Human evolution and South African science: Darwin's hunch in context

BOOK TITLE:
Darwin's hunch: Science, race, and the search for human origins

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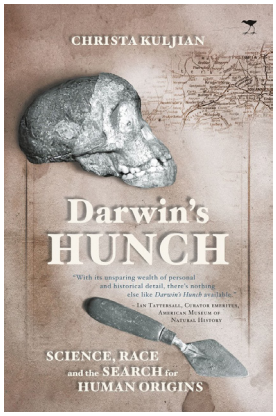

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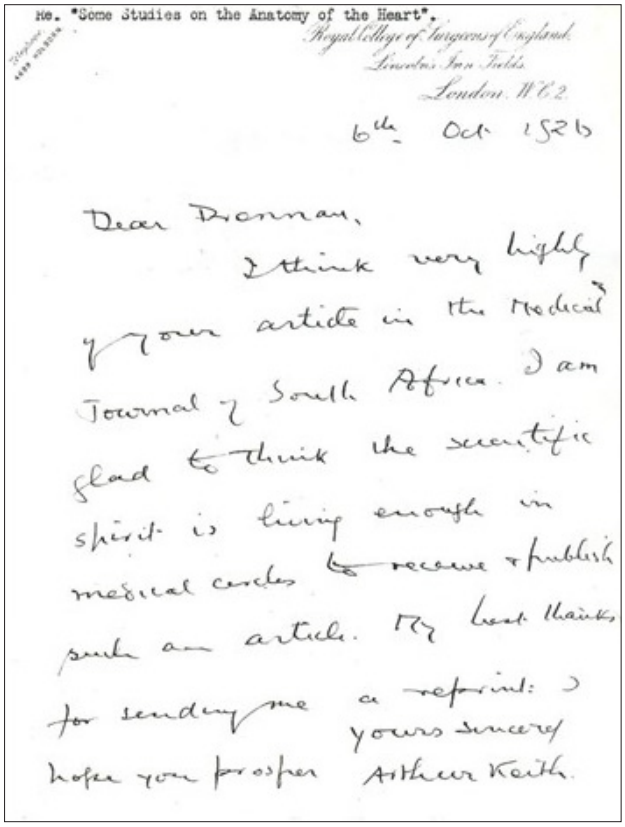
Back in 2015 I had the opportunity to spend 5 months in the UK searching for skeletons of Africans who had been accessioned in the anthropology collections of English, Irish and Scottish museums and universities. This was a project that I had been working on sporadically for many years and, thanks to the Leverhulme Trust, I was funded to be a visiting professor at Cambridge University and I made use of Cambridge as a UK base in order to do a final accounting if I could. One of the highlights of the research end of the trip was sitting in the library of the Royal College of Surgeons in London going through the pre-World War II letter files. This era was the heyday of skeleton collecting for the College and was only really terminated by German bombs hitting the college during the War. Although much was salvaged, the College lost its interest in anthropology and transferred the bones that survived the destruction to the Natural History Museum.

The correspondence through which I was paging included letters and notes that either referred to the arrival of the skeletons or described (sometimes in quite stark detail) how they were 'gathered'. My account of this correspondence is going to have to wait until I have had time to go through the huge mass of information I gathered, but what I wanted to focus on here was the South African connection that kept appearing in the correspondence files. From the English side, the main correspondent was Sir Arthur Keith, then the pre-eminent anthropological anatomist in the UK. It is hard to explain exactly how important this man was in his time, but basically he was the British Empire authority on human evolution. His support meant your success in publication and academic promotion, so it was intriguing to me to find South African names in his list of correspondents. Some were 'armchair' anthropologists who sent him boxes of bones from one source or another. Others were budding scientists who were based in what was then the still very new universities of South Africa. Keith was well acquainted with Raymond Dart, for he had written (grudgingly) in support of Dart's appointment in Johannesburg in 1923, but other names kept cropping up in the files. Chief amongst these was Matthew Drennan, my academic ancestor at the University of Cape Town.

This was not the first correspondence I had seen between Keith and Drennan. I had come across other letters between them in the old files of the University of Cape Town's Department of Human Biology. Although there is not a lot of scientific importance in their correspondence, the letters provide a real window into how a young academic in a distant realm of the far-flung empire saw himself in relation to the great authority of the day. Drennan had arrived in Cape Town in 1913 as a lecturer in anatomy, fresh off his medical training at the University of Edinburgh. It took quite a while for him to find his feet in Cape Town and research was not his first priority. He had no previous interest in anthropology, but he was certainly aware of the state of the science given the long history of anthropological research in Edinburgh's Department of Anatomy. By the 1920s, Drennan had begun his research career in studying the skeletonised remains of South Africans and their prehistoric predecessors and much of his correspondence with Keith was about the papers that he had begun to write on the subject. One letter, dated 3 May 1929, implores Keith to recommend publication of his new report on the Cape Flats skull in the *Journal of the Royal Anthropological Institute*. Drennan writes: 'We could give it to the Royal Society here, but then there would be no one to criticise it and few to read it.'

In many ways, this sentence sums up what was happening in the field of physical anthropology in South Africa in the years before World War II. These years were heady days of discovery, but what was critical was that these discoveries needed to be brought to the attention of the world. There were two key research thrusts: one was on the origin and variation of aboriginal South Africans, especially the Khoesan; while the other was on fossil discoveries that took the whole of humanity back to its roots. The 1920s and 1930s were indeed formative years, but what is important to understand is how the anthropological research was influenced by the colonial attitudes of the day and how these sometimes very racist ideas shaped the anthropological research of today. Saul Dubow[1] has looked at many of these issues, as have I[2], but what has been missing is someone to track through the more modern evidence and how our earlier social and academic biases and interests have impacted on current research. Now this has been done and what a superlative job it is!

Darwin's Hunch by Christa Kuljian is an important book because the search for fossil humans and the understanding of human variation is so important to South Africa. As the title of Kuljian's book indicates, it was Charles Darwin who first expressed the belief that the place where humans first evolved was Africa, but her book is not about Darwin. She instead focuses on how the question of race was mixed with the issue of evolution right from the start. Dubow[1] has touched on this issue, but what he did not do was to look in any depth at the personality of the players involved. This is Kuljian's big strength. She focuses on the Johannesburg researchers, partly because that is where she is based, but also because the University of the Witwatersrand has played, and continues to play, such a huge role in the search for the earliest humans. The first third of the book covers the period I mention above with a special focus on Raymond Dart. Two parallel themes emerge which continue in one form or another throughout the book. One theme is about the discovery of the fossil evidence – in this case the skull of the Taung child in 1925. The second is about the corresponding study of African people which provided a framework for the interpretation of the fossils. In particular was the dissection of /Keri/Keri, a young woman from the southern Kalahari whom Dart had met in life, and in death had obtained her body to study as a type specimen. She was the embodiment of what he considered to be the 'living fossils' of human evolution – the San of southern Africa. This part of the book ends with the unveiling of Piltdown as a forgery and the removal of this English fossil (championed by none other than Sir Arthur Keith) from the record of human evolution. The demise of Piltdown brought the African evidence to the fore and set the stage for the pre-eminence of Africa in the story of human origins.


Re. "Some Studies on the Anatomy of the Heart".
Royal College of Surgeons of England
Lincoln's Inn Fields
London. W.C.2.
6th Oct 1926

Dear Drennan,
I think very highly of your article in the Medical Journal of South Africa. I am glad to think the scientific spirit is living enough in medical circles to receive & publish such an article. My best thanks for sending me a reprint: Yours sincerely
Hope you prosper Arthur Keith.

Personal letter from Arthur Keith to Matthew Drennan, 6 October 1926.

Kuljian notes that the end of the Piltdown coincided with the rise of a new generation of African scholars, in particular Phillip Tobias. Tobias, who died in 2012, has left an outsized mark in the South African academic scene, but Kuljian sees him as an enigma. She identifies a paradox between his opposition to apartheid and his scientific practices which in many ways echo those of his mentor Raymond Dart. This is an important theme of the book. Kuljian has tried to go beyond the simple recounting of investigative tales. In particular she has teased out the stories of the 'small' people of science – the field workers, the lab assistants and, in particular, the women researchers. Her view ensures that we know they are not 'small' because of lack of importance, but because they have been long overlooked. Especially important to her is the fate of /Keri/Keri's skeleton which is not only a reminder of how poorly the earlier anthropologists treated the native populations, but is also a continuing saga because the remains themselves have gone missing.

The last few chapters of the book bring us up to events of the last few years, such as the discovery, excavation and unveiling of *Homo naledi* and the rise of ancient DNA. What Kuljian has done for those of us still working in the field, is to make us ask awkward questions of ourselves. Back in the days when Drennan was writing to Keith, the questions were about how South African scientists could make a mark on the world stage, but we have long been able to demonstrate our academic expertise as scientific equals to the academics of London and elsewhere. Kuljian now forces us to examine our science to see if it is not only correct, but appropriate and socially just. We know how we are received in the scientific journals of the world, but what does our research mean to South Africans themselves, especially those who have been excluded in the past? As Kuljian herself says, the old days of racial science are gone, but we still need to learn that science can never be divorced from the world around us, and that scientists are as much affected by the world in which they live as that world is affected by us.

References

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