down a notch” and dilute the robust science of identification (Cole, Chapter 6) due to the perceived arrogance of the scientific staff. This is a common thread throughout Dr. Cole's book (also see Cole, Chapter 12). Even when a validated forensic technique (using chest radiographs was established within the CIL and published in peer-reviewed journals; e.g. [5], opposition from outside the laboratory claimed that this was not a standard method of identification. Even though radiographs have been used for positive identification in a variety of fields for over 100 years, the former commander took it upon himself to become the sole approving authority of this method. It should be noted that the commander was not a scientist but trained as a lawyer.

However, this war on science appears to be becoming a standard practice in the United States Government. The DK Effect seems to have infiltrated many aspects of federal science and federally funded science. Politicians routinely criticize National Science Foundation grants and funding and want science research to focus on more limited, more applied science. The interference of politicians has become a standard practice, particularly in terms of

climate research and even has resulted in the expurgation of the term “climate change” on a variety of federal websites and information (e.g., [6–10]).

Why is the science important? Or, more importantly, why does it need to be independent of a non-scientific interference? The science used in human skeletal identification must be robust, not just because of protecting scientific integrity of the laboratory and its procedures, but because of the ethics involved in possible misidentification (e.g., [11]). Leaders of the laboratory have often been accused of being severely risk adverse, in terms of not wanting to create a situation related to a misidentification, especially if could be avoidable. To create sound, scientific identifications using the most robust sciences follows the purposes of forensic science: ...“to ensure the reliability of the disciplines, establish enforceable standards, and promote best practices and their consistent application ...” [12]:xix).

All in all, this is an important story that needs to be heard. The Scientific Analysis Section of the DPAA is considered by many forensic scientists to be the largest skeletal identification laboratory and it may come as a surprise to many about the strife and difficulties in working within a federal system. The control and development of scientific methodologies and processes should be controlled by the scientists. To this reviewer's knowledge, nowhere else in the Department of Defense is the development of science controlled by non-scientists, with this level of interference or lack of scientific leadership (see Cole, Chapter 5). However, this situation seems to become the norm, particularly in terms of environmental and climate change sciences.

Conflict of interest

Until 6 July 2019, I acted as the Deputy Director of the Defense POW/MIA Accounting Agency's Scientific Analysis Directorate (Laboratory) on Joint Based Pearl Harbor-Hickam AFB. I have acted in various roles within this laboratory and its predecessors (Joint POW/MIA Accounting Command – 2003–2015; US Army Central Identification Laboratory-Hawaii – 1998–2003).

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28 August 2019
Available online 6 September 2019