

‘HUMBLE’ KNOWLEDGE IN THE PALAEOSCIENCES: ISN’T IT TIME TO DECOLONISE?

NONHLANHLA VILAKAZI

University of Johannesburg

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INTRODUCTION

The palaeosciences have grown immensely in southern Africa over the past 50 years. Many of the ‘discoveries’ that have propelled this growth have been attributed to various researchers but not necessarily to the individuals who were actually behind the discovery. Narrations from local communities have shown that people who have never been acknowledged in fact either made the discovery, or knew of its existence and significance. Increasingly, researchers and scholars confirm these narrations. The purpose of this discussion is to provide a voice to the voiceless, the initiators of the discovery of these significant remains, to identify the ‘humble’ knowledge holders in palaeoscientific findings whose identities have been largely hidden, with some rare exceptions. This is one of the ways in which the process of decolonisation can be initiated, leading to giving the anonymous, unrecognised discoverers their rightful place in the palaeosciences.

As the study of past life forms, palaeoscience uses fossils (plants, trace fossils, animals, and human/hominids) and other materials left behind by our ancestors and/or animals (Rudwick 2008). It is not clear when humans first took an interest in fossils, although Kuban (2012) notes that some Neanderthal graves were found to have fossils inside them. It has been speculated that these fossils could have been used for decorative or religious purposes (Kuban 2012).

It was during the early 1700s in Europe that fossil collecting became popular among professionals and amateurs. These early activities are defined by the efforts of French naturalist Georges Cuvier (1769–1832), who is considered the founding father of palaeontology, and English geologist William ‘Strata’ Smith (1769–1838). They mapped and described a number of European rock formations in a detailed manner (Kuban 2012). It is only within Western civilisation that this awareness of fossils developed into a coherent scientific discipline (Rudwick 2008). However, long before this formalisation into a discipline that was concerned

with mapping and describing fossils, the Renaissance polymath Leonardo da Vinci was one of the earliest to express a modern interpretive view of fossils. He understood that marine fossils were the remains of ancient life forms, providing evidence that ancient seas once covered areas which are now dry land (Kuban 2012).

Understanding the early days of palaeoscientific evidence allows us to see the shift toward a more structured approach to fossil discoveries, usually made by excavation. This has contributed to a growing number of discoveries of palaeoscientific remains over the past 30 years, contributing to the identification of South Africa as the cradle of humanity. Narrations from African traditional elders show that community members have always been able to identify fossil remains (Mamodiehi Selepe, *pers. comm.* 13 May 2015). This corroborates the story of primary excavators who are usually able to describe the fossil to the principal excavator before they (principal excavator) can do a thorough study of the discovered fossil (Lazarus Kgasi, *pers. comm.* 16 September 2015). Yet, scientific articles referring to these discoveries do not mention the chain of information that led to the discovery, or in fact the real discoverers. Instead, it is typically only the principal excavator and their counterparts who take the credit for the discovery. The principal investigator would, under normal circumstances, be the one defined as the permit holder assisted by support staff (Rudwick 2008). I argue that while it is mainly the principal's job to oversee every aspect of the excavation, the primary excavator is the one who makes the discovery. Yet the principal usually takes credit for these discoveries, leaving out the real discoverer (Dart 1925). This is evident in most (if not all) South African discoveries in the palaeosciences. I discuss three case studies to highlight this historical reality. These are: the Taung Child discovered in 1924, the contentious 'discovery' of Mapungubwe in the 1930s, and that of Thulamela in 1983. A fourth case study – that of Little Foot in the Sterkfontein Caves the early 1990s – represents a departure from the way discoveries were usually rendered in publication.

I critically discuss some of the published research articles to establish what is mentioned regarding discovery of such palaeoscientific remains. Such information is then critiqued against what I have uncovered about these famous discoveries. This discussion is informed by data gathered from published sources and scholars across the palaeosciences disciplines. The manner of the discoveries at the four mentioned palaeoscientific sites forms the basis of the argument.

CASE STUDIES

CASE STUDY 1: TAUNG CHILD (*Australopithecus africanus*)

On examining the account of the discovery of the Taung Child (*Australopithecus africanus*), it is evident that only the scientists and the mine bosses are given all the credit. It has, however, been noted that these fossils were actually discovered by mineworkers (Dart 1925). Nothing further is said about these true discoverers. Yet, what they found has now become academically important, and accredited the status of being the first australopithecine on the continent (McKee 2000). Even the mention of Josephine Salmons, who was Raymond Dart's student at the time, fails to acknowledge the role of the mineworkers who made the discovery and brought it to the attention of the others (see Kuljian 2016). Salmons had been visiting the director of the Northern Lime Company in Taung, E.G. Izod, when this discovery was made. It would seem, in Dart's account, that it was more relevant to credit his student for having brought the skull to him. He also acknowledged E.G. Izod who, by association, now became the 'owner' of the fossil, being the director of the mine where the discovery was made. Nothing further is known or said about the mineworkers.

CASE STUDY 2: MAPUNGUBWE

Mapungubwe is one of the most important palaeoscientific locations in Africa, if not the world, in that it illustrates the complexity of African societies long before colonialism. The general area is also well known for its dinosaur fossil bones, their footprints, fossilised flowering plants, and whole-bodied insects and termite mounds (Fleminger 2006). Early researchers have documented that the son of a local informant known only as Mowena led a farmer, E.S.J. van Graan, and others to a specific area on the farm Greefswald in 1933. During this visit, Mowena's son showed his audience the hidden treasures (Meyer 2000). Besides this passing reference to Mowena, we learn nothing more about him. Instead, only the Van Graans (father and son) are actually acknowledged extensively in Leo Fouché's book (1937) which records the history and significance of the discovery. Tiley-Nel (2018), and Wintjes and Tiley-Nel (2019) have done extensive research on the Mapungubwe 'discovery' debacle. They indicate that Fouché portrayed locals as fearful of the area, failing to note the site's ancestral links and powers. They also argue that locals already knew of the site and viewed it as their sacred and ancestral place. They also acknowledge the many injustices in Fouché's narrative: of how only the Van Graans were lauded for bringing Mapungubwe and its treasures to the notice of the

scientific community, when in fact this is far from the whole truth (Manyanga & Chirikure, 2019).

CASE STUDY 3: THULAMELA

The Thulamela Heritage Site is found in the far northern part of the Kruger National Park. It is on a mountain plateau high above the Luvuvhu River floodplains (Nemaheni, 2003). In 1983, a ranger in the Pafuri area of the Kruger National Park discovered remains of dry stonewalls at Thulamela. An *in situ* investigation found that the area was probably a Late Iron Age site associated with during the 18th century. The Lembetu clan (presently found among the Venda people) have the closest affinity to the Thulamela people (Nemaheni, 2003). These are the remains of a citadel that flourished between 1240 and 1640, in which a hierarchical community farmed, mined and traded under royal governance. Controversy surrounds its discovery (Steyn *et al.* 1998). In some accounts, Pafuri section ranger Philip Nel has been credited with the discovery, while in other publications an unnamed ranger is given credit as the discoverer of the site in 1983. What is clear is that like, Mapungubwe, local people had known of the site for years but kept their knowledge to themselves out of respect for its ancestral and sacred status.

CASE STUDY 4: LITTLE FOOT

The discovery of Little Foot, an early form of *Australopithecus*, in the Sterkfontein Caves in 1994 further validated that Africa was indeed the Cradle of Humankind. The story of the discovery of this fossil is all the more remarkable, however, in that the field technicians responsible for finding and identifying a key part of the skeleton were fully acknowledged in research publications (see Clarke 1999). It took these technicians, Stephen Motsumi and Nkwane Molefe, more than 15 years to extract the fossil from breccias in which it had been preserved for millions of years. In contrast with other discovery instances, they were credited for their role in the fossil find (Kuljian 2016). While being mentioned by name and credited is clearly a positive step towards recognising their major role, this would have been an opportunity to both raise awareness of their contribution *and* set forth principles for collaborative acknowledgement, even if this has to be done retrospectively.

DISCUSSION

It would seem that both published literature and narrations confirm that there are indeed many

unidentified and unacknowledged people who are responsible for the discovery of some of the most important palaeoscientific remains. In the case of the Taung Child, we do not have any information about the mineworkers: none of their names are known, nor do we know their views on the discovery, nor any form of recognition they might have received for their important find. Instead, beyond acknowledging Izod as the owner, and Salmons as Dart's student who brought the find to his attention, the greatest focus is given to the scientist who described the fossil, Raymond Dart himself (Dart 1925). As much as the description is important, so are the discoverers as there would not be any fossil to describe if it were not for them. The mineworkers might not have known what the fossil was, but they understood it was interesting and were therefore equally important in the discovery as they brought it to the attention of the director.

The same experience of 'writing out of memory' the discoverer is evident in the case of Mapungubwe, where local informant Mowena is barely credited for being instrumental in leading the farm owner to one of the most important sites in southern African history. Instead, the focus has historically been on the Van Graans and Professor Fouché as the discoverers of the site (Meyer 2000). Mowena knew of the site because his community treated the site as their sacred land, a place used to communicate with the ancestors (Meyer 2000). Yet, it would seem that the Van Graans and Fouché took precedence because of their association with the University of Pretoria, the institution which was later awarded exclusive rights to the site (Fouché 1937). What is disappointing in this account of 'discovery' is that Mowena is not mentioned again anywhere, other than that he pointed out the site to the farmers.

The ranger who discovered Thulamela at Pafuri in 1983 has also effectively been silenced (Nemaheni 2004) since nothing further is known about him. Some articles (see Steyn *et al.* 1998) focus only on the archaeologists who have worked extensively on the site, thus distorting the truth about the discovery (Nemaheni 2004). The ranger would be the one to be celebrated as he shed light on our history. Such an acknowledgement will assist us in adequately dealing with the inconsistencies in the literature on the identity of the discoverer.

With the Little Foot discovery, the technicians were acknowledged, but that did not change their lives as one might expect with prominent researchers. One wonders, echoing Kuljian's (2016) sentiments, what would have happened had the discovery occurred pre-1994.

Noting that most of these discoveries were made before the transition to democracy, it is to be expected that the majority of South Africans did not have a voice for political reasons. The

same case seemingly extended to palaeosciences. These discoveries also illustrate how scholars tend to practise a kind of epistemic extractivism whereby they source information from the locals or the ordinary public, but do not even acknowledge them when reporting these ‘big’ discoveries. Scholars within the discipline need to rectify this so that a true reflection of the discoveries can be known, and all these unsung heroes and contributors can be celebrated.

CONCLUSION

This discussion has highlighted some of the issues within the discipline where possibly incorrect, and certainly incomplete, information on the discovery of certain fossils was communicated. Scholarship does not depend on one’s level of education or one’s standing in life, but on the inquisitive nature of one’s mind. If science has to be decolonised, then these anonymous discoverers need to be given their rightful place in the palaeosciences, allowing them to enjoy the recognition of academia, and by so doing, our communities will see the importance of these discoveries and be able to relate to them. These are just some of the examples highlighting the injustices within the science community. Whether science is ready to face reality and rectify these gross historical omissions remains to be seen.

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