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# Hominin heritage: How institutional repositories are managing collections, collaboration and repatriation

In this article, we discuss South African heritage management, and how it has shaped the role institutions play in protecting heritage 100 years ago versus today. Museums and universities are in a difficult position as they address past unethical archaeology and palaeoanthropology practices while implementing transformation and decolonisation approaches to protect and share heritage inclusively. We outline some of the complexities that museums, universities, and heritage bodies face in navigating human evolution research, site and material access, potential returns, repatriations or reburials, curation and the development of accessible educational content in a contemporary context.

**Significance:**

Museums, heritage agencies and universities have been the custodians of archaeological and palaeoanthropological heritage for a long time. In the past, conserving heritage was more about advocating race-based scientific study and advancing the colonial agenda. One hundred years later, this landscape has changed, but is not perfect. The complexities of heritage management, museum curation and collection, repatriation, and how we teach and share human evolution are many. Those navigating these complexities strive for a transformed and inclusive custodianship in an often difficult socio-political landscape, while simultaneously protecting and sharing our heritage.

***[Abstract in Setswana]***

## The colonial influence on heritage management

South Africa has a long history with legislated heritage management; however, historically, this has been primarily based upon the protection of the country's colonial history. The preoccupation with collecting archaeological artefacts for local and international (particularly Europe) viewing was popular during the colonial era, particularly in the late 1800s and early 1900s. To help conserve some of this heritage and curb the export of certain objects, the Union of South Africa established the first heritage protection legislation with the *Bushman Relics Protection Act of 1911 (no. 22 of 1911)*.[1] Although the act was directed at conserving rock art, it was also designed for use against the illicit trafficking of San and Khoe human remains.[2] During this time, southern African indigenous communities were targeted for the study of racial types. At least ten museums and learning institutions collected skeletal remains as part of their physical anthropology and human comparative collections. These practices also led to the trade in human remains for financial gain during the colonial era.[2] Body traders often sold human remains together with rock art and other hunter–gatherer-associated archaeological artefacts to institutions abroad.[2] Museums also took part in systems of donation and exchange, creating large skeletal collections in the Global North and some colonies, for use in race-based scientific research.[3] These and other collecting practices have, over time, led to the formation of human skeletal repositories across South Africa, many of which still hold archaeological remains.[4] The *Bushman Relics Protection Act* set the stage for the development of multiple legislative interventions over the next 88 years that would help protect archaeological sites and material culture in South Africa. These include, among others, the *Natural, Historical and Monuments Act (no. 6 of 1923)*, the *Natural and Historical Monuments, Relics and Antiques Act (no.4 of 1934)*, and the *National Monuments Council Act (no.28 of 1969)* (see several summaries[1,5–9] of these legislative acts, their usefulness, and their amendments).

Although these Acts helped protect archaeological material, access to the material was not strictly controlled. As the curators on this paper have observed for existing archives and from personal communications, during this time, collections were accessed through agreements, handshakes, and letters. Loans and analyses of artefacts, fossils, and human remains were conducted with relative ease through museums and other institutions, predominantly providing foreign researchers access to unique finds.

## Current legislative framework

Post-apartheid, the need for a new paradigm became more apparent to ensure that past inequalities were redressed, and that the heritage landscape was representative of all inhabitants of South Africa. In response to this need, the *National Heritage Resources Act (no. 25 of 1999)* (NHRA)[10] was promulgated and fully replaced the apartheid-era *National Monuments Act*. The NHRA represented a significant milestone in South Africa's heritage conservation efforts by providing a comprehensive framework for the identification, protection, and management of heritage resources. It established the South African Heritage Resources Agency (SAHRA) and introduced mechanisms for the declaration of national heritage sites, the protection of archaeological and palaeontological resources, and provisions for public participation and consultation in heritage management processes. The establishment of a three-tier system (national, provincial and municipal) was a major departure from the previous legislation (the *National Monuments Act No. 28 of 1969*[11]). It also made provision for restitution and repatriation and the registration of private collections, and significantly expanded the scope of the national estate. Within this new legislation, the rights of the public and access to their heritage were preserved. Although the NHRA draws heavily on the principles enshrined in documents such as the Burra Charter and the World Heritage Convention, it sought

to introduce a system of heritage management reflective of the country's constitution, with special emphasis on the importance that heritage plays in defining our cultural identity, spiritual well-being, and nation building.[5] It is considered to be one of the most progressive pieces of heritage legislation[12] and upholds the principle that South Africa's heritage is finite and non-renewable, and that it must be managed in a sustainable manner to ensure its continued conservation. To ensure this, it includes an integrated and interactive system of management of national heritage resources to promote good governance at all levels, and to empower civil society to nurture and conserve their legacy. However, a lack of funding and the devolution to the full three-tier system hinders the implementation of the Act.

Where previous legislation loosely defined objects under protection[11], today, any sampling procedures on archaeological material or palaeontological specimens, or any export of a heritage object, requires a SAHRA permit as regulated by the NHRA. A permit is issued only after the proposal has been scrutinised by a series of professionals. A holding facility or repository (e.g. museum) provides access to collections and must also provide permission for any destructive analysis (based on ensuring the overall integrity of the collection), prior to a SAHRA permit being issued. Despite the significant steps that have been taken to transform the management of the national estate in line with the Constitution of South Africa, including the reinterpretation and reforming of public symbols and spaces[13], the transformation of the palaeosciences remains slow and most investigations (as observed via SAHRA permits; see Supplementary table 1 which reflects permits issued by SAHRA, not including other sampling and excavation permits issued by provincial heritage agencies) in these fields are driven by foreign researchers. Although not legislated, SAHRA requests that a South African researcher be a participant in any international research team. They are often tasked to be the permit holder and the South Africans involved are not always invited to contribute meaningfully to research and publication. One of the key factors behind such a policy is to ensure opportunity for skills transfer. Not all cutting-edge or sophisticated analyses and methodologies are available in South Africa and ensuring involvement of local scholars provides an opportunity for early career scientists to be exposed to these types of research projects, thus building South African palaeoscience capacity. Later-career, well-established South African researchers or museum curators are often targeted to fulfil this role but, in our experience as curators, seldom are South African students and early career researchers approached. As outlined in Supplementary table 1, of the 119 SAHRA permit applications for 2023 for export, analysis or site excavations of an archaeological nature (across fauna, hominin, and artefact studies), there are 24 primary international permit holders (No. 1–24 in Supplementary table 1). These exclude permit applications by South Africans based at foreign institutions. Of the remaining 95 permits, 50 of them are linked to international research teams in the form of collaborations, applications on behalf of, or joint projects (No. 25–119 in Supplementary table 1). Permits have been issued based on proposal and affiliation with a local established researcher or museum curator. SAHRA policy indicates that temporary and permanent export permits should be given to curators, but, failing that, they are given to the principal researcher. There is no way to determine how involved local researchers and curators are in these projects, but, in our experience as curators, collaborators and permit holders, they are not always participating investigators but are rather included to comply with SAHRA policies. This means that up to 62% (74/119) of SAHRA permitted archaeological research in South Africa for 2023 was likely run and funded internationally. This includes the 24 foreigners who hold permits to South African sites and the 50 international parties involved in permitted projects.

Access to the collections at museums and other institutions is managed through institutional policies and their internal standard operating procedures. These precepts are informed by the country's legislative Acts. The *Cultural Institutions Act (no. 119 of 1998)*[14] provided for the establishment of certain institutions as declared cultural institutions under the control of councils and establishment of a National Museums Division. As much as these legislative precepts are scribed on paper, the implementation of them still leaves room for improvement. The NHRA does not guarantee the protection of heritage resources within the country. Legislation has failed with regard to community involvement and difficulties in enforcing the law.[7] Museums and other institutions have in the past years been faced with claims on human remains and calls for returns, reburials and repatriations. Archaeologists working with human remains collections have referred to the NHRA for guidance, but, in the Act, human remains are considered heritage objects and there is little structure regarding reburial claims or repatriation efforts. Curators have also consulted the *Human Tissue Act (no. 65 of 1983)*[15] and its subsequent amendments to help navigate the process of managing donated remains and their research. However, this Act is directed at cadaveric remains or those held at medical facilities and has never fully met collection needs.

A newly developed National Policy on the Repatriation and Restitution of Human Remains and Heritage Objects[16] provides some hope for future guidance. This policy was ratified by parliament on 16 March 2021 and clearly outlines a claims process and management strategy for human remains collections. It also states that any human remains considered fossils or sub-fossils are excluded from repatriation. It continues to demonstrate that, although claims can be made on these individuals or any others, it is unlikely that a claim on human remains dated older than 500 years would be successful due to the inability to "demonstrate clear genealogical, cultural or ethnic continuity far into the past"[16]. This new policy has also made provision for the establishment of a Repatriation and Restitution Office. As an arm of SAHRA, once fully functional, this office will be able to direct enquiries, manage claims and fulfil or refuse repatriation requests.

The lack of capacity within legislative bodies for monitoring and evaluating the conservation, preservation and safekeeping of heritage objects is becoming a great concern. There are no clear instructions on how communities are to be involved concerning objects linked to their own heritage, and even though attempts have been made, the management authorities of the sites and, in some cases, the local curating institutions, are yet to make significant strides regarding this.

National museums in South Africa have a heritage asset management policy, encompassing, but not limited to, collection access, operating procedures, loan practices, storage conditions etc. Generally, curators, guided by the policies and procedures of their individual organisations, control access to collections. This access may be requested by academic researchers, scholars, content creators (broadcasting), as well as the general public. The existence of procedures and guidelines is to ensure a fair and legal process is followed. However, in our experience as curators, there have been (and in some cases, still are) legacy and unsaid biases towards applicants. As curators of significant collections, we have also observed that not all excavated materials are being handed over to museums in compliance with permit conditions, and researchers often grant access to these materials rather than curatorial staff at recognised institutions. Examples of these include large-scale investigations at important sites across South Africa. Many of these research programmes have external research laboratories that run multiple projects simultaneously. Access to these excavated materials is generally limited to select scholars and researchers, as dictated by the principal investigator. We have found that some permit holders of archaeological and hominin fossil sites hold onto selected recovered material for years beyond the permit cycle without formally handing it over to the curating institution, and do so only after publication. Some, even after publication, do not make these remains available for other researchers to study, ignoring their agreement with both the SAHRA and the accredited repository.

This influences the degree of access that certain researchers have had to collections. The SAHRA has recently updated their procedure, and, soon, permit holders will need to produce a letter from the curator indicating the receipt of excavated material at the relevant repository as part of their final permit report. No new permits or extensions will be granted without this. The SAHRA has also observed illegal destructive sampling. For example, in 2016, a researcher sampled a well-known fossil skull without permission, although a retrospective permit was issued for the work. In another instance in 2022, fresh sampling of previously tested

sections at a fossil site was noticed by SAHRA officials, again without a permit. These are only a few of many incidents involving the disregard of heritage legislation that we have all experienced with some regularity. Many of these cases are confidential, and, if details were shared, may put researchers at risk, making the power dynamic within the heritage space difficult to navigate.

## Collections

The University of the Witwatersrand and Ditsong Museum of Natural History house the largest fossil hominin collections in South Africa, representing about 40% of Africa's early fossil hominin record. These collections include the Taung Child, holotype of *Australopithecus africanus*[17], the world's first early fossil hominin discovery, Mrs Ples (Sts 5), the first complete adult skull of *Australopithecus africanus*[18], as well as the type specimens of *Paranthropus robustus*[19], *Australopithecus prometheus*[20], *Australopithecus sediba*[21] and *Homo naledi*[22]. The remains of *A. africanus* (StW 413 and Sts 13), *A. prometheus* (StW 573 – 'Little Foot'), *A. sediba* (MH1 and MH2) and *Homo naledi* (LES1 – 'Neo') represent six of the ten known partial to complete early hominin skeletons in the world; the other four are from eastern Africa. There are a number of isolated more recent Middle Pleistocene specimens housed elsewhere in South Africa, e.g. the Florisbad cranium[23] is housed at the National Museum of Bloemfontein and the Saldanha calvarium[24] is held at Iziko Museums of South Africa in Cape Town. These 'prehuman' hominin fossils are dated from 3.6 Ma to 236 ka and there are also many isolated elements associated with the aforementioned taxa and possibly as yet unidentified species belonging to the genera *Australopithecus, Paranthropus* and early *Homo*. Collectively, these represent a substantial record of human evolution, a massive resource for the international scientific community, and opportunities for contributing to the public understanding of science.

Although many of these examples are considered relatives of modern humans, their morphology is distinctly different from recent modern humans. They are therefore not considered human in many institutional human remains policy definitions, which only refer to "humans" and not a species. Even the NHRA does not differentiate. Most fall within the pre-modern evolution of *Homo sapiens*. These are therefore not subjected to the same legal and ethical procedures that recent modern humans are. Free and, as far as possible, open access to these collections is given to bona fide researchers, via an access application process through the respective institution's access advisory committees or panels.

However, these fossil collections also contain some isolated skeletal remains of early and more recent *Homo sapiens*, ranging from 260 ka to ~10 ka ago. Examples reside at various institutions, including Iziko Museums of South Africa (from sites such as Klasies River Mouth, De Kelders, Blombos, Sea Harvest etc.), the University of the Witwatersrand (e.g. from the Border Cave site), the East London Museum (the Hofmeyr cranium[25]), as well as the Ditsong Museums of South Africa. To date, this material has been treated similarly to the older hominins, being "ancient" and not subject to ethical approval for study, but still requiring access and study approval from an institutional access advisory committee. It was presumed that the small numbers of human skeletal remains were of such antiquity, that no living group of people could claim ancestry or restitution. This has remained the case with the newly developed National Policy on the Repatriation and Restitution of Human Remains and Heritage Objects.

These and more recent archaeological remains were also used for comparative purposes, and this was considered acceptable at the time, as these are laboratories for the study of human origins. In 2017, the University of the Witwatersrand School of Anatomical Sciences approached the Evolutionary Studies Institute (ESI) to audit all human remains within the institute to identify and remove unethically obtained remains and align with the School of Anatomical Sciences' policy that all human remains should, as a rule, be housed at the School. This also included individuals that were officially on long-term loan from the School of Anatomical Sciences as the ESI may not "own" any human remains. The dilemma was that, as a laboratory that studies early human origins, comparative human remains are essential, together with those of the great apes and other primates. Several representative human skeletons were permitted to remain for comparative purposes, but the use of archaeological remains, without the necessary permissions, was prohibited. Fossil human remains reside within the fossil hominin collections, subject to the rules and regulations of the institutions, in recognition that human remains *sensu stricto* are also subject to the broader human remains policies.[10,15,16]

At Iziko Museums of South Africa, human remains collections are governed by an internal policy[26] and are only accessible through application review, both internally and by an external advisory committee. Fossils, Middle Stone Age context hominin remains, human remains and human casts are all considered part of the human remains collection and are housed in varying storage sections at the Iziko South African Museum's Archaeology Unit. The Unit has investigated the ethics of its collection and worked in consultation with academics, researchers, and descendant community leadership across southern Africa[27] to identify those human remains collected illicitly or unethically in an effort to rehumanise and return them to their place of origin[28]. Those identified have been deaccessioned (removed from the museum inventory and national register) and are no longer museum objects. Research on human remains continues, but only on those individuals collected via permit as indicated in the legislation.

## Ancestral claims and who counts as human?

In 2016, a delegation that self-identified as San visited the ESI, making claim to the Border Cave 3 (BC3) infant skeleton that was excavated in 1941[29] from the Howiesons Poort (HP) 1 RGBS layers dated to 74 ± 4 kya by electron spin resonance dating[30–33]. The delegation of about ten people, from different parts of South Africa, claimed that they are the descendants of the original Border Cave people, who were displaced during the Mfecane and that they wished to pay tribute to the BC3 individual through a traditional San ceremony.

They brought many documents, including scientific papers and books in support of their claim and a kaross specifically made by an elder, to symbolically place over the skeleton, as, in their culture, the deceased baby should not get cold. It was explained that, for an individual who lived so long ago, it would be difficult, if not impossible, for us to acknowledge them as direct descendants; however, support in principle for their wish to pay tribute was given. The delegation stated that the temporal context of a human had nothing to do with their level of humanness, as we recognise this individual to be the same species as us, and therefore they require the same level of respect as any human from an extant population. The ritual could not be carried out on that day, as making fire within the laboratory is prohibited. The intention was to plan a ceremony at a more appropriate and practical venue. Subsequent correspondence indicated that the San representatives wished to carry out the ritual at Border Cave, and had approached the government for support, although no support was given. To date, nothing further has been heard on this matter. For the first time, those who curate ancient fossil hominins were challenged on how we conduct work around fossil human remains, and confronted by a group of living people claiming to be associated with such remains. Since then, Iziko Museums of South Africa has had some correspondence with descendant communities in the Eastern Cape querying the possibility of the return and reburial of the Klasies River Mouth hominin remains[34–36] (dated 110 ka – 65 ka[31]). However, no further contact with the museum has been made in this regard.

Even though ancestral claims to much older fossil remains are rare, there have also been several attempts for the Taung Child (Taung 1/U.W.1-1) to be returned to the North West Province, including requests for reburial. After all, it was the scientists who claimed that the Taung Child is our ancestor and the fact that it was older than 2 ma, and not human, was irrelevant to the community making the claim.

Another interesting scenario around fossil human remains was a recent study on ancient human DNA from Plover's Lake, Gauteng.[37] The very fragmentary remains consisting of isolated teeth and post-crania were initially dated from flowstones to be more than 60 ka.[38] The site therefore became known as a Middle Stone Age hominin-bearing locality. However, DNA sampling of several human and faunal specimens revealed DNA of African farmers and domestic cattle.[37] Subsequent C14 dating suggested

that the human remains were no older than 500 years bp. This is an example of a collection that had been curated and studied as ancient fossil humans, and now falls within the realms of practically historical antiquity. In another example, Ditsong National Museum of Natural History curates a skeleton, TP1, discovered at the Springbok flats.[39] The locality of the discovery was initially thought to be of Middle Stone Age origin[40]; however, more recently, the skeleton was dated to between 20 ka and 11 ka[41]. Despite the relatively young age of the skeleton, as opposed to the fossil hominins in the collection, the skeleton is subjected to similar standard operating procedures as the entire collection. It is not treated as a recent human at all.

Another recent consideration is around the discovery of *Homo naledi*[22,42] – a hominin identified and described prior to dating. Much of this species looks primitive but was subsequently dated to between 335 ka and 236 ka.[43] This is astonishingly recent for a species that displays characteristics of hominins from around 2 ma ago. Nevertheless, several features of the skeleton are virtually indistinguishable from those of modern humans.[44,45] The time when *H. naledi* lived is contemporaneous with early *Homo sapiens* and their relatives and hybridisation between *H. naledi* and another hominin is not inconceivable. Furthermore, the *H. naledi* remains are not 'fossilised' but still organic and considered sub-fossil. Should molecular studies on such material be successful and yield human DNA or proteomic results, would the human status of such a species change? There is also a provocative hypothesis, that *H. naledi* may have interred its dead[42,46,47] and even practised rock art[48,49]. This hypothesis is not supported by the broader scientific community[50], but it does offer an opportunity for discourse on complex behaviours. Burial, from an archaeological perspective, provides a hard, material record of a behaviour that is deeply spiritual and meaningful. It allows scientists to trace the emergence of beliefs, values, and other complex ideas that appear to be uniquely human. Although the purported evidence for these symbolic behaviours has been criticised in the literature, the possibility that a primitive, small-brained hominin could have engaged in the deliberate disposal of its dead challenges the conventional thinking about the distinction between modern humans and earlier species.

Even though the laws, ethics, rules, and regulations pertaining to fossil human relatives are no different from those applied to any other fossils, when it comes to what are arguably fossil early or modern humans which lived long before they could be associated with any extant group, there is a point where lines become blurred. Human remains policies have been based on the premise that humans have a special status when deceased.

## Repatriation and the museum

After the recognition of the first democratically elected government, museums were used as a source of reconciliation and social cohesion, a mandate most museums are still trying to achieve or implement. This has been particularly difficult for many institutions due to South Africa's past. Shrouded in a legacy of race-based scientific research, grave robbery and human trafficking, extractive research practices, exclusion, and apartheid, it may be difficult for some colonially established museums and institutions to gain full trust and acceptance from the South African public, and particularly from indigenous communities. Most issues with human remains derive from early human evolution research and archaeological collections. At present, museums still collect human remains, predominantly from CRM (contract archaeology) work and impact assessments. During these archaeological mitigations, immediate reburials are often not possible and the individuals are therefore brought to museums for storage and protection (as per the NHRA) until such time as they can be reburied. While museums and institutions await further legislative developments and the resourcing of the newly initiated Repatriation and Restitution Office, curators have worked to develop strategies to liaise with descendant communities[51] and have networked broadly to facilitate reburial efforts and processes for human remains and heritage objects[27,52].

There have been a few successful repatriations and reburials of Khoesan descendant individuals held in archaeological or physical anthropological contexts. Most notable are the repatriation of Sarah Baartman from the Musee de l'Homme in Paris 2002[53], the return and reburial of Klaas and Trooi Pienaar from the Natural History Museum collections in Vienna in 2012[54], and the local reburial of the Sutherland Nine from the University of Cape Town to identified communities in the Northern Cape in 2023[52]. But these repatriation and reburial processes are incredibly slow. Iziko Museums of South Africa, for example, has been actively trying to rebury unethically collected human remains for a decade.

Community consultations have been successful, but the practicalities of community and government consensus, funding, and establishing processes, hinder progression. Because of these delays, museums are seen as a hindrance to returns and are often criticised in the public domain.[55,56] But the problems extend beyond repatriation. Some older museums may be reminders of colonial and apartheid erasure practices that have in the past been highlighted in exhibitions, educational content, collecting practices, and curatorial engagements.[57] Today, many museums in South Africa are trying to move forward responsibly, demonstrating their accountability for past harm. In short, local museums are trying to reframe how they represent heritage, people, places and things within and amongst a pan-African movement to decolonise museum spaces.[57–60]

## The museum's place in the South African school

Teaching, sharing, and learning archaeology and human evolution is critical to ensuring the growth of the next generation of diverse researchers, museum professionals and heritage practitioners within the discipline.

There are various obstacles to this, including that the school curricula, support material and textbooks designed to underpin teaching and learning of evolution are often inaccurate[61] or incomplete. However, in South Africa today, Grade 12 textbooks have substantial sections on evolutionary theories and human evolution. Teacher training may be lacking or insufficient and museums are often asked to step in and teach these themes. Compounding this is the feeling of educators that they poorly understand the topic and that their "flawed understanding is transferred to those attempting to learn it"[61]. Also, there is a resistance to human evolution in South Africa which has its roots in a complicated history of inequality, erased identity, religious education, and racism.[62] Religious and cultural beliefs among the diverse backgrounds of South African educators and learners can also have a huge impact on how human evolution is taught and viewed. Many teachers have not been adequately exposed to human evolution as it was excluded from South African curricula under the old Christian National Education system which was the basis of school education from the 1960s to 1990s nationally.[63] Today, traditional narratives within which the subject is taught disconnect human evolution from the way it is understood among different communities in South Africa. This has resulted in some teachers using methods that are not appropriate for dealing with the topic's complexity and controversy.[64]

To assist teachers and reach a broader public audience, Iziko Museum frames its new exhibitions and associated educational content on human evolution as a narrative that moves away from archaeological language and older classifications, categories and visuals[65], e.g. time periods, representations of people and races, heritage 'ownership' or using a narrative of superiority or simplicity across race, gender, belief, or background. The museum also addresses the lack of accurately translating concepts and scientific words from English to African languages. The museum uses new translation methodologies to make science more accessible to diverse audiences.[66] These efforts are not only about revisiting history but also reimagining it through inclusive narratives that reflect the diverse cultural and historical backgrounds of its audience.

Museums and their educational programmes act as resources to contextualise and strengthen teaching practice in these thematic areas, either passively when museum educators present lessons and workshops to schools, or actively when museums run teacher training workshops. It is interesting to note that both human evolution and Indigenous social history offer narratives of our origins, and it is these with which teachers need support.

The past ten years of teaching have done much work in positioning school learning areas as societally contextualised compartments. South Africans are accustomed to this compartmentalisation, which can include lived realities which accommodate simultaneous multiple worldviews, including organised religion, Indigenous cosmologies, community ritual, and formal education, all superimposed on a backdrop of multilingualism. In the national schooling curriculum, the sciences have been presented as a valid societal worldview, enabling educational institutions such as Iziko Museum to present Indigenous social history alongside cutting-edge science.

## The future of public human evolution education

Through educational workshops, interactive tours, and collaboration with educators, several South African museums strive to provide a comprehensive understanding that resonates with school-going learners' lived experiences. These initiatives are crucial in dismantling barriers erected by previous educational frameworks and in promoting a more egalitarian and accurate representation of human evolution, palaeoanthropological research, and, by extension, cultural diversity. The integration of exhibits, museum collections, and broader content into school curricula, alongside the provision of materials in multiple local languages (when possible), serves to democratise knowledge and make learning a more inclusive and engaging experience for all.

The integration of museum exhibits, particularly those at the forefront of palaeoanthropology, into the school curriculum offers a revolutionary way to address the historical residue of an education system shaped by colonialism and apartheid. By meticulously selecting content that both aligns with and expands upon the national curriculum, museums like the Iziko South African Museum play a crucial role in recalibrating students' understanding of human history. By presenting a multifaceted view of human evolution and cultural heritage, students are encouraged to critically evaluate the complexity and diversity of human history beyond the oversimplified narratives of the past. An example of this is the new Humanity exhibition which opened at Iziko South African Museum in September 2023 (see Kgotleng et al. in this issue[67]). In museums globally, the history of human evolution is often presented as a chronological story of male exploration and discovery. In South Africa, narratives in schools and media tend to highlight figures like Raymond Dart, Phillip Tobias, Lee Berger, and other predominantly white, foreign male researchers linked to major fossil finds in the region. In contrast, the Humanity exhibit focuses on the rich diversity of South Africa's people and the origins of that diversity. The exhibition is the result of a dynamic collaboration among South African and African researchers, academics, community leaders, and representatives from various interest groups. This collective effort has created a decolonised exhibit in which the narrative is authentically African and shaped by shared ownership that has been well received by the public.[68] We note good progress in some museums post-apartheid, while in others, not much transformation is evident in the displays exhibited. Some displays are still inclined towards the colonial and apartheid era[69] and there is still a noticeable disconnect between the current developments in the cultural, historical and scientific advancements (discoveries) that are yet to be included in the shared story lines. This educational strategy is pivotal in promoting a more nuanced and inclusive understanding of humanity's journey, fostering a generation of learners equipped to appreciate and engage with the richness of our shared heritage in a global context.

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## Data availability

All relevant data have been included in this paper. Additional data are publicly available on the SAHRIS platform and are openly accessible via this link: https://sahris.org.za/.

## Declarations

We have no competing interests to declare. We have no AI or LLM use to declare.

## Authors' contributions

W.B.: Conceptualisation, data collection, validation, writing – the initial draft, writing – revisions, project leadership. B.Z.: Data collection, validation, writing – revisions. M.T.: Data collection, validation, writing – revisions. G.A.: Data collection, validation, writing – revisions. P.H.: Data collection, validation, writing – revisions. All authors read and approved the final manuscript.

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