Becoming Respectable: T. Dale Stewart and the Acceptance of Forensic Anthropology in the Academic Community*

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ABSTRACT: Before World War II, forensic anthropology was of peripheral interest to a few anthropologists willing to assist in investigations by law enforcement agencies. A strong bias that "police work" was unbecoming to the scholarly pursuits of academics persisted into the post-war years. Changes took place as a consequence of T. Dale Stewart's case work in the identification of human remains with the FBI from 1943 to 1969, his directorship of the National Museum of Natural History (Smithsonian Institution) beginning in 1962, and his work with the Armed Forces after 1948. This paper discusses the historic period of transition of attitudes and practices in the contexts of Stewart's contributions and the cases and teaching programs of one of his contemporaries, Theodore D. McCown at the University of California at Berkeley, during the period of 1939 to 1969. The establishment of the Physical Anthropology Section within the American Academy of Forensic Sciences in 1972 and the creation of the T. Dale Stewart award for distinguished service in forensic anthropology advanced those laboratory research programs and medical-legal investigations conducted by presentday forensic anthropologists.

KEYWORDS: forensic science, forensic anthropology, T. Dale Stewart, T. D. McCown, research, case studies

"Carefully locked bone cabinets, mysterious packages, strange odors and late night visits by police officers" are listed by Clyde Snow (1) to be among the circumstances that disconcert our anthropology department colleagues who may question the propriety of academics becoming intimately involved with decomposing bodies and police work. This bias was even more prevalent during the earlier years of the twentieth century. It was T. Dale Stewart (1901-1997) of the National Museum of Natural History (Smithsonian Institution), Washington, D.C., who built the bridge between the anthropological and medical-legal communities by demonstrating that the skills of physical anthropologists engaged in skeletal biology and palaeodemographic research could be applied to the needs of society by personal identification of human remains in a manner that did not tarnish the walls of the ivory tower. In addition to this accomplishment. Stewart brought to forensic anthropology a challenge for its practitioners to design scientific research projects that would enhance their success in case studies.

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Several good histories of the development of forensic anthropology have been published (2–12). The present paper outlines some of the orientations of physical anthropologists engaged in forensic science investigations prior to the time of Stewart's contributions and the founding of the Physical Anthropology Section within the American Academy of Forensic Sciences in 1972.

Two approaches to the practice of forensic anthropology are discernible during this period: (a) Training in human osteology was offered by physical anthropologists at collages and universities who undertook some forensic work, usually without financial compensation and publication of reports, but who produced students whose careers combined consultation with medical-legal clients with laboratory research; (b) Other physical anthropologists were formally associated with research and military institutions and were active in publishing their investigations about determinations of age, sex, race, stature, markers of trauma and disease, and other components of the protocol of a forensic anthropological investigation.

Within the first group-the academics-are included Thomas Dwight (1843-1914) and Earnest A. Hooton (1887-1954) of Harvard University, Harris Hawthorne Wilder (1864-1928) of Smith College, T. Wingate Todd (1885-1938) of Case Western Reserve Medical School, Frederick S. Hulse (1906-1990) of the University of Arizona, James E. Anderson (1926-1995) of the University of Toronto, Georg K. Neumann (1908-1971) of the University of Indiana, Daris Swindler of the University of Washington, and Theodore D. McCown (1908-1969) of the University of California at Berkeley. Wilton M. Krogman (1903–1988) of the University of Pennsylvania was one of the pioneer forensic anthropologists who may be placed in both categories, and perhaps, T. Wingate Todd as well since they held positions in medical facilities while teaching on university faculties. Alice Brues and Mildred Trotter (1899–1991) held academic positions after their work with the military.

Among these mentors of many forensic anthropologists practicing today was Theodore D. McCown whose teaching and case studies exemplify the state of the art of forensic anthropology as practiced by academics prior to the 1970s. McCown and Stewart were close friends as well as colleagues who met from time to time at the annual meetings of the American Association of Physical Anthropologists, at the National Museum of Natural History, and at Berkeley. There are some parallels in their life histories since both were palaeoanthropologists with field research at Neanderthal sites, McCown conducting field research at Mount Carmel in Palestine and Stewart at Shanidar in Iraq. They had independently carried out studies of prehistoric human skeletal remains from South America. And both contributed their professional skills to the United States Army Office of the Quartermaster General and the Graves Registration Service.

McCown acquired his training in anatomy and skeletal biology through his association with Sir Arthur Keith (1866-1955) from 1934 to 1937. With the British anatomist and palaeoanthropologist, he collaborated on the study of the fossil hominids from Skhul and Tabun caves (excavated from 1932 to 1937 and again in 1945) when the specimens were forwarded from Palestine to the Royal College of Surgeons, London, and later to Buckston Brown farm at Downe, Kent. During this period McCown was fulfilling his doctoral requirements at Berkeley with his graduate committee composed of Alfred L. Kroeber (1876-1960) and Robert Lowie (1883-1957). Shortly after receiving his Ph.D. degree in 1939, Mc-Cown was active in military service at the Presidio in San Francisco. From 1942 to 1945 his duties included identification of skeletal remains of war dead from the Pacific theater, and for a brief period he was a cryptographer. His association with the military continued while he was a civilian and on the faculty of the department of anthropology at his alma mater, and from 1948 to 1950 he was consulted about prothesis research which he had begun in the final years of the Second World War (13). In this same period McCown held joint appointments in the departments of anthropology and criminology at Berkeley.

In 1952, McCown's collaboration with officers of the Memorial Division of the Office of the Quartermas General and with a former student, Russell W. Newman (1919–1981) who was the Head of the Anthropology Unit, resulted in a 40-min 16 mm color and sound film on the subject of exhumation of human remains. The film was made for the training of recovery teams charged with the location and removal of war dead from temporary burials associated with the Second World War and the Korean Conflict (14).

Other aspects of McCown's career are discussed in several published sources (15–18), but his contributions to forensic anthropology are less well known because he did not publish records of his cases. Among the most notable was the positive identification of the skeletal remains of Father Junipero Serra (1718–1784) at the Carmel Mission near Monterey, California, in 1943. In that year, secret canonical exhumation of Serra, founder of many of the Franciscan missions along the West Coast, began under the auspices of the Vatican. McCown and Mark Harrington (1882–1971), Curator of the Southwest Museum at Los Angeles, were consulted. Several burials were unearthed in the sanctuary graves. Concerning two of the skeletons, McCown reported:

"Tradition, historical fact, anthropology and archaeology combines overwhelmingly in establishing the identity of the cranium of the skeleton of individual A as Father Serra, a short-statured, small-boned white male European, over sixty years at death. He was about five feet, two inches tall, at the most a small and wiry but well-proportioned man. We can clearly identify individual A of Grave 2, the traditional Serra grave, as being the earthly remains of Father Junipero Serra" (19).

McCown was not permitted by the ecclesiastical authorities of the Roman Catholic church to report probable manner and cause of death or describe any markers of traumatic or pathological conditions of Serra's remains. These data would have been of interest since historical sources describe Serra as having difficulty in walking, although he preferred not to mount his donkey during his lengthy travels in Alta California. Beatification was delayed until 1988 out of deference to the sentiments of those Native Americans critical of the colonial missionization of California during the Spanish and Mexican periods.

The identification of the bones of Juan Bautista de Anza (1735-1788), founder of San Francisco, at Arizpe, Sonora, Mexico, in 1963 enhanced McCown's reputation with the handful of forensic anthropologists among his colleagues just as the case of the positive identification of the skeleton of an adolescent male in Yolo County four years earlier brought this academic to the attention of medical-legal clients. A negative identification of the reputed remains of the American aviatrix Amelia Earhart (1898-1937) followed a flamboyant television and newspaper effort on the part of Fred Groener (20) of KCBS News who had acquired some osseous and dental remains from a Pacific island. These were identified by McCown as the vestiges of a prehistoric Micronesian male with severe dental attrition, a condition unlikely to be encountered in a twentieth century female in her fourth decade of life. The press continues to be preoccupied with the lost flier, and claims of her recovery, dead or alive, cover the tabloids in the dubious company of Elvis Presley, Adolf Hitler and the Princesses Anastasia and Diana.

In addition to these notable cases, McCown handled the usual run of identifications of cattle bones, shoemakers' metal lasts in the shape of feet, bear paws, strangely formed rocks, expired pets, rubber skulls from novelty shops and other nonhuman materials which arrive at forensic anthropology laboratories. Thus far, records have not been located to determine if McCown accepted any criminal cases or appeared in court as an expert witness (21). Rather it was the identification of the eminent dead that commanded his interest, a topic of investigation continued by later forensic anthropologists (10,22) who have studied the remains of the Romanov family, Joseph Mengale, Pizarro, the two princes in the Tower of London, and other historic figures.

In this era before the establishment of the Physical Anthropology Section in the American Academy of Forensic Sciences, Mc-Cown served on the graduate committees of some 18 Berkeley Ph.D students among whom were several who identified themselves as forensic anthropologists (Table 1). His philosophy of teaching allowed these students to develop their own research interests rather than pursue topics of special interest to him (23). But he emphasized the importance of basic statistical methods and measurements of skeletal variability. He made improvements in anthropometric procedures for living and skeletal subjects, and he stressed the need for accurate maintenance of records, the danger of inter-observer error, and one's own tendencies towards error through fatigue in laboratory work. In his year-long laboratory course (Anthropology 150A and 150B), he attired himself in undershirt and tennis trunks and allowed himself to be the living subject upon whom his nervous students laid their cold hands and unsteady anthropometric instruments, palpating for subcutaneous landmarks, reading off the values from the scale, then being told to retake the measurement, for McCown was fully aware of his anthropometric dimensions! Students learned about sorting data by means of holorith cards, antecedents of modern computers, although Frieden calculators were in the lab. For many years Mc-Cown held weekly Wednesday night seminars at his house on Oxford Street, Berkeley, for any student wishing to attend and discuss forensic anthropology and other subjects. Included in this august company of Sheilagh Tompson Brooks, Robert Squier, Thomas McKern and other graduate students was a timid and seemingly retarded freshman by the name of Kennedy who seldom uttered a word but absorbed like a sponge the wisdom of his elders and betters.

Year Ph.D. Degree Awarded	Name of Student	Title of Ph.D. Dissertation
1947 1949	Richard King Beardsley Russell Wallace Newman*	A Comparative Analysis of Prehistoric Skeletal Remains from the Lower
1950	Leo Arthur Estel	Sacramento Valley
1951	Elizbeth Emaline Bacon	
	William Dalton Hohenthal	
	Sheilagh Thompson Brooks*	A Comparison of the Criteria of Age Determination in Human Skeletons by Cranial and Pelvic Morphology
1952	Dorothy Libby	Girls' Puberty Observations among the Northern Athabaskans
1953	Harold Nelson	
	Chester Chard	Kamchadal Culture and its Relation-ships to the Old and New Worlds
	Clement Woodward Meighan	Ancient Pottery Figurines and their Significance in the Study of Prehistory
1954	John Francis Goins	
1955	Thomas Wilton McKern*	An Anthropometric and Morphological Analysis of a Prehistory Population from Santa Cruz Island, California
	William Clifford Massey	Culture History in the Cape Region of Baja California
	John Givens Roney*	A Study of Skeletal Maturation in Central Iran
1957	Dwight Tousch Wallace	
1960	Edward Putnam Lanning	
1962	Clara Stern Hall Kenneth Adrian Raine Kennedy*	Chronological Study of the Mural Art of Teotihuacan The Balangodese of Ceylon: Their Biological and Cultural Affinities with the Vedda
1963	May Nordquist Diez	
	Richard Rannells Randolph	
	Paul Emory Simonds	Ecology of Macaques
1964	Theodore Isidore Grand	
	Mary Ronald Walpole Marzke	
	Ralph Leslie Holloway	Some Aspects of Quantative Relations in the Primate Brain
	Zenon Stephen Pohorecky	Archaeology of the South Coast Ranges of California
	John Michael Potter	P'ing Shan: The Changing Economy of a Chinese Village in Hong Kong
1965	Richard Allen Gould	
	Russell Howard Tuttle	
1966	Charles Marquis Keller	
	Donald Stone Sade	Ontogeny of Social Relations in a Group of Free-ranging Rhesus Monkeys
1967	Adrienne Louella Zihlman	
	Donald Gilson Lindburg	
	Vincent Matthew Sarich	
	John Oscar Ellefson	
	Laura Jane Beckman Lancaster	
	Judith Sherek Ellefson	Visual Communication in Macaca iris
1968	Lawrence Harry Robbins	
	Michael Haddon MacRoberts	
	Alan Eugene Mann	
	Christopher Bruce Donnan	
	John Milton Whitehead*	The Physical Anthropology of the Yuki Indians
1969	Richard Norman Van Horn	
	Sheryl Flum Miller	
	Marianne Yvonne Winton	The Secular Essential Nature of Diet in Some South American Indians

 TABLE 1—Graduate Students of Theodore D. McCown. Students for whom the dissertation title is listed had McCown as chairman of their graduate committees.

* Identifies those studens with careers in forensic anthropology and palaeopathology.

The subject of this paper is T. Dale Stewart, but it is hoped that the reader will accept the author's historical orientation in highlighting the state of the art of forensic anthropology during this earlier period at Berkeley in order that Stewart's role may be defined more clearly. Differences in the careers of these two men are marked by Stewart's early association with the National Museum of Natural History and with Aleš Hrdlička (1669-1943), director of the institution's department of anthropology, founder of the American Journal of Physical Anthropology in 1928 and organizer of the American Association of Physical Anthropologists a decade later. Early subscribers and members of the AJPA and the Association did not contribute papers in forensic anthropology nor did law enforcement agencies confer often with forensic anthropologists. But during the time of Stewart's early association with the Museum he became familiar with cases forwarded to Hrdlička by the Federal Bureau of Investigation. These case reports were not published by his supervisor, but stronger ties with the FBI were made after Hrdlička's death when Stewart assumed his curatorial position in physical anthropology at the Museum. By this time Krogman's (24) "Guide to the Identification of Human Skeletal Material" had been published in the FBI Law Enforcement Bulletin. Then came Stewart's court appearances as an expert witness, thus introducing forensic anthropologists to this applied aspect of meeting the needs of society. Continuity in the handling of cases was assured with the appointment of J. Lawrence Angel (1915-1986) in 1962 when Stewart's administrative duties shifted to him the bulk of the FBI work. Douglas Ubelaker was a colleague of Angel's in the Museum for a number of years and he assumed Angel's case load after the latter's death in 1986. The awareness of the U.S. military that physical anthropologists could use the skills acquired by Stewart, Krogman, McCown, McKern, Trotter, Brues, and others in the post-World War II and Korean Conflict period for identification of service war dead brought forensic anthropology into sharper focus among legal and medical professionals as well as among historians. The latter have interests in studies of what might be learned from the remains of the eminent dead. Stewart personified those earlier practitioners of our discipline who were affiliated with research and military institutions, although most of them did some teaching in academia, e.g., Brues, Krogman, McKern, Todd, and Trotter. As Joyce Stover (7) has claimed, "Stewart shares only with Krogman the leading role in placing forensics in the firmament of physical anthropology."

So have we become respectable at last? Forensic anthropologists constitute membership in a vital community of scholars in the American Academy of Forensic Sciences with its healthy student enrollment, maintenance of high standards for certification as a Diplomate of the American Board of Forensic Anthropology, availability of prestige journals for publication of research investigations and case studies, and opportunities to meet at regional, national and international organizations. There are more forensic anthropologists today than in 1972 when the Physical Anthropology Section was formed, and field schools and special courses are increasing.

Yes, it appears that forensic anthropologists have gained professional respectability, but this trend initiated by Stewart has yet a way to go. Younger members of the field must struggle for funding to build facilities and collections, often in departments of anthropology where their socio-cultural associates have not been in a laboratory since high school and dispute the rationale for surrendering space in an already overcrowded building. Since the post-Vietnam period when "applied anthropology" became linked to protests against colonialism and CIA operations, many anthropologists question the political correctness or scholarly merits of any practical applications of their discipline, a question that may evoke a blunt answer when the forensic anthropologist down the hall is cloistered with a decomposing body or grizzly skeleton. There is anxiety about academic or research institutions making sound decisions in the replacement of positions of retiring or deceased forensic anthopologists, although it is possible to lose sight of the fact that new names appear over the horizon. And the word must still reach medical examiners and law enforcement personnel that no investigation of human skeletal remains is complete without the contribution from a well-trained and experienced forensic anthropologist. Success in "decoding the bones" does not come from reading a textbook about forensic anthropology; years of experience in field and laboratory research are required.

The author was asked by the convenor of this symposium to honor the late T. Dale Stewart to offer his personal sentiments as a recipient of the T. Dale Stewart Award. All awardees value this honor because it is bestowed by our peers. As Charles Darwin reminds us in his *Autobiography*, "If one acts for the good of others, he will receive the approbation of his fellow men and gain the love of those with whom he lives, and this latter gain undoubtedly is the highest pleasure on this earth." However, the author's disposition in receiving this honor some 12 years ago is associated with Stewart as a friend and colleague within that ancient and universal community of scholars among whom he advanced the scientific study of human biological diversity and evolution and from whom so many modern practices in forensic anthropology are derived.

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