



Academic integrity

We highlight academic integrity in this issue, relating it to initiatives in South Africa this year. In February, the Council on Higher Education arranged a conference on the theme 'Promoting Academic Integrity in Higher Education'; select papers from this conference are published in this issue of SAJS. In July, the *Statement on Ethical Research and Scholarly Publishing Practices* was formulated and signed by five key South African agencies whose commitments to its goals are provided in their Commentaries in this issue. We announce that Cape Town has been chosen to host the 7th World Conference on Research Integrity in 2021 – the first time this event will be held in Africa. We hope readers will find our content interesting, stimulating and useful. We also take this opportunity to affirm our commitment to ethical scholarly publishing practices.

Academic integrity appears fragile in our era, and frequently the Internet is held responsible. Journals, like SAJS, as well as university staff, find themselves acting as detectives as well as teachers and editors, and it has become the norm that students' work and manuscripts are put through similarity checking (or 'plagiarism detection') programs. It was with profound dismay that we discovered that two of the manuscripts submitted to SAJS from the academic integrity conference showed a high degree of similarity (about 40–50%) with previous work. There appears to be a crisis as scholarly ethics are compromised time and again.

The principles of modern academic integrity arose with scientific professionalisation and the separation of disciplines at the end of the 19th century together with the proliferation of scholarly journals. 'Original research' was emphasised and thus ideas of 'ownership' of that research emerged. The result was that use of research, without proper acknowledgement, became akin to theft. Students are often blamed for this kind of behaviour as they jostle for jobs and citations, but the matter is more serious. Deliberate academic deceit of whatever kind – and there are many variations – has manifold consequences: it can damage the entire enterprise and place the structure of knowledge and knowledge generation at risk.

Many readers will be familiar with the fraud of 'Piltdown Man' that I use as an example. There are numerous easily accessible accounts of this scam, its unfolding, and its cover-up, but I would like to emphasise its long-term effects on South African scholarship. I begin with the bare bones of the story. In 1912, British amateur archaeologist Charles Dawson claimed to have unearthed parts of the skull of the 'missing link', a species intermediate between apes and humans, in a quarry at Piltdown, Surrey, England. He shared the news of his find with Arthur Smith Woodward, Keeper of Geology at the Natural History Museum in London, and together they found more bones at the site. In an era before reliable dating techniques were available, Woodward hypothesised the age of the bones to be around 500 000 years. There was great excitement among the upper echelons of the scientific community as *Eoanthropus dawsoni* was announced and news proliferated through learned societies. Evolutionary theory was deemed to have advanced substantially. Not all scientists were convinced; some argued it was a composition of altered parts of a modern human and an orangutan. However, the weight of opinion lay with Dawson and renowned European anatomists, physical anthropologists and naturalists, many of whom were Fellows of the Royal Society and/or associated with the Natural History Museum, including Smith Woodward, Sir Arthur Keith and Sir Grafton Elliott Smith. A painting by John Cooke (1915) shows the distinguished group examining the evidence with a portrait of Charles Darwin hanging on the wall behind them.

The Piltdown finds were very satisfying to most of the scientific community because they aligned with the scientific paradigm and

ideological preconceptions of that era. It was 'accepted' that humans had evolved in the northern hemisphere and finding a protohuman in England itself was a great coup. Not surprisingly then, when young, inexperienced, upstart Australian Raymond Dart, an anatomist at Wits – then a little known, minor and new university at the southern tip of Africa – came up with fossil evidence from Taung, it was not well received by the establishment. Dart was confident – he had, after all, once been Elliott Smith's assistant. Dart named the fossil *Australopithecus africanus*, and published a short account in *Nature* on 7 February 1925. Woodward and his colleagues responded vigorously, calling the claim 'preposterous'. Not only did Piltdown contradict this fossil find, but it was 'accepted' that early hominids had large brains (like Piltdown), a juvenile specimen was unreliable, and Africa was simply out of the frame. As the old adage has it, the largest impediment to new thinking is old thinking. Only in 1953 was the Piltdown fraud exposed when Oxford physical anthropologist Joseph Weiner (interestingly, another South African) and his colleagues, who by then had fluorine dating tests at their disposal, worked out the age of Piltdown and its component parts.^{1,2} Thereafter South African palaeoanthropology took its rightful place.

A veritable industry has arisen around assigning responsibility for this academic fraud. Evidence suggests that Dawson alone was the culprit (he was responsible for numerous other forgeries), but some people at the time may have known, perhaps been implicated to some extent, or simply did not publicise their knowledge or suspicions for fear of discrediting their peers and destroying reputations. Some speculation about 'who knew what' appeared in SAJS as recently as 2016.³ But this fraud is not just a joke, not merely a 'hoax' that needs to be uncovered like a 'whodunnit'. There is a larger element to deceit, and the consequences thereof, often unintended, can cause lasting damage. Piltdown damaged South African palaeoanthropology, perhaps irreparably, retarding knowledge and research for decades.

At the time Dart announced *A. africanus*, government support for the palaeontological disciplines was strong. In 1925, Jan Smuts's Presidential Address to the South African Association for the Advancement of Science (published in full in SAJS⁴) made this clear. Robert Broom and others were given financial and other state support to continue the search and, as is well known, their efforts yielded great treasures. But after 1948 the political context changed. With the National Party in power – strongly antithetical to the philosophy of evolution – this support ended. As apartheid became entrenched, international collaboration became increasingly difficult and, not surprisingly, the centre of gravity by way of expertise and finance for palaeo-studies shifted to East Africa. Certainly, under Phillip Tobias and others at Wits, the momentum was not lost entirely, and much has been regained since 1994. But a generation of research that would have brought renown to South Africa and its scientists was lost, irrecoverably.

Dishonesty can have a profound effect, with ripples and consequences far beyond the original act of corruption.

References

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