In/On the Bones: species meanings and the racialising discourse of animality in the *Homo naledi* controversy

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ABSTRACT

In this article, I address a controversy about species meanings and a racialising discourse of animality surrounding the *Homo naledi* fossils that were discovered in 2013 at the Cradle of Humankind; a fossil-rich area located just outside of Johannesburg. Nothing less than the origins, and definition, of humanity were said to be at stake in the fossils. This claim issued from the co-presence within the specimens of so-called "human" and "animal" features. In South Africa, the fossils provoked what Claire Jean Kim (2015) would call an 'impassioned dispute' about the perceived relationships between animals – particularly primates – and persons who are socially marked, and who identify, as black. Situating the *naledi* event within the long history of the 'interconstitution' (Kim 2015) of blackness and animality, I argue that the controversy surfaced anxieties about the untethering of racialising species meanings from prevailing ideas about the ontological foundations of "the human". By approaching the cultural politics of the dispute, I explore how it provided an opening onto the conjugation of race and species within South Africa and conclude that the naledi event attests to the perils of eliding the history of race science as well as the difficulty of retaining within anti-racist politics "the animal" as a device to secure "the human".

Keywords: *Homo naledi*, race, species, the animal, South Africa.

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> *Homo sapiens* long preferred to view itself as set apart from animals … But that's just not the case. Like it or not we are members of a large and particularly noisy family called great apes. Our closest living relatives include chimpanzees, gorillas, and orangutans. The chimpanzees are the closest. … *Homo sapiens* has kept hidden an even more disturbing secret. Not only do we possess an abundance of uncivilized cousins, once upon a time we had quite a few brothers and sisters as well. We are used to thinking about ourselves as the only humans, because for the last 10, 000 years, our species has indeed been the only human species around. Yet the real meaning of the word human is an 'animal belonging to the genus Homo', and there used to be many other species of this genus besides *Homo sapiens* (Harari 2015:5).

> As long as there are beasts, there will be Chinamen and Negroes (Kim 2010:70).

'Almost Human' [1]

In this article, I address a controversy about species meanings and a racialising discourse of animality surrounding the *Homo naledi* fossils that were discovered in 2013 at the Cradle of Humankind;[2] a fossil-rich area located just outside of Johannesburg.[3] The specimens were unveiled at the Maropeng heritage museum on the 10th of September, 2015 (Serrao 2015).[4] They were presented to the South African polity, and a wider international audience,[5] as both a nation-making scenario[6] and a global event in which nothing less than the origins, and definition, of humanity were said to be at stake.[7]

Lee Berger, the Wits University based project leader and *National Geographic* 'explorer in residence'[8] said that the fossils, 'the single largest hominin' find 'yet to come out of Africa', should be classified as a 'new species' (in Serrao 2015:1) and that they display 'characteristics which would place them at the base of the genus'. Berger (in Serrao 2015:1) also claimed that the new species 'buried their dead':

> Until this moment, we would have perhaps thought that putting your dead in the same place is the definition of being human… But you would not mistake *naledi* for us. It is a great moment for science and for our species to begin to contemplate what it is that makes us human now. Our use of tools, the contemplation of our mortality and critical thought have been thought to set us apart from animals. We have just met another species, although lost to time, who perhaps did that too.

This has proven to be one of Berger's more contentious claims.[9] It is not the only one. The palaeo-anthropologist's speculations about *Homo naledi's* place and significance with respect to the evolution of *Homo sapiens* were immediately disputed on a number

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FIGURE **Nº 1 & 2**

Maropeng uses the 'Almost Human' tag on the banners that frame the *Homo naledi* exhibition and foregrounds its links with the *National Geographic* brand. Photographs taken by author, Maropeng Visitor Centre, 5 May 2018.

of grounds and they continue to be so. For instance, when the announcement was made, the fossils had not yet been subjected to tests that would establish their age; as conventions in the field dictate.[10] Skeptics observed that 'if there was no serious attempt to date the site, it would be difficult to draw any conclusions' (Christoph Zoliker, in Chernick & Dipa 2015:1).[11] The fossils were subsequently tested. On the *BBC Inside Science* podcast of the 27th of April 2017, Adam Rutherford reported that the fossil specimen was found to be between 200 000 and 300 000 years old.[12] Rutherford admitted that he was unable to contain his astonishment since, he said, this development had profound implications for theories about human evolution. For Rutherford, it meant that *naledi*, which was 'very different from Homo sapiens', was from the 'same time as anatomical modern humans [were] around in Africa'. Precisely what the *naledi* materials tell us about human evolution has not been definitively established. What can be said is that they are among a cascade of recent fossil finds across the globe that are destabilising a field which had been thought to be settled thirty years ago.[13] When interviewed about the repercussions these discoveries have for dominant theories of human evolution, Chris Stringer, from the Natural History

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Museum in London, said that 'the more we find out the less we know' adding that *Homo sapiens*'s 'lineage' is both 'widening' and 'evolving'.[14] In a similar vein, Jessica Thompson, a palaeolithic archeologist, has argued that the evolutionary process 'doesn't start out with something that looks like a monkey, and the (sic) something that looks like an ape, and then something that looks like a human, and then all of a sudden you've got people … It's much more complicated than that' (in Sample 2017:[sp]). Berger's assessment of *naledi's* importance also proposes an intensely ramified conception of sapiens's formation. *National Geographic* reported on Berger's views about this subject in the following terms:

> He doesn't claim he has found the earliest *Homo*, or that his fossils return the title of "Cradle of Humankind" from East to South Africa. The fossils do suggest, however, that both regions, and everywhere in between, may harbor clues to a story that is more complicated than the metaphor "human family tree" would suggest … Berger himself thinks the right metaphor for human evolution, instead of a tree branching from a single root, is a braided stream: a river that divides into channels, only to merge again downstream (Shreeve 2015:56).

Another feature of the *naledi* materials that supports this re-evaluation of received models of human evolution is that they index a species which evidenced a perplexing amalgamation of anatomically modern "human" and 'primitive' — or "animal" — features some of which, the shoulders included, have been described as 'apish' (Shreeve 2015:43). To date, the initial claims about this 'schizoid' (Shreeve 2015:43) anatomy have been corroborated by later research, which indicates that, although 'naledi only had a brain the size of an orange', the hominin was nonetheless capable of performing 'a number of human-like behaviours' (Smillie 2018:[sp]]. *Naledi's* distinctive co-mixture of properties that are taken to be either human or animalic makes for a species that Berger et al. construe as almost, but not quite, "human". All of this being said, I am not concerned here with excavating the implications for palaeoscience of the aforementioned details.[15] I attend to a different, albeit related, controversy.

In South Africa, the fossils provoked what Claire Jean Kim (2015) would call an 'impassioned dispute' about the perceived relationships between animals, particularly primates, and persons who are socially marked, and who identify, as black. The *naledi* specimens appear to underscore just how thoroughly connected are species that have been held in quarantine from one another within western ontological imaginaries about "human"-"animal" distinctions. Depending on which study one consults, chimpanzees are said to share between ninety six and ninety nine percent of their DNA with humans.[16] This is not to say that different humans do not have genetic profiles that are even more analogous.[17] Noting that this has been understood, for my purposes what is of consequence is that, as Kim tells us, while '[h]umans do differ from chimpanzees',

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humans have produced classificatory systems that have 'read momentous political and moral meaning into these differences' by putting 'humans and chimpanzees into discontinuous, unequal categories of beings' (Kim 2015:16). To put it differently, the taxonomical separation of the "human", particularly the "white human", from the "nonhuman", or "animal", is a naturalised product of a complex western history through which species differences have been racialised and race has been animalised (See Haraway 1991; Haraway & Wolfe 2016; Wolfe 2010; Chen 2012; Jackson 2013; Deckha 2012, 2013, Kim 2010, 2015 & 2016; Kim & Freccero 2013; Lundblad 2013; de Robillard & Lipschitz 2017). Race, as Kim notes, 'has been articulated in part as a metric of *animality*, as a classification system that orders human bodies according to how animal they are – and how human they are not with all the entailments that follow (Kim 2015:18, emphasis in original). According to Kim (2015), these taxonomical practices are 'synergistic'; and, they build taxonomical borders that have been made to produce and anchor racialised/ing species hierarchies. Developments in the overlapping fields of critical animal studies and critical posthumanism have convincingly demonstrated that all of this matters because 'discourses and technologies of biopower hinge on the species divide' (Chen 2012:6).[18]

In South Africa's violent history of nation-making the very matter and meaning of "the human", what Haraway (2010 & 2016) would call its material-semiotic substance, has always been said to be at stake at the Cradle. As its name makes explicit, the Cradle has been rendered as a place in which humans were conceived and nurtured.[19] Within this history, the *naledi* project is an up-to-date example of the production of humanness (Chen 2012). In westo-centric contexts, projects of this sort are typically organised under the aegis of humanism and, as Rosi Braidotti (2013), among others, has shown, humanism has been a race-making endeavour.[20] Predictably, the initial publicity about the fossils neglected to mention that, for part of the twentieth century, the much vaunted Cradle was a laboratory for race science. It should go without saying that race science is a thoroughly ignominious and discredited pursuit.[21] As Bonner et al. (2007) document, the Cradle was a site where ideas about white superiority were manufactured through racialising taxonomical practices that took the form of 'comparative anatomy' (Dubow 2007:14). To express it differently, the modes of human-making that unfolded in the Cradle conspired with race-making technologies. Of course, species meanings provided the grounds on which so-called racial distinctions could be imagined and materialised in the first instance (Kim 2016; de Robillard & Lipschitz 2017). If, as Saul Dubow (2007:13) puts it, palaeontology has been an instrument through which political elites have sought to 'bring South Africa "right into the centre" of things', then Lee Berger's association with *National Geographic*, a particularly influential global media brand, has meant that current research at the Cradle has realised those ambitions. At this point one must highlight that *National Geographic*

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has also functioned as a race-making institution. The 'special issue' of the magazine on the topic of race published in April 2018 substantiates this claim. In the aforementioned issue, with the assistance of John Edwin Mason, a historian of both photography and Africa, *National Geographic* performed a remarkable *mea culpa* by drawing attention to how it had invited its readers to enter into an unremittingly racist visual regime for most of the 130 years it has been in circulation.[22] Catherine Lutz and Jane Collins (1991) had previously illustrated the racialising effects of the magazine's visualising procedures, which is to say that they had demonstrated why *National Geographic* – like the Cradle – has a history of functioning as a race-making apparatus. Now, while the *Homo naledi* media briefing did not draw attention to these histories, they nonetheless account for the controversy about how the fossils should be interpreted. As I will show, the controversy surfaced anxieties about the untethering of racialising species meanings from prevailing ideas about the ontological foundations of "the human" (Lipschitz 2014; De Robillard & Lipschitz 2017; Jackson 2013; Kim 2010, 2015, 2016). For this reason, the *naledi* event was a noteworthy moment within the production of the post/apartheid racial imagination. By approaching the cultural politics of the dispute, I explore how it provided an opening onto the conjugation of race, species meanings, and the racialised discourse of animality within South Africa. In this respect, this paper contributes towards recent scholarship within the enmeshed habitats of critical posthumanism and critical animal studies that takes seriously the salience of species and animality for the making of race.[24] In addition, it extends an argument presented with Ruth Lipschitz (2017) in which we establish why it is vital for anti-racist politics to unmake, rather than reproduce, "the animal". Doing this is a prerequisite if we are to 'meaningfully and radically rethink the category of the human' (Kim 2015:286).

'But, then, where's the Hottentot?'

Proteus (2003), an important, though largely unseen, film of the post/apartheid period, sets up a critical exchange with the South African archive with regard to how race and sexuality have been constructed and represented within it.[25] Jesse Arsenault (2013:56) argues that the film queers the nation's historico-racial frame by reconfiguring 'mechanisms of racialization that heterosexualize black bodies and exclude queer desire from the national narrative'.[26] Using reflexive techniques that disrupt the conventions of visualising space and time in realist cinema, the film destabilises the methods of interpreting history that would be familiar to most audiences in South Africa. History, the film suggests, should be approached as a protean *techne*, rather than as a settled and calcified record of events that simply needs to be retrieved. *Proteus* fictionalises aspects of a legal document from 1735, which records that two prisoners,

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Claas Blank[27] and Rijkhaert Jacobsz,[28] each serving prison sentences on Robben Island, were judged, by the colonial administration, to have 'mutually perpetrated' "sodomy"[29] and in doing so the film evinces how colonial logics criminalised 'anal or intercrural intercourse' (Stobie 2016:917). After being found "guilty" of this "crime" the men were sentenced to death by drowning in Table Bay. Until the arrival of European botanist, Virgil Niven,[30] Blank and Rijkhaart are seen to be toiling on Robben Island. Niven wants to extract prisoners' knowledge about the indigenous flora and co-opts their labour to classify the sugarbush Proteas on the island and its environs.[31] Blank, a so-called "Hottentot", catches the botanist's eye and he is selected to form part of this group. Working for Carl Linnaeus, the Swedish botanist and zoologist who, as the Linnaean Society of London has it, is well-known for 'his work in Taxonomy', Niven both stands in for, and uses, the Linnaean classification system.[32] *Proteus* incorporates a number of scenes in which life forms are converted into Linnaean taxa. These sequences disclose the fallacious grounds on which this system produced racial categories and the lethal effects they could have for those who were racialised through its procedures. For the purposes of illustration, let us turn to the scene in which Blank and Niven are at work in the botanist's makeshift laboratory. Blank informs Niven about the indigenous flora's medicinal properties before opening a copy of Linnaeus's *Systema naturae* to examine a group of illustrations.[33] The following exchange ensues:

> Blank: What's this?
>
> Niven: Dr. Linnaeus has divided mankind into four binomials, four distinct races.
>
> Blank: Wat?[34]
>
> Niven: *Americanus Rufus*, dominant humour is bile, resulting traits, Indians are choleric, obstinate, content, free.
>
> Blank: The bile makes the Hottentot yellow?
>
> Niven: No, no, no, not the Hottentot. These are Indians of the Americas. Now here, *Europeanus Albus*, humour is blood, resulting in a nature that is sanguine, bronny, gentle, inventive. And *Africanus Niger*, humour is phlegm and the traits are slugglish, crappy, indolent, negligent.[35]
>
> Blank: But, then, where's the Hottentot?

At this point Niven turns the page to reveal the 'Simian', which the *Systema naturae* marks as a different category of being.

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> Niven: *Homo monstrosus*, the three sub-species of man, the bridge between Simian and Homo Erectus. *Monorchides Hottentoti*, unique to the Cape. In the Anatomicum in Amsterdam they have an excellent *monorchides* skeleton on display. The tail is almost eighteen inches.
>
> Blank: A man with a tail?
>
> Niven: And there's a *Hottentoti* boy in formaldehyde. And an enviable collection of human horns?
>
> Blank: Horns sir?

In this scene, *Proteus* is, of course, staging the production of humanness. A race-making process that was, and is, predicated on the construction of "the animal", from whom the human is both distinguished and separated through various mediating figures, including the ostensible "Hottentot". The spectator is aligned with Blank's and Niven's perspectives as they look at the illustrations in the *Systema naturae* and observe that the taxonomical distinctions Niven enumerates are those that Linnaeus had constructed between the so-called "white" European, who was imbued with virtues, and "other" – lesser – types of "human". Through Niven's reference to the '*monorchides Hottentoti* tail', what this scene suggests, but cannot fully convey, is how whiteness was invented through an array of technologies including the fallacious orientation of Linnaeus's observations in this regard. The botanist's formulations of race and species were not singular, '[m]any European scientific observers from the 1600s forward posited that the so-called Hottentots (KhoiKhoi of South Africa) were the connecting link between man and ape' (Kim 2015:36). Kim (2010:62-63, emphasis in original) encapsulates the long and coiled histories of the idea that humans are "human" because they are not "animals":

> Aristotle's notions of natural hierarchy and natural slavery, the Christian belief that man was made in the image of God and granted "dominion" over all living creatures, the medieval notion of the Great Chain of Being, Cartesian ideas about mind and matter, and Kantian arguments about autonomy and relationality have all done their part over centuries, in entrenching notions of human supremacy. Humans and animals, we learn, belong to distinct, heriarchically ordered categories of beings … In thinking this way, we have thoroughly animalized animals – as slave, body, matter, nature, and object. Indeed, humans can denigrate other humans through animalization only because animalness, though constructed, is such a stable site of meaning for us, an enduring counterpoint to humanness, the baseline below which we cannot fall. As Keith Thomas notes: "It was as a comment on *human* nature that the concept of 'animality' was devised" (1983, 41).

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Needless to say, the proposition that there is 'a baseline below which we cannot fall' does not extend to everyone; the 'we' in this frame is persistently exclusionary (Haraway 1991; Kim 2013, 2015, 2016; Deckha 2012, 2013; Wolfe 2010; Mbembe 2017). It is well-known that there are humans who have been made to fall below 'the baseline' of humanness, such as the '*Hottentoti*' of Linnaeus et al.'s imaginings. The putative 'sub-species' to which Niven gestures were fabricated and then dehumanised; a process that entailed racialising species through the technology of animalisation (De Robillard & Lipschitz 2017). Within the western ontological imagination, then, the subjects who are said to be "white" have been written out of race and animality while those who are thought to be "black" have been written into them. This is to say that "blackness" and "animality" are 'dynamically interconstituted' since '[b]lackness is a species construct (meaning "in proximity to the animal"), and animalness is a racial construct (meaning "in proximity to the black")' (Kim 2016:17). Owing to the animal's abject status, equating black people with what "the animal" has been made to signify discharges the stain of abjection into the fabric of blackness (Mbembe 2017; Lipschitz 2018; De Robillard & Lipschitz 2017). Kim (2015:31) observes that 'no figure has been evoked in these speculations more often than the ape'. An animal that – although 'most human-like' – has been bestialised and is therefore not valued in the ways that are cats or dolphins, for instance (Kim 2015:31). It is well understood that Africa has been a pivotal site for the invention and application of these ideas (Mbembe, 2017; Kim 2015, 2016). Although, as Kim (2016:13) points out: 'It is not quite that Africans were animalized here, or had a pre-formulated apeness transferred over to them, but rather that apeness and blackness were hammered out in intimate relation in the crucible of the Western imaginary, each taking shape with the other in mind'. The modes of co-production, rather than substitution, at work are exceptionally intricate:

> [T]he "human" is paradigmatically both not-animal and not-black, birthed through the simultaneous application of these two caesurae, requiring the presence of both the "animal" and the "black" to locate itself. The "human" ejects itself from the superset category of animal and ejects from within itself the subset category of black, opening a zone of thriving marked by these external and internal limits. Subtending both the human-animal dyad and the human-black dyad, therefore, is the human-black-animal triad. (Kim 2016:15).

By adjusting arguments that assume a dualistic relationship between race and species, Kim (2015:17) proposes that it is necessary to 'think in terms of taxonomies', rather than dualisms, since 'race is not expressed as a binary of white over black (or white over nonwhite) but as a complex, fluid set of multiple positions (Kim 1999, 2000)'. So, for Kim (2015:17-18), then, 'the concept of species cannot be reduced to a dualism (human/animal) but rather expresses itself as a taxonomy or complex

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hierarchical ordering of different animal kinds'; a taxonomy that is 'synergistic' rather than 'interlocking'. *Proteus* enacts how it is that 'synergistic' taxonomies of race and species were made to constellate. '*Europeanus Albus*' was 'bronny' and 'gentle' and therefore "white" not only because "he" (it was always a "he') was not 'Simian', "he" was 'bronny' and 'gentle' and "white" because "he" was also not like '*Americanus Rufus*' (who was 'choleric' and 'obstinate') or "black" like '*Africanus Niger*' (who was 'sluggish' and 'crappy'). '*Europeanus Albus*' was 'bronny' and 'gentle' and "white" because "he" was unlike '*monorchides Hottentoti*' and because "he" was further away from 'Simian' being than any of Linnaeus's other 'binomials'. Furthermore, '*Americanus Rufus*' was 'content' and 'free', and further away from '*Homo monstrosus*', and 'Simian' being than was '*Africanus Niger*' who was 'indolent', 'negligent' and closer to '*Homo Monstrosus*' and so on and so on.

Recalling Blank's question, where the 'Hottentot' is located matters a great deal because the category both forms and expands 'the baseline below which we cannot fall'. By marking the cut-off point between the human and the animal the category is made to set the terms, and construe the limits, of the 'we' who acquire the status of humanness. Although it was naturalised as a biological fact, *Proteus* illustrates that the '*monorchides Hottentoti*' was a taxonomical fiction. The film presents the moment at which Blank asks this question not to establish "the answer", it does so to query the ontological precepts — and effects — of racialising taxonomical enterprises. One of the striking features of this scene is that, the "black" figure, '*Africanus Niger*', is located above the 'baseline' on the side of humanness, even though, as Niven's description makes explicit, he does not share full humanity with '*Europeanus Albus*'. This is not always the case. What the scene suggests is that the terms of race and species hierarchies, and the ways in which the discourse of race has both relied on and defined species meanings, have been, and are, arbitrary and mutable. There have been times and places, as Michael Lundblad's work proves, when, instead of being located above the 'baseline', 'the black "savage" was placed below the ranks of those that possessed animal instincts' (Lundblad, in Jackson 2013:678). Investigating 'the historical emergence of the jungle as a discourse in the United States', Lundblad (2013:4) shows that this racialising discourse became especially potent once Darwinian and Freudian thinking coalesced:

> In the discourse of the jungle, the behavior of "real" animals comes to represent "natural" human instincts, particularly in terms of violence and heterosexuality … the key confluence, in my view, was when Freudian psychoanalysis traveled to U.S. shores and translated Darwinist constructions of "real" animals into "animal instincts" within the human psyche … The early work of Freud crystallized these constructions of human animality.

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According to Lundblad (2013:5), '[a]t the turn of the century, the discourse of the jungle was much more unsettled, complex, and inconsistent than current critical interpretations' admit. Analysing a range of influential texts, Lundblad (2013:5) charts how many evinced 'the Darwinist-Freudian jungle', while others 'resisted' its terms, and others still presented 'alternative constructions of animality', for instance, *Tarzan of the Apes* that 'distorted evolutionary hierarchies that place animality above blackness'.[36] Lundblad's (2013:5) larger claim is that the 'Progressive-Era' in the United States was a:

> [H]istorical moment in which constructions of animality-both human and nonhuman-seem rather different from what we might expect today. Consider Topsy, for example: a circus elephant publicly electrocuted in front of a large crowd at Coney Island in 1903; should animals (and the working-class immigrants they sometimes symbolized) be punished as agents responsible for their own actions? Or, Ota Benga: an African man publicly displayed in the Monkey House of the Bronx Zoo in 1906; could animals be claimed to be closer to white men within evolutionary discourse, making "savages" somehow "lower" than animals?

Lundblad answers the latter question by examining one of the contexts in which the durable, but fluid, 'race-species order' (De Robillard & Lipschitz 2017; Kim 2015, 2016) is produced over time to reverse the positions of blackness and apeness as they were represented in the Linnaean system. When humans started to "become animal", the 'zoo-logo racial order' (Kim 2016:17) did not dispense with the beast or the savage. Instead, "white" exceptionalism was reinscribed by a range of procedures through which blackness was made to be unassimilable, once again. Calls for the more humane treatment of animals were one of the points around which race-species differences were simultaneously reorganised and consolidated. Zakiyyah Jackson (2013:677-678) registers the 'field-transformative' potential of Lundblad's contribution to analyses of how, why, and to what ends, race and animality are made to circumscribe the terms of humanness and recounts one of his crucial insights:

> At a moment when an understanding of human behavior was increasingly reliant upon a construction of an "animal" human psyche, the discourse of human animality bifurcated along racial lines … In the discourse of humane reform, white humans, especially those with class privilege, were distinctive in that they had the capacity to restrain, control, or repress their "animal instincts," unlike black people who were possessed by "savagery" and "passion." … Thus, at the moment when the conception of "the human" was reorganized such that humanity was understood as coincident with "the animal," humane discourse relying on this new understanding simultaneously reformulated blackness as inferior to both "the human" and "the animal".

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To Lundblad's insights, we should add Kim's (2016:20) observation that, '[t]he ontological certainty of the "human" turns out to depend upon the ontological uncertainty of "black" and "animal."' An ontological enfolding 'in which both imagined entities—"black" and "animal"—are produced as indeterminate relative to one another' (Kim 2016:20). It is the very instability and indeterminacy of the ontological foundation of humanness which triggers the anxieties that propel controversies such as the one that occasioned the news about the *Homo naledi* fossils.

Undoing "the Human"

> These finds again underline that Africa, our continent, is the home of great scientific discoveries, the home of our humanity, the home of our collective cultures as humans. These discoveries underline the fact that despite our individual differences in the way we appear, the languages that we speak, the beliefs that we hold onto, and our cultural practices, we are bound together by a common ancestry. Cyril Ramaphosa[37]

> Human populations appear to be different in terms of colour, body size, limb proportions, hair texture and other physical attributes. Beneath the surface, we are all virtually identical. There is no genetic boundary for race. We are one species. Maropeng Visitor Centre[38]

> Science is materialism – its facts that can be proven. No one will dig old monkey bones to back up a theory that I was once a baboon – sorry … It's insults like this that make some of us to question the whole thing. Zwelinzima Vavi (quoted in Germaner 2015:1)

> Humanity did not evolve from the Animal Kingdom, and more specifically the apes. Mathole Motshekga (quoted in Germaner 2015:1)[39]

> There is nothing wrong with scientists and paleontologists investigating the origins of things … It's important to look at different fossils, creatures and skeletons. The problem comes in when we say human evolution itself, especially Africans, descended from animals. Mathole Motshekga (quoted in Chernick & Dipa 2015:1)

> It's an insult to say we come from baboons. We must continue to engage and discern what it is that God is communicating to us at this time. Bishop Ziphozihle Siwa (quoted in Germaner 2015:1)[40]

Let us recall that the academics and politicians who introduced the *naledi* fossils at the media briefing in 2015 constructed a narrative about the specimens' destabilising impact on received ideas about the origins and evolution of 'humankind'. By using

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the 'Almost Human' tag, Berger et al. were eager to place the fossils in close proximity to "humans".[41] As a consequence, they unwittingly drew attention to the instability of what is taken to be the settled ontological foundation of humanness; a foundation that has, in fact, been conjured through the invention and co-production of race and animality. These effects were unintentional because the *naledi* research is invested in securing ontological foundations – coded here as 'origins' – albeit with the understanding that these might be more hybridised and ramified than had been thought previously.[42] Unfixing the "human" from an apparently fixed ontological substrate, throws into disorder the system of species meanings that keeps "humans" and "animals" apart and in place. It is not surprising, then, that news about the fossils provoked anxiety within the polity. Predictably, this anxiety manifested as a dispute about race-species meanings and hierarchies. The dispute was fuelled by the Cradle's role in the production of white supremacy. As I have mentioned before, the Cradle has always been implicated in the peculiar torsions of race thinking in South Africa. Bonner et al. (2007:277) confirm that the apartheid racial imagination was constituted, in part, through a 'creationist' suspicion, and re-purposing, of Darwinist theories about human evolution; it was an important site for this imaginative work:

> Notions of 'racial superiority', coupled with creationism, played out as an odd mix of what can best be described as a cross between Victorian polygenism[43] and Darwin's suggestion that some 'races' were vestiges of different stages in the evolution of 'mankind' … Many white people came to believe that they had been created, but that black people had evolved, and many black people regarded activities at Sterkfontein[44] with suspicion because they understandably believed that the motive behind the excavation was to prove that the 'blacks' had evolved. Evolution thus not only touched on religious sensitivities but cut to the core of South African identity politics.

As was the case in the Progressive Era that Lundblad investigates, we see in the history that Bonner et al. trace how a white supremacist formation reacts to the discourse of evolution by producing species differences that are made to bifurcate along racial lines. This history was both occluded – and contained – in the *naledi* media event. Naturally, it surfaced when the public responded to the news.

No one who spoke at the *naledi* briefing referred in explicit terms to the Cradle's history as a race science laboratory. This being said, it would not be accurate to say that the site's links to race science were laundered from the event altogether. In celebrating the fossils' significance for 'our collective culture as humans', Ramaphosa was implicitly addressing how species meanings have been used to construct racial differences, and hierarchies, in South Africa's colonial and apartheid histories. Together with the other speakers, he was reproducing the 'we are one species' trope that is used to

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frame the human evolution exhibition hall at Maropeng. The centre has been conceived as a nation-making site that contests the racist terms of South Africa's formation (Bonner *et al.* 2007). This is done through a discourse which posits that 'we are all one' and 'all African', rather than any explicit confrontation with, or deconstruction of, the racist effects of the research that had been undertaken at the Cradle in the previous century. Inasmuch as this history is addressed it is done in entirely indirect terms.[45] Through emphasising that the *naledi* specimens reconfirm 'our collective culture as humans', and by saying that 'we are one global species with an African heritage', Ramaphosa and Maropeng implicitly want to give the lie to racist taxonomies, which earlier research conducted at the Cradle had helped to fabricate. These discursive and symbolic interventions sought to undo and re-make species meanings by alluding to contemporary scientific research that unsettles the grounds on which palaeoscience had contrived racial differences. To give another example of this re(de)-construction of race-thinking, in its 'special issue' on race, *National Geographic* published an article titled 'Skin Deep' in which the author, Elizabeth Kolbert, surveyed developments in the fields of genetics and evolutionary theory.[46] Kolbert (2018:28-30) introduced her discussion in the following way: 'What is race exactly? Science tells us there is no genetic or scientific basis for it. Instead it's largely a made-up label, used to define and separate us.' To illustrate its claims about human and animal genetic propinquity, the article includes an illustration which places a photograph of a "white" infant alongside one of a chimpanzee. Since this image featured in the 'special issue' about race in which the publication set out to undo the racist visual system it helped to engender, it would not be unreasonable to assume that *National Geographic* structured the image in this way because it appreciated just how incendiary it would be to juxtapose photographs of chimpanzees and "black" infants.

Racist comments and memes started to circulate on Twitter in the hours and days after the media briefing. To exemplify the genre, it will suffice to make reference to two tweets each of which drew comparisons between the *naledi* fossils and Naledi Pandor who was serving as a cabinet minister in the ANC-led government at the time.[47] MrGift@NiceNic72407352 posted an image that positioned a photograph of *Homo naledi* alongside a tightly cropped photograph of Naledi Pandor's face. The image was captioned as follows: 'Homo Naledi vs Naledi Pandor'. This meme relies for its racist effects on widely known bestialising stereotypes; the imputation, of course, being that Naledi Pandor is everything that "the animal" has come to represent. Imback@dondykman wrote: 'been stuck at work all day, just found out that Naledi Pandor is a homo #HomoNaledi'. In this instance, racist imaginaries are spliced with homophobic ones.[48] What these examples show is that in the face of the acute pressure under which the *naledi* research puts white supremacist logics, the fossils

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are read as further evidence of the facticity of typological racial differences. This anxious misreading attempts to make the fossils consolidate precisely what it is that they unsettle, namely, the racial bifurcation of "human" and "animal" genetic material. *Homo naledi*'s 'schizoid' (Shreeve 2015:43) anatomical 'pattern', the co-presence of so-called "human" and "animal" features, undoes the idea that whiteness is uncontaminated by animality and that blackness is somehow coterminous with it. As Noah Yuval Harari's comment included as an epigraph shows, refutations of the aforesaid are entering into popular consciousness.[49] Those who are cathected to racist logics cannot come to terms with these race-unmaking processes. The racist memes they circulate are frantic attempts to repress what is that they are being made to know. To be sure, what this drive to reinscribe racial typologies and hierarchies ends up revealing is that it can never be done 'in any permanently successful way' (Kim 2015:25).

I now want to bring into focus statements that were made by a number of prominent black South Africans each of whom repudiated any connection between blackness and animality. Zwelinzima Vavi, the influential trade unionist, said that he was 'no grandchild of any ape, monkey, or baboon' and that 'no one will dig old monkey bones to back up a theory that I was once a baboon … It's insults like this that make some of us to question the whole thing' (in Germaner 2015:1). Similarly, Mathole Motshekga, a senior ANC parliamentarian and founding president of the Kara Heritage Institute, said that: 'The problem comes in when we say human evolution itself, especially Africans, descended from animals'[50] and '[h]umanity did not evolve from the animal kingdom, and more specifically the apes'.[51] The South African Council of Churches president, Bishop Ziphozihle Siwa, was quoted as saying that 'while the council was celebrating the discovery, it did not approve of the theory that humans descended from baboons'.[52] Although these statements are informed by slightly different concerns, they are each grounded in a deep-rooted skepticism of palaeoscience because of the role it is understood to have played in the 'interconstitution' of blackness and animality. Notwithstanding the fact that Vavi and company's objections rest on somewhat faulty grounds, they were understandable when viewed in the context of the racialising technologies outlined in this paper. The erroneous conflation of the fossils with black people was made possible because the 'zoo-logo racial apparatus' is intact (De Robillard & Lipschitz 2017). Kim (2015:23) points out that comparisons between black people and animals 'have enabled extreme violence'[53] and for this reason 'they are considered today to be "dreaded" or even "inadmissible"' and argues that this is why racialising species meanings have to be unmade. As Lipschitz and I have shown, the problem with limiting anti-racist challenges to the necro-biopolitical effects of animalisation to a "we are not animals" posture is that it keeps in place the

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race-species order through which racist social logics are activated (De Robillard & Lipschitz 2017).[54] Dismantling this apparatus requires a form of anti-racist politics that is alive to the central place of species within the archive of racism. In other words, the abjected category of "the animal" cannot be left intact. Doing this leaves it open and available so that the violence borne of animalisation can be visited on any species.

If Vavi et al.'s protestations were insufficient, then so was Berger's response to them. Berger entered into what the media staged as a 'race row'[55] in the following terms:

> The discovery of Homo naledi should not be seen as a way for people to put religion under the microscope, but rather a way to better understand humanity's deep family tree. … Our science is not asking questions of religion nor challenging anyone's belief systems; it is simply exploring the fossil evidence for the origin of our species. I would repeat: we, as a species, are not descendant from baboons; baboons are a distant relative of ours no closer in their relationship to us most likely than a dog is related to a cat. Naledi is a human relative, giving us insight into our deep family tree. We completely agree that humans are not descended from baboons. The search for human origins is one that celebrates all of humankind's common origins on the continent of Africa. It should not be divisive (in Germaner 2015:1).

Berger's rebuttal was couched in the same 'we are one' and 'all African' discourse that shaped Ramaphosa's speech and to which Maropeng hews. While he referred to the objections that were rooted in religious formulations, Berger did not make any explicit reference to those that had to do with racism. Indeed, race is not mentioned. Instead, the question of racism and how it has been at stake in palaeoscience in general, and the Cradle in particular, is elided by his insistence that: 'it [the fossils] should not be divisive'. In effect, Berger's intervention was designed to defuse the controversy by avoiding the history of racism in both the field and the site within which he works.[56] The other, related, question that Berger's comments circumvent is that of "the animal". In saying that 'humans are not descended from baboons' and that 'baboons are a distant relative of ours', he was attempting to deflect the concerns that Vavi's remarks represented by placing humans and animals at a great distance from one another.

Berger was trying to thread a rather fine needle here since, as he had argued at the initial media briefing, the *naledi* specimens demonstrate an especially striking entanglement of apparently "human" and "animal" features. Now, while it is possible to imagine why a palaeoscientist conducting research at the Cradle would not want to delve into the site's involvement with the production of white supremacist logics, it nonetheless was inadequate to respond to the taxonomical panic that the news

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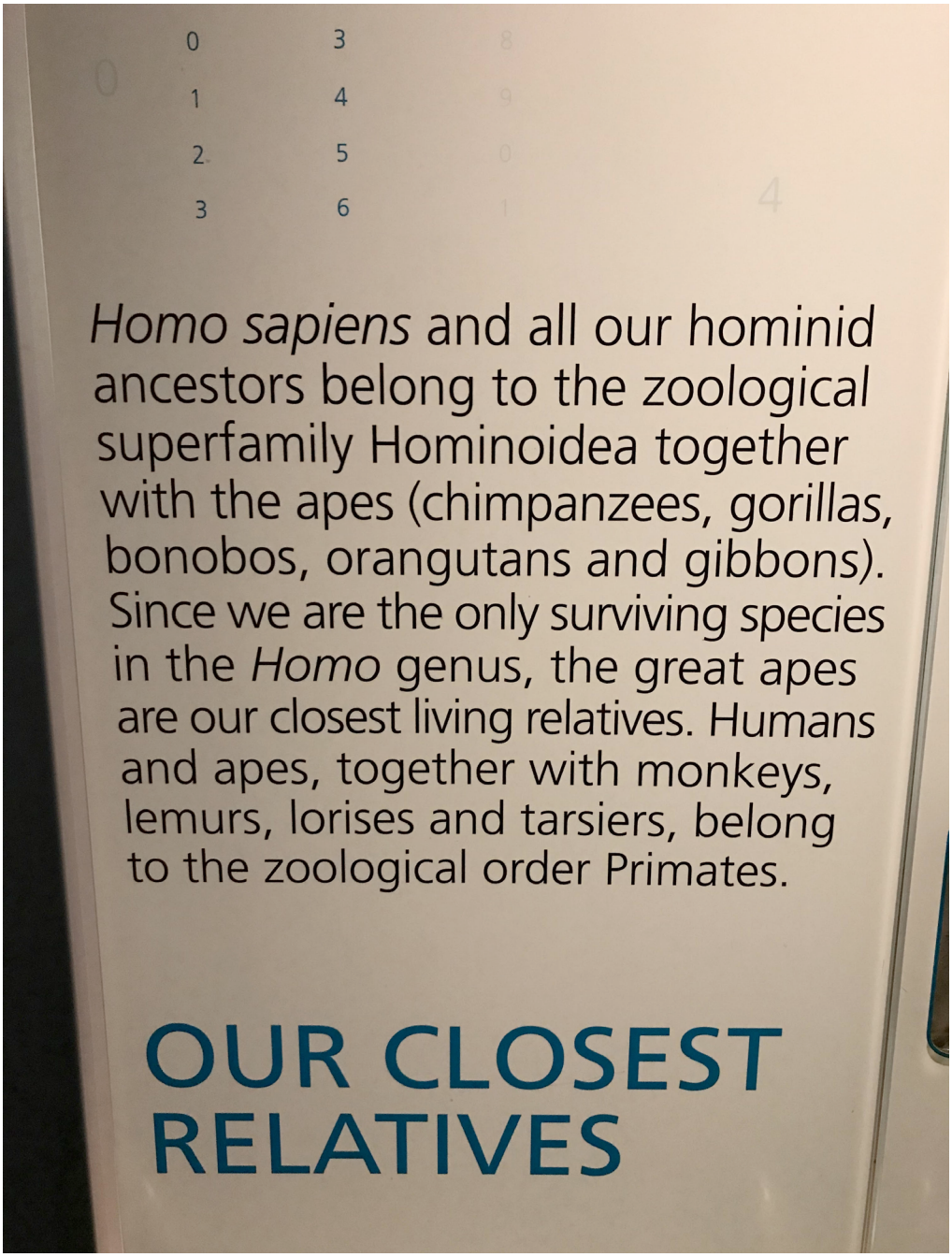

FIGURE **Nº 3**

This text features in the 'human evolution' exhibition hall at Maropeng. It emphasises relationality and proximity rather than distance. Indeed, this idea works as a *leitmotif* across the exhibition. Photograph taken by author, Maropeng Visitor Centre, 5 May 2018.

about the fossils precipitated by not confronting this aspect of the Cradle's history. South Africa's 'most publicly visible scientist',[57] who has become a leading figure in contemporary palaeoscience,[58] bears a greater responsibility for squaring up to this history than was demonstrated during the naledi episode.

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Conclusion

Disputes such as the one described in this article are, as Kim (2010:70) says, 'site[s] for the production, contestation, and reproduction of racial, cultural and species difference', which 'reveal a great deal about the influence that interlocking dualisms continue to have in delineating who matters morally in … society and why'. Although Berger and Ramaphosa had a point when they highlighted that the boundaries of "the human" were at stake in the *naledi* fossil research, the framework that was used to account for the specimens's significance was vexed by the failure to attend to the 'interconstitution' of race and species. Put differently, the *Homo naledi* controversy demonstrates the perils of eliding the history of race science. It also manifests the difficulty of retaining within an anti-racist perspective "the animal" as a category to secure "the human" (De Robillard & Lipschitz 2017). Instead, what is needed is an anti-racist frame that adopts a post-anthropocentric orientation to unravel the 'zoo-logo racial order' (Kim 2016:17); an order that has always sought to render the "human" through the coproduction of blackness and animality. This would entail undoing "the animal", which, Felice Cimatti observes, 'is an invention, the sum of what we do not recognize as human' (Cimatti, in Salzani 2016:108). It would also require unmaking racist species meanings and taxonomical hierarchies by proceeding with the understanding that - as the *naledi* fossils themselves suggest – the ontological oppositions through which nature has been materialised and explained to us can be especially unsound. As *Proteus* illustrates, western ontological frames that have to do with race and animality were produced through arbitrary and fallacious postulates. Jackson (2013:679) insists that the work of dislodging and reimagining these postulates is vital because '[b]iopolitics is enacted through the arbitrary coding and recoding of [these] rubrics and the referents' they purport 'to index'. The co-presence within the *naledi* materials of so-called "human" and "animal" features highlights just how unstable and unbounded these ontological oppositions can be (Chen 2012). They also reveal that the space between "human" and "animal" is indeterminate and always on the point of disintegrating (Kim 2015). Since, as we have seen, meaning is inscribed on the bones, rather than simply "discovered" in them, it seems to me that rather than only fuelling a search for "origins", the *naledi* fossils demand a careful evaluation of how they relate to the production of race-species taxonomies and the ontological imaginaries these instantiate.

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Notes

1. 'Almost Human' was the Twitter hashtag used for the media briefing about the *Homo naledi* fossils. *National Geographic* also used this formulation on the cover of the issue it published to coincide with the briefing.

2. Hereafter referred to as the Cradle.

3. The Cradle acquired UNESCO World Heritage status in 1999 (Dubow 2007:9). It is a place where fossils of considerable palaeoanthropological significance have been found and where numerous research careers have been made. Refer to Bonner, Esterhuysen and Jenkins (2007) for a history and analysis of the Cradle's place in the South African national imaginary.

4. A video recording of the media briefing is available on YouTube: https://www.youtube.com/watch?v=QiiOJ4Y9ZLo Accessed 20 March 2018. According to its website, the Maropeng heritage museum is: 'The official visitor centre for The Cradle of Humankind World Heritage Site, Gauteng, South Africa', https://www.maropeng.co.za Accessed 29 May 2015. The museum is touted as being one of the country's most important tourist attractions.

5. According to the *witsLeader*, news about the fossils was the: 'biggest story world-wide for the global wire agency, Reuters, on the 10th of September', the story also trended as the leading hashtag on Twitter both in South Africa and internationally, and it generated what is described as 'digital coverage' to the value of 'R220 million' (*WitsLeader* 2016:7).

6. Maropeng's role in post/apartheid nation-making is signaled throughout the museum. For instance, the museum's lobby is decorated with a series of impressions of all of the post/apartheid presidents' hands.

7. Visitors encounter engraved granite markers as they walk along the pathway that leads up to Maropeng's entrance. These markers stake out Maropeng's claims about the Cradle being a site from which 'humankind's origins' can be traced.

8. Berger makes the latter remark in a voiceover for a *National Geographic* 'live event' video titled 'Discovering Homo naledi Part 1'. Accessed 20 March 2018, https://www.youtube.com/watch?reload=9&v=36_LNsN9W3s.

9. Berger (2017) has said that he worked with a team of up to sixty researchers on the *naledi* project. Whenever I refer to Berger, this point should be deemed to have been understood.

10. Berger (in Chernick & Dipa 2015:1) explained that they thought it would be 'unethical to destroy hominin material until it had been described; dating the specimen would mean the destruction of the material'.

11. See also Sample (2017).

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12. Refer to Farber (2018) for a report about the ongoing tests on, and controversies around, the *naledi* specimens.

13. The BBC *Inside Science* podcast of 9 June 2017 reports on these discoveries and examines their implications for palaeoscientific orthodoxies.

14. Consult BBC *Inside Science* podcast of the 9th of June, 2017.

15. For further details of these questions and debates refer to Sample (2017) and the BBC's Inside Science podcast of the 27th of April 2017.

16. See for instance Kolbert (2018), Ramsey and Lee (2018), and Wong (2014).

17. Refer to Kolbert (2018) and Wong (2014).

18. See also de Robillard and Lipschitz (2017), Jackson (2013), Haraway and Wolfe (2016) and Wolfe (2010).

19. Consult Bonner *et al.* (2007) for a description of the Cradle's construction as a site of national and international significance as well as details of the contested claims that are made in this regard with respect to fossil-rich sites in East Africa.

20. See Deckha (2012, 2013), Jackson (2013), and Wolfe (2010).

21. For instance, consult Dubow (2007:13) for a discussion of how researchers working at the Cradle postulated the 'Boskop Man', a 'highly racialised' formulation, and how this was 'thoroughly discredited'. None of this is to say that powerful vestiges of these ideas are not at work in contemporary racial imaginaries; or, that race science does not rear its head in new forms, see for example Hemmer (2017).

22. Consult Goldberg (2018).

23. In Donna Haraway's terms, the magazine functions as a 'myth and science system' (in Kim 2015:43).

24. The question of race had not always received the attention that was warranted within these critical formations. Kim and Freccero (2013) and Jackson (2013 & 2015) delineate the causes and effects of this oversight. Scholars including, but not limited to, Boisseron (2018), Chen (2012), Kim (2010, 2015, 2016) and Lundblad (2013) are redefining these fields, and the terms within which they should relate to one another, with scholarship that puts race at the heart of matters.

25. For a discussion of why the film was not distributed in South Africa consult Katz (2016).

26. Refer to Stobie (2016) for an alternative reading of the film's sexual politics and political valency.

27. The film deploys, but does not validate, the colonial nomenclature in virtue of which Blank was described as a "Hottentot". KhoeKhoe and Khoikoi are the terms that have now come into use. See Stobie (2016) and South African History Online https://www.sahistory.org.za/article/khoikhoi Accessed 17 January, 2019.

28. Who appears as 'Rijkhaart' in the film.

29. Blank was a Khoekhoe herder and Rijkhaert a Dutch sailor (Stobie 2016).

30. Stobie (2016:916) notes that Niven was 'based on a Scottish plant collector based in the Cape who became the protea king of Europe some thirty years after Carl Linnaeus named *Proteaceae* in 1735'. Katz (2016) investigates how the Protea both figures in, and is used as a refracting device within, the film.

31. Refer to Katz (2016) and Stobie (2016) for a discussion of how Blank both co-operates with and subverts Niven's extractive project.

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32. The Linnean Society of London. Available: https://www.linnean.org/learning/who-was-linnaeus Accessed 4 July 2017.

33. Linnaeus's *Systema naturae* first appeared in 1766. As Haraway (1989) has shown, its influence is tenacious. In an exhibition hall at Maropeng, dedicated to the science of human evolution, Linnaeus's impact on the field he helped to establish is acknowledged but his influence on race science is not confronted. The museum characterises his significance thus: 'Carl Linnaeus (1707-1778) was a Swedish botanist and physician who founded the scientific classification of all plants and animals into a family, genus and species. The basic system he devised is still in use, though it has been modified over the years'. As I illustrate at a later stage in this paper, Maropeng's references to race science are implicit.

34. This is the Afrikaans term for the English word what.

35. *Asiaticus* was the fourth Linnaean 'binomial', which *Proteus* does not describe in this scene. Julia Douthwaite's (2002:15) summation of this part of the *Systema naturae* is worth recording here since it conveys something of how the attempt to master the world's disorganisation was shot through with fantastic interpretive frames: 'Linnaeus broke down the genus *Homo* into two subgenera: *Homo nocturnus* and *Homo diurnus*. *Homo nocturnus*, otherwise known as the "Troglodyte," refers to the chimpanzees, orangutans, and other anthropoids reportedly sighted by early explorers in Africa and Asia … *Homo diurnus* comprises three species: the normative *Homo sapiens*, distinguished by its characteristic skin, temperament, and location as European, American, Asian, or African, followed by the inferior *Homo monstrosus* and *Homo ferus*. *Homo monstrosus* embraces a number of hotly debated human anomalies, such as the Patagonian giant, the dwarf of the Alps, and the monorchid Hottentot. *Homo ferus*, or "feral man," on the other hand, covers a number of unfortunate individuals whose existence was well documented. Distinguished by bestial traits such as muteness, quadruped locomotion, and hairiness, the *Homines feri* listed by Linnaeus include the wolf-boy of Hesse (*Juvenis lupinus hessensis*), Peter of Hanover (*Juvenis hannoveranus*), and the wild girl of Champagne (*Puella campanica*)'.

36. Lundblad (2013:5) does not commend Edgar Rice Burroughs's novel; he foregrounds that there were many currents in play at the time and says that those which differed from 'Darwinist-Freudian constructions of animality' were not 'necessarily always better' than the aforesaid, which had, of course, been used to justify 'atrocities related to eugenics, imperialist conquest, and widespread abuses of nonhuman animals'.

37. This is an excerpt from Ramaphosa's speech at the *Homo naledi* media briefing, (https://www.youtube.com/watch?v=QiiOJ4Y9ZLo Accessed 20 March 2018. At the time, Ramaphosa was the deputy president of both South Africa and the African National Congress (ANC). He ascended to the presidency after his election at the ANC's conference in December 2017.

38. This is the text that greets visitors to Maropeng as they enter an exhibition about evolutionary science and the contributions that the Cradle has made to that field.

39. At the time, Mathole Motshekga was the African National Congress's 'chief whip' in parliament.

40. Bishop Siwa was commenting in his capacity as president of the South African Council of Churches.

41. 'Almost Human' is also the title Berger gives to a book about the discovery of the fossils that he subsequently wrote with John Hawks (Berger & Hawks 2017).

42. To this point, refer to Berger's comments in a later media interview: 'we don't yet know where it came from and we don't know where it goes. It could be the root of the genus *Homo*, it could have hybridised with us, we just don't know yet' (in Smillie 2018:[sp]) and his speculations in *Almost Human* (2017:218-222).

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43. Polygenism, Kim (2015:39) explains, was developed by a group of American anthropologists who claimed that 'different races were different species created at different times. This was a momentous shift in thinking. The difference between a variety and a species meant also, in the theory at least, the difference between a Black man who was inferior to the whites but akin to them and a Black man who was more animal than human and could, for most purposes, be treated as such … Although polygensim never became a majority viewpoint, it was eagerly embraced by defenders of slavery and embraced by Southerners during Reconstruction'.

44. Sterkfontein forms part of the Cradle and as such it has been the site of important fossil discoveries.

45. Addressing the politics of post/apartheid museum production, Wandile Kasibe (2017) elucidates why this strategy is patently inadequate: 'Museums hide in plain sight, but have a complicated colonial history – as observed by Ciraj Rassool, "South African museums have been reluctant to address these aspects of their history, choosing rather to portray the museum as benevolent without any fundamental epistemological reassessment of the blood of colonial history". Rassool's institutional critique against the involvement of the museum in "crimes against humanity" is relevant as South Africa's oldest museums are now being taken to task for the role they have willingly played in the perpetuation of racial science.'

46. If the sciences that have been imbricated with race-making technologies do not themselves reckon with their histories, they will have to account for those histories nonetheless. See for example the case of James Watson. As *The New York Times* (2019:[sp]) reported, Watson, 'the Nobel Prize-winning DNA scientist who lost his job in 2007 for expressing racist views, was stripped of several honorary titles Friday by the New York lab he once headed. Cold Spring Harbor Laboratory said it was reacting to Watson's remarks in a television documentary aired earlier this month. In the film, Watson said his views about intelligence and race had not changed since 2007, when he told a magazine that he was "inherently gloomy about the prospect of Africa" because "all our social policies are based on the fact that their intelligence is the same as ours — where all the testing says not really." In the 2007 interview, Watson said that while he hopes everyone is equal, "people who have to deal with black employees find this is not true."'

47. It should be noted that the racist memes and comments that drew comparisons between the fossils and Naledi Pandor were circulated by both "white" and "black" Twitter users. One can account for this circumstance by noticing that the minister has been treated with suspicion by sections of the South African polity apparently due to her educational achievements, accent, and appearance. Social media commentary about Pandor is routinely inflected with both misogyny and homophobia. The minister, it must be said, has never identified as homosexual.

48. Constraints preclude any critical reflection here on the ways in which species meanings informed 'the invention of "the homosexual"' (Jackson 2013:678) and the production of racialised gender differences (Coetzee 2018:13) each of which reverberate in the *Homo naledi*/Naledi Pandor comparisons.

49. I refer to Harari's book because of its popularity. It has remained on bestseller lists since the time of its publication in 2015; according to The Guardian's Review (29 December 2018) magazine, it was the ninth bestselling book in the United Kingdom across all categories in 2018.

50. Quoted in Chernick and Dipa (2015:1)

51. Quoted in Germaner (2015:1).

52. Quoted in Germaner (2015:1).

53. Refer also to De Robillard and Lipschitz (2017).

54. See also Kim (2015).

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55. Germaner (2015).

56. It is striking that in his book-length discussion of the *naledi* discovery, Berger, with Hawks, (2017:209-211) does not make any reference to the controversy delineated in this article. Furthermore, the word race does not appear in the book's index.

57. *Wits Review* (2018:16).

58. In 2016 Berger was named one of *Time* (2016) magazine's '100 most influential people'.

REFERENCES

Arsenault, J. 2013. Queer desire and the men of the nation: reading race, masculinity and South African national identity in John Greyson's *Proteus. Safundi: The Journal of South African and American Studies* 14(1):37-58.

Berger, L & Hawks, J. 2017. *Almost human: the astonishing tale of homo naledi.* Johannesburg and Cape Town: Jonathan Ball Publishers.

Berger, L. 2018. Piecing together a new human relative. *National Geographic Science* December/January:84-92.

Boisseron, B. 2018. *Afro-Dog: blackness and the animal question.* New York: Columbia University Press.

Bonner, P, Esterhuysen, A & Jenkins, T (eds). 2007. *A search for origins: science, history and South Africa's 'Cradle of Humankind'*. Johannesburg: Wits University Press.

Braidotti, R. 2013. *The posthuman*. Cambridge: Polity Press.

Chernick, I & Dipa, K. 2015. Fossil team fights back. *The Star.* 11 September:1.

Chen, MY. 2012. *Animacies: biopolitics, racial mattering, and queer affect.* Durham: Duke University Press.

Coetzee, A. 2018. Why tackling sexual violence is key to SA's decolonisation project. *The Star.* 23 February:13.

Deckha, M. 2012. Toward a postcolonial, posthumanist and feminist theory: centralizing race and culture in feminist work in nonhuman animals. *Hypatia* 27(3):527-545.

Deckha, M. 2013. Welfarist and imperial: the contributions of anticruelty laws to civilizational discourse. *American Quarterly* 65(3):515-548.

De Robillard, B & Lipschitz, R. 2017. Race and "the animal" in the post-apartheid 'national symbolic'. *Image & Text* 30:73-93.

DOI: http://dx.doi.org/10.17159/2617-3255/2018/n32a15

Douthwaite, JV. 2002. *The wild girl, natural man, and the monster: dangerous experiments in the age of enlightenment.* Chicago & London: The University of Chicago Press.

Dubow, S. 2007. White South Africa and the South Africanisation of science: humankind or kinds of humans?, in *A search for origins: science, history and South Africa's 'Cradle of Humankind'*, edited by P Bonner, A Esterhuysen & T Jenkins. Johannesburg: Wits University Press. [page numbers]

Farber, T. 2018. Making sense of 300 000-year-old bones of contention. *Sunday Times* 4 February:7.

Germaner, S. 2015. Fossil race row rages: 'naledi is unrelated to apes,' assures professor. *The Star* 14 September:13.

Goldberg, S. 2018. To rise above the racism of the past, we must acknowledge it. *National Geographic* April 2018:8-10.

Greyson, J & Lewis, J (dir). 2004 [2003]. *Proteus*. [Film]. Strand Releasing.

Harari, YN. 2015. *Sapiens: a brief history of humankind*. New York: Harper.

Haraway, D. 1989. *Primate visions: gender, race, and nature in the world of modern science.* New York & London: Routledge.

Haraway, D. 1991. *Simians, cyborgs, and women: the reinvention of nature*. New York & London: Routledge.

Haraway, D & Wolfe, C. 2016. *Manifestly Haraway*. Minneapolis: University of Minnesota Press.

Hemmer, N. "Scientific racism" is on the rise on the right. But it's been lurking there for years. [O]. Available: https://www.vox.com/the-big-idea/2017/3/28/15078400/scientific-racism-murray-alt-right-black-muslim-culture-trump. Accessed 8 August 2018.

Jackson, ZI. 2013. Animal: new directions in the theorization of race and posthumanism. *Feminist Studies* 39(3):669–685.

Katz, JL. 2016. Queer entanglements: postcolonial intimacies, spaces and times in Greyson and Lewis's *Proteus* (2003). Masters Thesis. Johannesburg: University of the Witwatersrand.

Kesibe, W. 2017. Colonial History rooted in museums. 13 August. *Independent*. [O]. Available: https://www.iol.co.za/capetimes/opinion/colonial-history-rooted-in-museums-10775526 Accessed 15 August 2017.

DOI: http://dx.doi.org/10.17159/2617-3255/2018/n32a15

Kim, CJ. 2010. Slaying the beast: reflections on race, culture, and species. *Kalfou* (Inaugural issue, Spring):57-74.

Kim, CJ. 2015. *Dangerous crossings: race, species, and nature in a multicultural age.* New York: Cambridge University Press.

Kim, CJ. 2016. Murder and mattering in Harambe's house. *Politics and Animals* 2(Fall):37-57.

Kim, CJ & Freccero, C. 2013. Introduction: a dialogue. *American Quarterly* 65(3):461-479.

Kolbert, E. 2018. Skin deep; what is race, exactly? Science tells us there is no genetic or scientific basis for it. Instead it's a largely made-up label, used to define and separate us. *National Geographic*. April:28-41.

Kluger, J. 2016. Lee Berger. 21 April. *Time*. [O]. Available: http://time.com/collection-post/4302420/lee-berger-2016-time-100/ Accessed 15 December 2018.

Lipschitz, R. 2014. Animality and alterity: species discourse and the limits of "the human" in contemporary South African art. PhD Thesis. London: Goldsmiths, University of London.

Lipschitz, R. 2018. Abjection, in *Edinburgh companion to animal studies*, edited by R Broglio, U Sellbach & L Turner. Edinburgh: Edinburgh University Press:13-29.

Lundblad, M. 2013. *The birth of a jungle: animality in progressive-era U.S. Literature and culture.* New York: Oxford University Press.

Lutz, C & Collins, J. 1991. The photograph as an intersection of gazes: the example of National Geographic. *Visual Anthropology Review* 7(1):134-149.

National Geographic. 2016. *Discovering Homo naledi* [Online Video]. Available: https://video.nationalgeographiccom/video/ng-live/160627-sciex-nglive-berger-homo-naledi-part1-lecture Accessed 30 May 2018.

Ramsey, L & Lee, S. 2018. Humans share almost all of DNA with cats, cattle and mice: more than half our genetic code is the same as a banana's. 6 April. *Independent*. [O] Available: https://www.independent.co.uk/news/science/human-dna-share-cats-cattle-mice-same-genetics-code-a8292111.html Accessed 4 June 2018.

Salzani, C. 2017. From post-human to post-animal: posthumanism and the 'animal turn'. *Lo Sguardo* 24(11):97-109.

DOI: http://dx.doi.org/10.17159/2617-3255/2018/n32a15

Sample, I. 2017. New haul of Homo naledi bones sheds surprising light on human evolution. 9 May. *The Guardian*. [O]. Available: https://www.theguardian.com/science/2017/may/09/new-haul-of-homo-naledi-bones-sheds-surprising-light-on-human-evolution
Accessed 6 August 2017.

Serrao, A. 2018. Face of our past. *The Star* 10 September:1.

Shreeve, J. 2015. Mystery man: a trove of fossils found deep in a South African cave adds a baffling new branch to the human family tree. *National Geographic.* October:30-57.

Smillie, S. 2018. A small-brained relative is about to shake up our family tree. 16 May. *The Daily Maverick*. [O]. Available: https://www.dailymaverick.co.za/article/2018-05-15-a-small-brained-relative-is-about-to-shake-up-our-family-tree
Accessed 16 May 2018.

Stobie, C. 2016. 'Di ta go; ons het dit gedoen; we did it': Khoekhoe ethnicity, sexuality and temporalities in *Proteus. Critical Arts* 30(6):915-930.

The New York Times. (2019). 'Lab revokes honors for controversial DNA scientist Watson.' 11 January. *The New York Times*. [O]. Available: https://www.nytimes.com/aponline/2019/01/11/science/ap-us-sci-scientist-honors-revoked.html
Accessed 15 January 2019.

witsLeader. 2016. *Homo naledi* fossil discovery a triumph for open access education (1):7.

Wits Review. 2018. Rising star cave comes to the lone star state. (40):10.

Wolfe, C. 2010. *What is Posthumanism?* Minneapolis: University of Minnesota Press.

Wong, K. 2014. Tiny genetic differences between humans and other primates pervade the genome. *Scientific American*. [O]. Available https://www.scientificaamerican.com/article/tiny-genetic-differeces-between-humans-and-other-priates-pervade-the-genome
Accessed 5 June 2018.

DOI: http://dx.doi.org/10.17159/2617-3255/2018/n32a15