Obituary: Phillip Vallentine Tobias (1925–2012)

Matthew R. Goodrum*

Virginia Tech—Science and Technology in Society, Blacksburg, VA 24061

Phillip V. Tobias died on June 7, 2012 in Johannesburg at Wits University Donald Gordon Medical Centre, at the age of 86. Phillip Tobias was born in Durban, Natal, Republic of South Africa, on October 14, 1925, the only son and second child of Joseph Newman Tobias (who was born in Portsmouth, England) and Fanny Rosendorff (who was born in Edenburg, Orange Free State). He learned to read by the age of 3, but his childhood was disrupted by his parents’ divorce as well as his father’s bankruptcy. When Tobias was 15 years old, his sister Valerie, then only 21 years old, died of diabetes and this was a major factor that contributed to his intention to study medicine. Tobias attended Durban Preparatory High School from 1933 to 1935 but spent the following year at President Brand School, in Bloemfontein, and the next 2 years at St Andrews School in Bloemfontein. He entered Durban High School in 1939 and graduated in 1942. In 1944, he enrolled at the medical school of the University of the Witwatersrand, where he was appointed as Demonstrator in Histology and Instructor in Physiology in 1945. Tobias had the good fortune to study genetics with Raymond Dart and paleontology with Joe Gillman during his time as a student and under their influence he was exposed to paleoanthropology. Dart was already well-known for his studies of a new type of hominid he named *Australopithecus africanus*, based on a partial skull and endocast discovered in Taung in 1924, and he was just entering a new phase of research on the australopithecines when Tobias was taking classes. As a student, Tobias also became involved in student politics. He was elected as President of the National Union of South African Students three times (1948–1950) and in this role he led some of the earliest campaigns against the apartheid government. In 1948, the National Party came to power in South Africa and one consequence of its apartheid policies was that the student union, which had previously been nonracial, is now racially segregated. Tobias’ opposition to this marks the beginning of a life-long effort to combat apartheid.

As a student, Tobias had some of his first experiences with archaeology and paleontology. While traveling with a botanist friend in the Transvaal in 1945, he stopped to take a closer look at a yellowwood tree located in a cave, which he later named Mwulu’s Cave, when he felt a hard object buried in the sand. When he dug the object out, it proved to be a prehistoric stone tool dating from the Southern African Middle Stone Age (50,000–100,000 years old). That same year, he led a group of fellow students to explore the Makapansgat Valley where he found fossil baboon skulls among the breccia from Limeworks Cave, which indicated that its deposits were contemporaneous with other australopithecine deposits. Tobias received a B.Sc. degree in Histology and Physiology in 1946 and a B.Sc. Honors (1st Class) in Histology in 1947, and he completed his medical degree (M.B., B.Ch.) in 1950. He was appointed as lecturer in anatomy at the University of the Witwatersrand in 1951 and in 1953 and he received his Ph.D. for a thesis titled *Chromosomes, Sex-Cells, and Evolution in the Gerbil*.

Tobias undertook postgraduate research in 1955 at Cambridge University, in England, where he was a Nuffield Dominion Senior Traveling Fellow in physical anthropology. The following year he traveled to the United States to continue his postgraduate studies at the University of Michigan at Ann Arbor (where he worked in anatomy with Bradley Patten, human genetics with James V. Neel and anthropology with Fred Thieme and James Spuhler) and at the University of Chicago (where he worked with Sherwood Washburn) as a Rockefeller Traveling Fellow in anthropology, human genetics, and dental anatomy and growth. After returning to South Africa, Tobias was instrumental in establishing, in 1956, the Institute for the Study of Man in Africa. The Institute, housed at the University of the Witwatersrand and meant as a living memorial to Raymond Dart, was created to advance the study of human ancestry and evolution. Then in 1959, Tobias succeeded his mentor Raymond Dart as Professor and Head of the Department.

Additional Supporting Information may be found in the online version of this article.

*Correspondence to: Matthew R. Goodrum, Virginia Tech—Science and Technology in Society, 133 Lane Hall, Blacksburg, VA 24061. E-mail: mgoodrum@vt.edu

Received 24 August 2012; accepted 3 October 2012

DOI 10.1002/ajpa.22182

Published online 26 November 2012 in Wiley Online Library (wileyonlinelibrary.com).
Phillip Tobias had a diverse and accomplished career. He was involved in numerous archaeological and paleontological excavations, conducted research into the physical anthropology of African people, and contributed significantly to paleoanthropology. As a member of the French Panhard-Capricorn Expedition in 1951, he discovered 25 new archaeological sites in what was then Bechuanaand Protectorate (now Botswana). During the period 1957–1958, he was invited by the Rhodes-Livingstone Museum and the Rhodes-Livingstone Institute of Lusaka to study the Tonga people of Zambia and over the decades he also wrote on the Kalahari San (Bushmen) and other African peoples. Much of this research focused on the anatomy, growth, physique, and secular trends in southern African people, but it also led Tobias to write about the concept of race as it is applied to human beings and the implications of racism in the modern world in such works as The Meaning of Race (1961).

Tobias is best known for his research in paleoanthropology. He analyzed and described hominid fossils from Indonesia, Israel, Kenya, Namibia, South Africa, Tanzania, Zimbabwe, and Zambia. When Louis and Mary Leakey discovered the fragmented skull of a new hominid at Olдуvai Gorge in 1959, they invited Tobias to study the specimen, as neither Louis nor Mary was trained anatomist. Tobias’ detailed and comprehensive analysis of the cranium and maxillary dentition of Zinjanthropus (Australopithecus) boisei, published in volume two of Olduval Gorge (1967), garnered wide praise, and served as a model for how hominid fossils should be studied. He also collaborated with Louis Leakey and John Napier to analyze the fossil remains of Olduval Hominid 7, which the Leakeys discovered in 1960. After careful study and some deliberation, Leakey, Napier, and Tobias argued that owing to the specimen’s cranial capacity and the evidence for a precision grip in the hand fragments (which indicated this hominid possessed the ability to use tools) they felt justified in classifying it as a new species, Homo habilis, which they considered to be a transitional species between A. africanus and H. erectus. When they announced this new species in the April 1964 issue of the journal Nature, they ignited a debate over the creation and characterization of this new species within the anthropology community that continues today.

For much of his career, however, Phillip Tobias was closely associated with excavations conducted at Sterkfontein, in Transvaal Province, a site where the renowned South African paleontologist Robert Broom first found Australopithecus fossils in 1936. Tobias initiated a research program at Sterkfontein in 1966 that in the course of the last half century has led to the recovery of approximately 600 hominid fossils. In 1995, Tobias and his colleague Ronald J. Clarke announced one of the most important discoveries made at Sterkfontein, a nearly complete skull and skeleton of a 4.17 million-year-old australopithecine that was given the nickname Little Foot. Because of the importance of the Sterkfontein site to our understanding of human evolution, Tobias campaigned successfully for the Sterkfontein caves to be proclaimed a Unesco World Heritage site

...
and hence it is a mark of his achievements that Phillip Tobias was only one of the two South African Honorary Fellows of the Society and one of only a few recipients of the Society's highest medal, the John Herschel Medal. He also received honorary degrees from nearly 24 universities around the world and was nominated three times for a Nobel Prize.

Besides these scientific awards, Tobias also received numerous civil honors. These include South Africa's Order for Meritorious Service (Gold Class) (1992); Commander, the National Order of Merit of France (1998); Commander of the Order of Merit of the Republic of Italy (2000); the Honorary Cross for Science and Arts (first class) bestowed by the government of Austria (2002); Commander of the Order of St. John (2003); and the Walter Sisulu Special Contribution Award (2007). President Nelson Mandela awarded him the rarely given Order of the Southern Cross (class II) in 1999. Tobias was active in many professional organizations and was one of the founders of the International Association of Human Biologists in 1967, was the founder of the Anatomical Society of Southern Africa in 1968 and of the South African Society for Quaternary Research in 1969. He was one of the founders of the International Society of Cryptozoology in 1981 and was the founder and chairperson of Medical Education for South African Blacks (MESAB) in 1986.

It is impossible to review the career of Phillip Tobias without discussing the social and political context of the government policy of apartheid in the Republic of South Africa that affected so much of his professional life. In the beginning, when he was a student and continuing into his years as a prominent researcher and professor, Tobias was an outspoken critic of apartheid. Tobias noted on the occasion of his acceptance of the Walter Sisulu Special Contribution Award in 2007 that: “Only a few years after I arrived here [at the University of the Witwatersrand], the Apartheid regime came to power under D. F. Malan and they won that fateful election on an apartheid platform. Every branch of society was to be segregated. Discrimination was to be enforced between the haves and the have-nots, between black and white South Africans.” Tobias opposed this policy and its consequences in a variety of ways. He was a member of the executive committee of the Education League of South Africa, a body established to campaign against apartheid education, from its creation in 1948 to 1958. In his role as a South African academic Tobias publicly opposed apartheid, although there were real risks to his career. South African authorities even warned him periodically that his research grants might be withdrawn if he failed to follow the government’s official policies.

Following the death of Steve Biko in 1977, Tobias and other academics presented a formal complaint to the South African Medical Council concerning the treatment of Biko by the police. They even went so far as to take the Council to the Supreme Court over the matter. Yet, he criticized the academic boycott of South Africa by the executive committee of the British national organizing committee of the World Archaeological Congress held in Southampton in 1986. He argued that “isolating South African scholars would only result in our universities running down and down—and I couldn’t bear the thought of bequeathing a series of run-down universities to our post-apartheid successors.” Tobias also used his expertise in physical anthropology and paleoanthropology to critique racist political policies and the social and scientific ideas about race that these policies sometimes drew upon. He saw the archaeological and paleontological evidence for the origins of humanity in Africa as a significant political fact and he thought it was the scientist’s duty to expose the truths about race as a way to counter the assumptions of apartheid. After the end of apartheid, Tobias led negotiations to have the remains of Saartjie (Sarah) Baartman, a Khoi woman displayed throughout Europe in the 19th Century as the Hottentot Venus, to be repatriated from Paris. Her grave is now a national heritage site.

Besides being a prolific scientist and prominent South African academic, Tobias pursued a variety of other interests. In 2002, he hosted a television series called Tobias’ Bodies that consisted of six episodes that explored issues relating to genetics, anatomy, and primatology. Toward the end of his career Tobias began to write about the history of paleoanthropology, focusing especially on the contributions of South African scientists and discoveries. His book on the career of Raymond Dart, Dart, Taung, and the “Missing Link” (1984), written for the occasion of Dart’s 90th birthday, remains one of the best treatments of his mentor’s life and paleoanthropological research. Tobias himself was the subject of several Festschriften honoring his career, including From Apes to Angels: Essays in Anthropology in Honor of Phillip V. Tobias (1990) published on the occasion of his 65th birthday and his retirement as Chair of Anatomy and Human Biology and Images of Humanity: Selected Writings of Phillip V. Tobias (1991). He was the subject of a documentary film made by Seth Asch in 1991 titled Time, Transience, and Tobias and in 1975 he was featured in the documentary film Tobias on the Evolution of Man produced by the National Geographic Society.

Phillip Tobias never married and had no children, but he left a lasting legacy at the University of Witwatersrand where he spent his entire career. He proudly stated in a 2010 interview: “I am married to my work, the medical school, and the anatomy department at Wits. I also have a large family of around 10,000 children—my students.” He enjoyed time spent with friends, colleagues, and students. On another occasion, he mentioned how he loved “dinner parties and braaivleis [barbecues], and camping out with my students at Sterkfontein and Makapansgat and sing-songs around the campfire… Part of me is quite an ordinary sort of chap. I love quite simple things.” Among those simple things that he loved were cricket, tea, chocolate, books, theatre, and music.

Phillip Tobias contributed in significant ways to a many different fields including paleoanthropology, genetics, systematics, the evolution of the human brain, and the teaching of anatomy and his ideas will continue to inform these areas of research for decades to come. His research and his teaching have influenced generations of scientists and his presence will be sorely missed.