Fossils, Literature, and the Origins of Race in the Americas: Museum Writing and the Poetics of Display

By

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Para mi madre, Liana Magalí Varela Mereles,
que siempre está cuidando a sus hijos.

Para mi hermano, Alexis Joaquín Varela Mereles,
que siempre está apoyándome.

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Introduction

This study reveals how and why fossils exhibited in literary works surprised their authors, generating alternate ways of conceiving the history of humans and other animals in the Americas. My baseline question is this: what are the consequences of using fossils alongside literary and museum studies to construct the nature of race and the nature of life? While studies on fossils abound in scientific disciplines and the history of science, my project studies their presence in relation to literature and museums. It specifically examines the presence of fossils in nineteenth-century literature, arguing that human and nonhuman ancient bones are more accurately understood if analyzed at the intersection of museum, literary, and critical race studies.

In what follows, I consider fossils as private and public surfaces on which paleontology becomes an ekphrastic experience, or a literary artifact. This opens up new pathways to understanding how fossils themselves signify. Thus, the fossil in a private cabinet of curiosities or in a public museum brings out the dead—organic life before human existence. Nonetheless, fossils in art, poetry, and avowedly scientific works are elusive, indirect, and affective in their inhuman presence and agency. The layered and frayed meanings of fossils allow me to link the prehistoric with the posthuman in literature, and with indigenous and African diasporic spaces.

At the center of this study are works produced by three intellectuals who wrote about fossils in three different geographic locations: essayist Domingo Sarmiento (Argentina), poet Antônio Gonçalves Dias (Brazil), and novelist Francisco Calcagno (Cuba). Each of these writers, this project contends, engaged in what this project calls *museum writing*. Museum writing is defined here as a poetics of display where fossils ekphrastically appear as specimens that support but also outsmart these authors' theories of racial origins. It thus reflects on a certain intimacy of

trust and value in consumers of natural history both in the nineteenth century and today. More broadly, it presents a pressing need to evaluate the ethics and aesthetics of newly discovered origins, unexpected genetic kinships, and prehistorical migration routes exhibited in natural history museums.

Fossils have tremendously influenced Western thought in its branches of science, history, philosophy, and religion. As Europe expanded to other continents with the advent of colonialism, it also questioned its own definitions about the human species. It also questioned racial classification within the human species, and how humans perceive other animals, some of which were extinct or unknown. Ancient bones created both problems and solutions for intellectuals in the colonial period of British and Spanish America. A compelling example is Noah's Flood. In his now classic study *The Legend of Noah*, Don Cameron Allen postulates that the legend of Noah in relation to the fossil record has caused quite a headache for seventeenth and eighteenth-century scholars. The reason lies in that they tried to accommodate their findings in geology with the Bible's status as the main authority for science.

As intellectuals of the time started to delve into questions such as the origin of humanity, proving the existence of the Flood through scientific reasoning also became an obsession. To simply dismiss it as myth would have put into question the veracity of Genesis as a genuine source of science. Consequently, Noah's Flood became an integral element of natural history to understand the tenuous relationship between religion and the history of science. By examining the Bible as they plunged into Earth's geology, these intellectuals also probed questions about the Earth's age formation, humankind's first appearance, and why certain species (like biblical giants) no longer walk among us.

Investigating how the Flood came to be understood by prominent scientists at the time reveals the ever-shifting lines of the natural and humanistic sciences throughout the seventeenth and eighteenth century. Allen starts his discussion on diluvialism by affirming that the desire to verify its occurrence was the mythological accounts from indigenous populations on the so-called New World and other colonized lands around the globe. As scholars became familiar with the mythologies of different non-Western cultures, they sought to corroborate them by using the Bible. Although the confirmation of the Flood and its influence on Earth had been a common interest for scholars during the Middle Ages, colonialism brought forth the opportunity to authenticate the universality of the deluge.

At the core of debates concerning Noah's Flood were fossils, especially marine fossils found in areas far from the ocean because they could potentially prove that there was once a global diluvium. On the skeptical side, however, were those who claimed that fossils were not actually the remains of once-living creatures, but "wonders of nature" or minerals that closely resembled organisms. Allen specifically focuses on the way in which certain seventeenth-century British theologians – Matthew Hale, Thomas Burnet, John Ray, John Woodward, and William Whiston – dealt with the problem of fossils to explain their own versions of what the antediluvian earth looked like, how the Flood occurred, and its consequences on the Earth's landscapes.

For Hale, for example, marine fossil shells in mountains testified that there was once a universal Flood that covered the entire Earth in water. For Ray, on the other hand, fossils were much more problematic to explain, since many of them were specimens with no modern relatives, which in turn would suggest the existence of a missing link in the great chain of being. Yet, he believed that fossils were neither *lusus naturae* nor natural deformations resembling

organisms because admitting so would contest the biblical notion that nature produces everything for a determined end. For Allen, fossils were a conundrum for Ray because he could not interpret them in accordance with his biblical beliefs: "For Ray the fossils are no proof of the universality of the Flood; they are rather something disturbing, something impossible to explain."[1] Woodward, for his part, believed that during the Deluge the Earth's solid matter dissolved in the water and was later settled by means of stratification along with the fossil shells. Whiston, in contrast, concluded that the deluge was caused by a comet that traveled near the Earth and caused a massive high tide with extended rain coming from the comet's tail.

The ardent debates that surrounded fossils and their scientific as well as biblical interpretations were part of a larger framework involving intellectuals' methodologies of research that reached a new level in the seventeenth century. According to Rhoda Rappaport, during the seventeenth century geology developed as a field that contested the primacy of mathematics by introducing the inductive form of reasoning within empirical research. This method opposed the deductive approach of mathematics espoused by Descartes and in which certain premises about the world were assumed to be universally true and incontestable.

Rappaport affirms that geologists and historians, in the form of civil and natural histories, shared a desire in the seventeenth century to explain Earth's history and its connection to humankind in both scientific and religious terms. She writes that "methodically, practitioners of both sought to eschew personal bias by a focus on facts. Just as historians valued 'monuments,' geologists regarded fossils and rocks as unbiased evidence about the past."[2] She finds that

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[1] Don Cameron Allen, *The Legend of Noah: Renaissance Rationalism in Art, Science, and Letters* (Champaign: University of Illinois Press, 1963), 92-112.

[2] Rhoda Rappaport, *When Geologists were Historians, 1665-1750* (Ithaca: Cornell University Press, 1997), 94.

geologists repeated historians' vocabulary as they discussed fossils in terms of monuments and considered biblical text as historical evidence in the endeavors to discover Earth's genealogy. It was by following this approach that geologists debated with other scientific, humanistic, and theological disciplines in order to reconcile the Flood with actual evidence, to the point that the universal Deluge was taken to be a fact.

"At stake, then," Rappaport states, "was not only geological information and its interpretation, but also the status of Genesis as a work of history. For all its peculiarities, the story of the Flood possessed the attributes of historical narrative: it was factual, detailed, and precise, from the dimension of the Ark to the number of days of rains."[3] Scientific, humanistic, and theological views about the Earth's history then found common ground in the Flood through fossils. Additionally, they also started to appear elsewhere in the form of significantly large bones, which brought another biblical character on the spotlight: giants.

Allen's and Rappaport's respective studies of scientific reasoning around fossils and the universal Deluge barely mention the Iberian world, in which studies on fossils were being undertaken. Because Spain had very strong and grounded Catholicism both in the metropolis and its colonies, supporting the Bible's stories on fossils (rather than contesting them) was the obvious route. In Juan de Torquemada's *Monarquia Indiana*, for instance, the author mentions not only indigenous myths equivalent to that of the Flood, but also large fossils. Torquemada writes that large bones found at several sites in regions like México and Perú were actually the bones of giants who died both before and after the Flood. In chapter 13 of Book 1, titled "Que trata de los gigantes, primeros moradores de estas indianas tierras antes de los tultecas," ("Which

[3] Ibid., 172.

focus on giants, first dwellers of these Indian lands before the tultecans"). Torquemada dives into the reasonings behind the discovery of the big bones and concludes that they are, in facts, from giants. He argues that the Americas was first populated by these creatures, whose existence is well documented in the Bible, and who came into being from sexual encounters from angels and humans.

Their bones, he informs us, were frightening for their enormity: "hemos visto sus huesos tan grandes y desemejados que pone espanto considerar su grandeza."[4] He specifically mentions a large and heavy molar that helps him to confirm the giants' former existence either before or after the Deluge: "está ahora la duda en si los huesos que ahora parecen de estos desemejados gigantes fueron de antes del Diluvio o después de él, para cuya inteligencia digo que he tenido en mi poder una muela, que para estar entera le falta poco y es dos veces tan grande como el puño y tan pesada, que tiene de peso más de dos libras."[5] Torquemada textually exhibits and hyperbolizes the molar in his writing to highlight the giants' great size and weight. The molar becomes the imposing synecdoche of intimidating creatures that no longer walk on Earth.

Torquemada's case was not the only one in Spanish colonial texts accounting for giant bones. José Torrubia, a towering figure in the history of paleontology in Spain, used *Monarquia Indiana* as a source to discuss the existence of giants. In his *Aparato para la Historia Natural Española* (1754), Torrubia dedicated chapter 10, titled "Gigantologia Española," exclusively to big fossils found in Spain and the Americas. Francisco Pelayo indicates that Torrubia's text had

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[4] Juan de Torquemada, *Monarquía indiana de los veinte y un libros rituales y Monarquía indiana, con el origen y guerras de los indios occidentales, de sus poblazones, descubrimiento, conquista, conversión y otras cosas maravillosas de la mesma tierra*, vol. 1 (México City: Universidad Nacional Autónoma de México, 1975), 52.

[5] Ibid., 53.

an acceptable circulation in Europe, "siendo reseñada en revistas de crítica literaria francesas e inglesas de la época y traducido al alemán y el capítulo sobre los gigantes al francés y italiano."[6] For this reason, it is an important chapter in the history of Spanish paleontology in the eighteenth century.

Yet, while studies on fossils abound in scientific disciplines and the history of science, an examination of their presence in relation to the ethics and aesthetics of literature and museum exhibition is missing. Current scientific findings reveal groundbreaking information about the ancient history of the so-called New World, but the topic itself was not new to the nineteenth-century authors featured in this project. Although it seems unusual to compare these three particular writers, a major point of similarity is their standing as important figures of their respective homelands. Yet, a major point of difference is precisely their distinct national backgrounds. Sarmiento was president and citizen of a republic, Gonçalves Dias wrote poetry under the auspices of a monarchy, and Calcagno lived in one of the last Spanish colonies in the world.

Analyzing how they portray fossils must also include an analysis of their uses of literature as a museum, for as Martin J. S. affirms, "without the establishment of a tradition of museum preservation, it is difficult to imagine how a science of palaeontology could have emerged."[7] I thus interrogate literature on fossils as a site of textual exhibition in which paleontology turns into an exercise about ekphrasis, or a literary response to a visual work of art.

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[6] Francisco Pelayo, *Del diluvio al megaterio: los orígenes de la Paleontología en España* (Madrid: Consejo Superior de Investigaciones Científicas, 1996), 15.

[7] Martin J. S. Rudwick, *The Meaning of Fossils: Episodes in the History of Palaeontology*, second edition (Chicago: The University of Chicago Press, 1976), 12.

I approach the fossil in a museum as an object formed prior to human existence, and as a human-made and textual artistry that is elusive, indirect, and affective in its inhuman presence.

Chapter one centers on the poetics of exhibition in Brazilian poet and ethnographer Antônio Gonçalves Dias's work. Throughout his life, Gonçalves Dias was associated with the literary movement of *Indianismo* – an artistic current that applied an exoticized image of Pre-Columbian populations to uphold a distinct national identity. Most of his poetry collection centers on a vision of extinct or vanished civilizations in Brazil as a result of colonization. Even though there are countless critical studies on this poet's affiliations with Indianismo, an examination of his poetry in light of fossils and museum studies remains to be written. This is remarkable given his tendencies to portray indigenous populations as rocks. My chapter thus studies how Gonçalves Dias uses poetry's curatorial powers to assemble an exhibition of prehistoric entities akin to fossils. To do so, it uses as cases in point his *Poemas americanos* (*American Poems*), his unfinished epic poem *Os Timbiras* (*The Timbiras*), and his ethnographic treatise on the transcontinental migration of the first populations in the Americas, titled *Brasil e Oceania* (*Brazil and Oceania*).

Chapter two shifts the focus from the Brazilian poet to the Argentinian statesman Domingo Sarmiento, former president of his homeland and a key figure in Hispanic studies. Unlike Gonçalves Dias, Sarmiento felt complete disgust for indigenous people, and beginning in the 1860s, encouraged their large-scale genocide while whitening Argentina through immigration. Nonetheless, he saw them also as living fossils whose artefacts and lifestyles could reveal much about the origins of race, especially Aryanism in the Americas. He had deep interests in natural history museums and the way that nonhuman fossils could reveal a hidden geographic history not only of race, but of former wildlife in the Americas.

While there is an impressive bibliography on Sarmiento and his views on racism and transnational influences, his approach to race in relation to extinct species, fossils, and museum writing needs greater attention. Indeed, his interests in Pleistocene animals such as the giant sloth Megatherium, the large armadillo-like Glyptodon, the ferocious saber-toothed Smilodon, and the South American horse *Hippidion* were directly related to his theories about racial origins and first peoples. I approach Sarmiento using a lens that intersects extinct-animal studies, critical race studies, and museum studies in order to create a deeper analysis of his nonfictional work. My analysis privileges his book *Conflictos y armonía de las razas* (*Conflicts and Harmony of the Races*), his conference presentations, and his biography of Colonel Francisco Javier Muñiz, a pioneer in Argentinian paleontology. Additionally, chapter two considers Sarmiento's intellectual connections with three of the most representative scientists of the time: paleontologists Hermann Burmeister (founder of the Buenos Aires Museum of Natural Sciences), Florentino Ameghino, and archaeologist Francisco Moreno, who was also the first director of the La Plata Museum of Natural History.

Chapter three shifts direction, this time from South America to Cuba in the last decades of the nineteenth century. It examines Francisco Calcagno, a distinguished Cuban writer and abolitionist who wrote an intriguing novel entitled *En busca del eslabón* (*In Search for the Missing Link*). The plot focuses on the search for the yearned missing link or common ancestor between humans and other primates. Published in 1888, the novel has received scant critical attention despite bringing forth fundamental topics surrounding the origins of human races and interspecies relations. It centers on a former U.S. Civil War Confederate soldier and his voyage around the world in search for the common ancestor, designated as Miss Link, as he is joined by his Virginian family as well as a Cuban man with his former slave. Traveling aboard the ship

Antropoide, the main protagonist and the other characters embark on a journey that takes them to Brazil, Africa, South Asia, and Oceania. Along the way they find what they believe to be "walking fossils" in the form of nonwhite and nonhuman Others.

In addition to being steeped in the scientific advancements around natural history in this time, Calcagno was the son-in-law of Felipe Poey, the leading Cuban natural historian and museologist of the nineteenth century. A renowned ichthyologist, Poey published extensively on Cuban flora and fauna, human evolution, and even authored several literary pieces. By studying *In Search for the Missing Link* in conjunction with sociocultural contexts and scientific findings at the time, this chapter reveals the ways in which the novel configures museum writing, the poetics of display, and the assemblage of the fossil Others – and how the latter ultimately outmaneuver their authors.

Gonçalves Dias, Sarmiento, and Calcagno assembled and scripted prehistoric bones and life in a manner resembling a museum, an institution that became fully cemented in the public sphere by the nineteenth century. Unlike the elitist, select, and private cabinet of wonders, the public museum became an extension and an integral part of nation-building as it was entrusted with charting the past in preparation for the modern future. To this day, natural history museums are delegated with the daunting task of constantly anchoring these slippery bones into defined paradigms. Like curators of these institutions, Gonçalves Dias, Sarmiento, and Calcagno used literature as a public institution of trust to offer compelling theories of race. In doing so, ancient bones became the protagonists of their national and racial projects.

The theoretical underpinnings that support my readings of each of these intellectuals' fixations with fossils and museums come from the ontological studies on vibrant matter and assemblage theory elaborated by Jane Bennett and Manuel DeLanda, respectively. According to

Bennett, matter possesses a level of vibrancy and agency that allows for a flourishing of intimacy between organic and inorganic things. Vital materiality is "*an active becoming, a creative not-quite-human force capable of producing the new*."[8] Objects and subjects enter into a shared enmeshment as they become heterogenous compounds of vibrancy. Following a similar line, DeLanda writes that assemblages are made of singularities that possess "relations of exteriority" and produce contact between components without foregoing their autonomy."[9]

On the one hand, Bennett's approach to matter informs my reading of fossils as active agents that influence and even outwit the very same authors who write about them. On the other, DeLanda's theory – itself an extension and revision of Gilles Deleuze and Félix Guattari's concept of assemblage – reinforces my approach to the natural history museum as a public institution. Particularly, it is one that assembles different exterior elements, such as fossils, into ever renewing and fictional connections between objects and subjects. My project then places the museum alongside literature, merging two concomitant modes of assemblages that showcase prehistorical, nonhuman, and racialized Others through their vibrant fossils.

As important for the development of this project is the use of and insight that ekphrasis provides for a more precise understanding of museum writing. From the Hellenic Greek *ἔκφρασις* (description) and Ancient Greek *ἐκφράζειν* (to recount), ekphrasis has conventionally been defined as the description of a visual image, especially works of visual art. Its earliest uses were in classical rhetoric in which the rhetor centered and amplified certain features of a mental image to convince audiences. It is therefore commonly compared to Aristotle's energeia or tropes of animation that underline the power of words to make images come alive in the mind of

[8] Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham/London: Duke University Press, 2009), 118, emphasis in original.

[9] Manuel DeLanda. *Assemblage Theory* (Edinburgh: Edinburgh University Press, 2016), 12.

speakers and audiences. It was also an exercise of memorization in which the speaker drew arguments from a mental image, such as a wheel, that facilitated the storage and use of information.

Ekphrasis later acquired a powerful presence in modern poetry for its tradition to poetically portray works of visual art or, in Horace's words, *ut pictura poesis* (as is painting, so is poetry). This fruitful connection prompted literature, painting, and even music to be labeled as "sister" arts due to their similar ability to present subject matters for instructive and affective purposes. One should also note, however, that ancient and even modern uses of ekphrasis are not limited to two-dimensional works, but also include sculpture, architecture, landscapes, and even animals.

A fundamental dimension of ekphrasis is its dialectical engagement between word and image, and how literature responds by focusing or amplifying ethical and aesthetical dimensions of nonverbal elements that surround us. In his study of John Keats' poem "Ode on a Grecian Urn," Leo Spitzer defined ekphrasis as "the reproduction through the medium of words of sensuously perceptible *objets d'art*."[10] That is, it is a verbal transposition of a visual work in that it uses language to amplify the sensuality of perceiving a work of visual art. Of Keats's specific case, Spitzer highlights how the poet's sensuous apprehension of the urn led him to decipher a particular message which he poetically conveyed to his readers. Keats, he states, "turned a lengthy enumeration of factual detail, difficult to visualize, into one continuous, emotion-laden address to the urn and into a dramatic search for the message contained therein."[11]

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[10] Leo Spitzer. "The 'Ode on a Grecian Urn,' or Content vs. Metagrammar." *Comparative Literature* vol. 7, no. 3 (1955), 207.

[11] Ibid., 218.

This same trope within ekphrasis – its rewarding capacity to turn mere description into an affective search for a message – would also be a major theme in Murray Krieger's *Ekphrasis: The Illusion of the Natural Sign*. Murray most notably argued for poetry's capacity to freeze time like a visual work of art, providing readers with a similar experience as they would have in front of an artwork. Ekphrasis was for him the desire and aversion of the "natural sign," or an ambivalent position in language to both portray the visual and surpass it altogether. Instead of emulating the natural, it could go farther by opening the "free-ranging imagination" to enhance an object's quality, give it a voice, and bring out its moral dimension.[12]

James Heffernan also became an important scholar who commented on the efficacy and imaginative rewards of ekphrasis, demarcating it as a sustained activity on the difference between the real and its representation. Famously defining it as "the verbal representation of visual representation," he argued that one of its major contributions was unveiling the illusions and deceptions of the whole process. It revealed that transposition of visual art into text was much more than an innocent act of description: it was also an act of narration. Consequently, ekphrasis expresses the paragonal tension between word and image as two rival types of representation, "between the driving force of the narrating word and the stubborn resistance of the fixed image."[13] It also sets the stage for both the veneration of the image (iconophilia) and disdain towards it (iconoclasm), or the replication of the image's stupefying power in writing and its displacement by the shifting powers of language.

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[12] Murray Krieger, *Ekphrasis: The Illusion of the Natural Sign* (Baltimore: The Johns Hopkins University Press, 1992), 11.

[13] James Heffernan, *The Museum of Words: The Poetics of Ekphrasis from Homer to Ashbery* (Chicago: The University of Chicago Press), 6.

Heffernan states from a contemporary standpoint that the title selected for his work, *The Museum of Words*, serves as an invitation to think about how museums and words display artworks collaboratively by the end of the twentieth century. It "gains a special resonance in this century, when ekphrastic poems typically evoke actual museums of art along with the words they offer us: the whole complex of titles, curatorial notes, and art historical commentary that surround the works of art we now see on museum walls."[14] To disengage ekphrasis from its curatorial potential would be to miss the point that language and image participate not just in a paragonal relationship, but also a symbiotic one as they influence each other. As W. J. T Mitchell remarks, the dichotomy between the verbal and the visual break down to reveal that meaning generates from this interplay because all media are mixed media.[15]

On his part, Mitchell utilizes the interplay between words and images to theorize his own conception of ekphrasis as a literary device that is ambivalent precisely because our capacity to distinguish between words from images, or subjects from objects, is ambivalent. Using his tripartite approach to ekphrasis as hope, fear, and indifference, he affirms that its existence "is grounded in our ambivalence about other people, regarded as subjects and objects in the field of verbal and visual representation."[16] Furthermore, this uncertainty between image and word or between object and subject is heightened if the audience is taken as a variable in the equation.

Otherness is embodied then in the object/subject described and the reader for whom the author describes it. Ekphrasis then becomes an expression of trust and intimacy as the author seeks to "accurately" portray for readers something that will create a significant emotional and

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[14] Ibid., 8.

[15] W. J. T. Mitchell. *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: The University of Chicago Press 1994), 5.
[16] Mitchell, *Picture Theory*, 162.

moral impact. This process, Mitchell explains, even extends to the racialized other that must acquire a language to challenge and distort the stereotypical image set forth by the white gaze. Ekphrasis is therefore under certain circumstances already a matter of racial otherness. It is also a form of insubordination by making the "object" strike back and reveal the hopes, fears, and anxieties inscribed in the whole process.

Going farther than Mitchell did, one of the main goals of this project is to reveal how museum writing challenges not only constructions of race but also constructions of what it means to be human. More importantly, how it presents critical race studies and posthuman studies as two modes of thought inextricable from the other because they ask similar questions about the past, present, and future of both racialized communities and the human species. Doing so requires that I extend the definition of ekphrasis not just to issues of representation, but also of cultural performance. By "performance," I mean a focusing not so much on the accuracy of representation itself but what such representation accomplishes as it challenges accepted meanings and values in the public domain.

On June 2018, the journal *Poetics Today* released a special issue titled "Ekphrasis in the Digital Age: Responses to Images," which focused on the relevance of ekphrasis in the twentieth-first century. The special issue's editor, Renate Brosch, opened her introduction by declaring the insistence of revising the definition of ekphrasis, steering away from its representational attributes to its performative potential. This shift, she proclaimed, is necessary due to the exponential increase of digital images that have redefined the very meaning of image itself. Brosch then proposes that a performative understanding of ekphrasis will yield more a more insightful examination about hybrid practices that are currently taking place. What used to

be an assumed aim of ekphrasis – the description of an artwork – has been displaced by modes of writing that interrogate what an artwork is and what it does in various communities.

This has also permitted uses of ekphrasis to question ways of seeing and the scopic regimes that regulate them, prompting Brosch to see ekphrasis as a form of performance rather than just representation. Defining it as "a literary response" to images, she highlights its effectiveness for eliciting a response process involving various media and projections. She states that ekphrasis as performance locates an audience that "looks both ways: toward the public domain in which any form of expression must seek resonance as well as toward the experiential reading process in the response to an ekphrastic text."[17] The main platform for audiences to perform this doubly staged process is in the digital realm, where an abundance of images across transoceanic regions and media has marshaled another way to select and interpret visual inputs. These include videogames, virtual reality, and online communities, where people experience and perform images while also textually communicating with one another.

A dimension of ekphrasis that neither Brosch nor the authors discussed in the special issue is the interaction between ekphrasis and scientific fields. That is, those fields that heavily utilize images to showcase their findings to the general public through natural history museums and other publication venues. My dissertation addresses this gap by placing literature and museum studies in correspondence with paleontology and its neighboring fields, such as anthropology and archaeology.

In the specific case of Colonial Latin America, ekphrasis was a recurring rhetoric employed by European scientists and theologians who traveled to the "New World" in search for

[17] Renate Brosch. "Ekphrasis in the Digital Age: Responses to Images." *Poetics Today* vol. 39, no. 2 (2018), 227-228.

new knowledge. They needed to make the American fauna and flora "come alive" in their texts for an European audience that may never have traveled to the New World. Margaret Ewalt, for instance, explores the concept of wonder in Jesuit missionary expeditions that participated in the production of knowledge during the Enlightenment. Rather than positioning wonder and scientific discovery as opposite to each other, Ewalt argues that religious scholarship from the Hispanic Enlightenment used scriptural authority and divine intervention in conjunction with empirical reason. She examines how natural history in José Gumilla's text *El Orinoco ilustrado* (1741-45), utilized certain rhetorical techniques, such as ekphrasis and amplification, to represent a vision of the wildlife in the Americas that was both scientific and emotional. Gumilla's use of ekphrasis even influenced Humboldt "as the most important strategy for displaying objects in a rhetorically constructed natural history cabinet."[18] My dissertation builds on this textual construction of exhibited artefacts, a rhetorical style that remains present to this day.

Important scientific publications such as *National Geographic* publish almost every week reports and essays on fossil excavations and footprints, explaining what extinct specimens might have looked like or how they might have behaved. These reenactments are affectively charged narratives with important insinuations regarding the importance of recognizing and recording forgotten lives, both human and animal. Science staff writer Maya Wei-Haas published on October 15, 2020, in *National Geographic* an article about a 10,000-year-old trek based on fossil footprints. It discusses a scientific finding lead by Matthew R. Bennett, a geologist at Bournemouth University in England, whose team excavated the delicate footprints, photographed them, and made three-dimensional models using 3D photogrammetry. The

[18] Margaret Ewalt. *Peripheral Wonders: Nature, Knowledge, and Enlightenment in the Eighteenth-Century Orinoco* (Bucknell: Bucknell University Press, 2008), 185.

discovery reveals that more than 10,000 years ago, a woman or young man carried a toddler in an arduous trek through what is now White Sands National Park, New Mexico.

Wei-Hass's narrative description is visual and affective: the rain "may have pelted the traveler's face as their bare feet slid on the mud."[19] The finding also indicates that a wooly mammoth and a giant sloth strolled close by the two humans. The longest human-trodden path of its age, it has drawn the attention from various members of the scientific community. The article quotes Sally Reynolds, one the team members, affirming that the trackway "gives us a sense of humans within their ancient ecosystem" because, unlike bones, fossilized footprints unveil certain behavioral patterns that have frozen in time. In this case, the prints from the sloth suggest that it stood on two legs because it possibly smelled the humans.

The article also provides an emotionally laden narrative that encourages modern readers to vicariously experience the exhaustion of this ancient human. It asks us to dwell on the thought of walking for miles in an inclement weather and in proximity to formidable animals. Wei-Hass and the scientists conjure from the crumbly footprints a "person" who lived thousands of years ago and whose vulnerable existence needs to be acknowledged and documented. The author and the featured specialists perform an ekphrastic approach on the fossilized human footprints by giving them a voice through language and 3D photogrammetry. Doing so permits this ancient being to announce a story about suffering and persistence that has remained until now forgotten in the archives of sedimentation. The author indicates that by "analyzing the shape, structure, and spread of the tracks the research team unveiled an intimate portrait of one ancient person's walk across the landscape, right down to their toes slipping on the slick surface."[20]

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[19] Maya Wei-Haas, "Incredible details of 10,000-year-old trek revealed in fossil footprint," *National Geographic*, published October 15, 2020, n.p.
[20] Ibid., n. p.

To provide an intimate portrait means to reveal an inward, deep-seated feeling to someone else. It means to establish a closely personal relationship with another by performing an artistic intervention with the ultimate goal of displaying it graphically to an interested audience. This portrait is most readily seen in the paleoart work placed at the beginning of the article. Here we see a prehistoric human being fiercely protecting an infant across a plain during heavy rain and dark thunderstorm. The adult is nervously looking at a figure not captured in the image, which might possibly be the ground sloth. In a relatively distant background two mammoths are also crossing the plain, seemingly unconcerned with the adult and child. We also see that the adult is leaving footprints on the sand, which are presumably the same footprints that will be excavated 10,000 years after by scientists wishing to know more about these mysterious people.

The very classification of these prehistoric humans as "people" is an act of rhetorical *amplificatio*, for it predisposes readers to generate emotional connections with their fossilized footprints. Rather than simply being classified as objects, Wei-Hass invites us to think of them as people who are just like us and who, like us, are complex and vulnerable. Where were they going and where did they come from? While scientists don't know their destination or their origin, the piece highlights the similarities that contemporary human beings share with these ancient individuals. William Harcourt-Smith, a paleoanthropologist at the City University of New York not involved in the study team but who is also featured in the article, remarks that the footprints are "a reminder that these people were just like us. Maybe different individual daily stresses – we don't have mammoths walking around – but they're walking around the landscape in the same way we would."[21] Wei Hass then finishes her article by stating that the research team continues

[21] Ibid., n. p.

its work to uncover a more nuanced vision of the region's former inhabitants, and that "with time, more stories – and certainly more mysteries – will be uncovered."[22]

The use of the specific word "stories" signals that these findings are more than just a listing of discovered facts. They are also emotional narratives and storylines with the power to recalibrate our human sense of being in this planet and relate to each other and across species lines. This affective amplification is precisely what the authors that I study performed in their writings: they centralized fossils by giving them the power to define human races and the human species. Ancient bones were for them matters of fact as much as they were matters of concern, as Bruno Latour would claim, in that they require humanistic and scientific viewpoints.

Although not mentioning paleontology's ekphrastic dimension within museum exhibitions, Derek D. Turner emphasizes that there is in this field an aesthetic component that is inextricable from its epistemic goals. In effect, the author argues that paleontology has aesthetic aims because it develops a sense of place within a geologic era, which in turn leads to better appreciation of fossils from specimens that lived in such era. More broadly, possessing knowledge about something's history affects how we aesthetically approach it. He calls this process historical cognitivism and asserts that paleoasthetics is about developing a sense of place through this process. He also remarks that "our sense of place has much to do with narratives, often including scientific narratives, about what transpired there."[23] Ekphrasis, which centers precisely in providing objects and images with a sense of narrative, may then provide a rich contribution to paleoasthetics.

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[22] Ibid., n. p.

[23] Derek D. Turner. *Paleoasthetics and the Practice of Paleontology* (Cambridge: Cambridge University Press, 2019), 9.

Another important claim that Turner makes is that paleoasthetics also takes place in museums through the arduous work of scientists, preparators, and curators to make fossils appealing by displaying them alongside impactful stories about their origins. Since my project focuses on how authors used their literary works as if they were natural history museums on paper, it it important here to summarie the institutional powers of actual museums. During the colonial period, several cabinets were established throughout Latin America, and one of their main duties was to provide specimens and artefacts to the Metropolis in Madrid and, In Brazil's case, Coimbra and Lisbon.

This process of collection and transportation across the Atlantic contributed to a network of exchange made possible by imperialism. After independence, several Latin American nations and the Brazilian empire began founding museums as a sign of nationalism, tabulating in their catalogues and investigating the natural wonders of their respective territories. An exception was Cuba, which established its first natural history museum while still being a colony. As Irina Podgorny and Maria Margaret Lopes point out, however, this sense of nationalism did not suspend the transnational and even transoceanic relations that museums maintained with each other.[24] In fact, several major museums, such as the Museu Real in Rio de Janeiro and the Public Museum in Buenos Aires, prided themselves of their cosmopolitan undertones, exhibiting collections from many parts of the world.

The identification and exhibition of extinct fauna and flora was therefore due in great part to the networks of exchange established by colonialism and imperialism, which allowed paleontology and similar fields to flourish in the nineteenth century. It is not then surprising

[24] Irina Podgorny and Maria Margaret Lopes, "Filling in the Picture: Nineteenth-Century Museums in Spanish and Portuguese America," *Museum History Journal*, vol. 9, no. 1 (2016), 4.

when Mitchell claims: "Mature nineteenth-century imperialism, with its global reach and archives of living organisms, was a precondition for discovering the true nature of fossils as the relics of extinct life-forms."[25] As such, the museum has garnered critical attention in the last couple of decades as an institution made possible by and affiliated with colonialist agendas and state-sanctioned manipulation of marginalized communities.

Donald Preziosi, for example, asserts that the museum was a fundamental instrument for the nation because it enabled a messianic narrative and the "facticity of its fictions."[26] Using as case studies museums from Britain, Australia, and the United States, Tony Bennett argues natural history museums in the nineteenth century established a regime of visual culture to manage populations through knowledge about the distant past. Burgeoning fields such as paleontology and archaeology allowed nations to use exhibitions with textual interpretations to create an evolutionary history of human nature and society. The modern person was now seen through a geologic lens and archeological gaze alongside objects in natural history museums. "In the process," Bennett writes, "those objects acquired a new depth structure requiring new practices of vision which, rather than looking *at* or *into objects*, were directed along *the relations between* them to discern how the pasts that had been accumulated and sedimented within them from earlier phases of development were carried over into, and built on by, the next phase of development."[27] In the specific case of Argentina and Brazil, Jens Andermann contends that the

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[25] W. J. T. Mitchell, *What do Pictures Want? The Lives and Loves of Images* (Chicago: The University of Chicago Press, 2005), 167.

[26] Donald Preziosi, "Narrativity and the Museological Myths of Nationality," *Museum Studies: An Anthology of Contexts*, second edition, edited by Bettina M. Carbonell (Malden, MA: Wiley-Blackwell, 2012), 84.

[27] Tony Bennett. *Pasts Beyond Memory: Evolution, Museums, Colonialism* (London/New York: Routledge, 2004), 39, emphasis in original.

state developed a new way of seeing that permitted it to become an agent in itself. Under this optic of the state, anyone could potentially be an object of scopic authority under an immaterial and disembodied gaze.[28]

In response to this unpleasant history of colonization and state-sponsored oppression, several scholars in museum studies and other humanistic fields have recalibrated the aspirations of natural history museums. In 2018, Routledge released in conjunction with International Council of Museums an edited collection, titled *The Future of Natural History Museums*, that tackles the opportunities and challenges awaiting natural history museums. In particular, it focuses on the catering to audiences from diverse backgrounds that also possess more advanced knowledge in technology. The collection's editor, Eric Dorfman, is the Director of Pittsburgh's Carnegie Museum of Natural History. In the introduction, he affirms that natural history museums are fighting for a niche in today's society through interdisciplinary and participatory initiatives.[29] This effort to stay relevant stems in great part from a combination of technological and generational factors that has prompted the general public to learn about nature without leaving their homes. In response, natural history museums are trying to find ways to increase active participation from their audiences, inviting them to interpret their collections without being silenced by curators.

One of the contributors is Kara Blond, the Director of Exhibitions at the Smithsonian's Museum of Natural History (NMNH), who states that the use of multimedia and augmented reality is becoming a more permanent method to attracts audiences. "We've drawn visitors closer

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[28] Jens Andermann. *The Optic of the State: Visuality and Power in Argentina and Brazil* (Pittsburgh: University of Pittsburgh Press, 2007), 57.
[29] Eric Dorfman, "Introduction," *The Future of Natural History Museums*, edited by Eric Dorfman (New York: Routledge, 2018), 3.

through touchable models," she writes, "more inviting language in our labels, and more compelling and physically accessible graphics and three-dimensional design."[30] Doing so permits audiences to witness objects being brought to life and placed into context so that they have a more rewarding experience understanding how these objects were made and moved. It also invites museum curators to be more interdisciplinary, steering away from closed fields so that visitors can think "across the natural and cultural world."[31] Along these lines, museums are trying to bring a more personal dimension to the visitor experience, encouraging "first-person descriptions as a critical part of the storytelling process."[32]

This emphasis on the physicality of artifacts, the media employed to augment their physicality, and their resulting storylines are also a central topic in new materialism, especially as it relates to literary studies. Eugenio Donato theorized more than twenty years ago that the museum is a closed space that tries to contain the totality of the world. Both museum studies and literary scholars are increasingly contesting this view, bringing forth an interpretation of matter that actively interacts with language rather than being opposed to it, as Blond intimates in her reassessment of natural history museums. Karen Barad, for example, introduces her concept of *agential realism* by which "matter feels, converses, suffers, desires, yearns, and remembers."[33] For Barad there is no knowing from a distance because we are already entangled with the objects that we study, and agency is never an essence but just an enactment that comes as a result of this

[30] Kara Blond, "Imagining the future of natural history museum exhibitions" *The Future of Natural History Museums*, edited by Eric Dorfman (New York: Routledge, 2018), 104.

[31] Ibid., 109.

[32] Ibid., 109.

[33] "Interview with Karen Barad," in *New Materialism: Interviews & Cartographies*, edited by Rick Dolphijn and Iris van der Tuin (Ann Arbor: Open Humanities Press, 2012), 59.

entanglement. Under agential realism, matter and language are always already inextricable from each other because we, as human beings, are already intertwined with the material world that was here before we became a species.

Another important component within natural history museums is their assemblage of fossils and paradigms of scientific discoveries that mediate how and why we should care about the past. In 1980, Gilles Deleuze and Félix Guattari introduced the term "assemblage" to philosophy and literary studies to analyze the fluid intricacies and heterogeneities of social relations. They describe assemblage as the arrangement of heterogenous parts that are defined by external relations, making it a multiplicity rather than a whole. The elements within assemblages can reorganize themselves into other assemblages infinitely through their addition or subtraction. As Deleuze asserts, in "a multiplicity what counts are not the terms or the elements, but what there is 'between', the between, a set of relations which are not separable from each other."[34]

In this way, they are *abstract machines* by possessing specific external relations rather than just being a thing contained in itself. Thomas Nail explains that the "abstract machine is abstract in the sense that it is not a thing, but it is absolutely real in the sense that the relations that arrange concrete elements are real. It is a machine in the sense that it is defined only by extrinsic relations and not intrinsic relations of organic unity."[35] Assemblages are then abstract machines immanent to this world because its elements change, disengage, and engage with other elements in a concrete manner.

Expanding and reinvigorating Deleuze and Guattari's assemblage theory, DeLanda explores the way assemblages are composed of material entities with the capacity to self-

[34] Gilles Deleuze and Claire Parnet, *Dialogues*, translated by Hugh Tomlison (New York: Columbia University Press, 1987), viii.

[35] Thomas Nail, "What is an Assemblage?" *SubStance*, vol. 46, no. 1 (2017), 25.

organize and influence social and material relations alike. In 1997, he expanded his take on assemblages with the publication of his book *A Thousand Years of Nonlinear History*. Important for the subsequent development of new materialism and speculative realism, this work challenges the view of history as an exclusively textual arena filled with metaphors and ideologies. The author, instead, argues that history is more accurately understood through the interplay of matter and energy that have influenced human populations in the last millennium. They are as much present in geological processes as they are in the construction of economies and languages. Rather than being subdue to human will, matter and energy are self-directed, morphogenetic developments that destabilize Western civilization's view of itself as a teleological, linear history of progress.

One of the examples DeLanda mentions is the origin of vertebrate life that started when minerals incorporated themselves into the flesh of primitive lifeforms, and so they became skeletons. "And yet," he writes, "while bone allowed the complexification of the animal phylum to which we, as vertebrates, belong, it never forgot its mineral origins: it is the living material that most easily petrifies, that most readily crosses the threshold back into the world of rocks. For that reason, much of the geologic record is written with the fossil bone."[36] The fossil is then a self-sustaining assemblage that transpires the boundaries between the mineral and the organic, and narrates the geologic history to which the human species belongs. It combined with other elements to diversify the animal kingdom, giving birth to humans, but it never disavowed the rocks from which it originated.

One of the major contributions that my study makes is to bring assemblages and new materialism into conversation with museum studies and literary studies. The three authors whom

[36] Manuel DeLanda. *A Thousand Years of Nonlinear History* (New York: Swerve Editions, 2000), 27.

I examine here marshaled a vision of literature in direct correspondence with, rather than opposed to, the similarly creative narrative of fossils that were established in natural history museums in the Americas. They understood that literature is, like the museum, an assemblage with a storyline about the beginnings of both human "races" and the human species. Likewise, in referencing, describing, and interpreting fossils, the three authors in this study enacted a definition of ekphrasis as both a form of representation of vibrant matter and as a performative practice that amplified and rewrote the meaning of fossils featured in museums. By ekphrastically showcasing fossils in their works, Gonçalves Dias, Sarmiento, and Calcagno questioned accepted meanings, values, and beliefs inscribed in ways of seeing and approaching natural history. They utilized the power of literature to interrogate scopic regimes as they formulated their own responses to racial and biological theories of origins that were gaining major currency in the nineteenth century. Their works underline the museum as an institution open to the public or at least certain public sectors, a notion that was fully cemented in the Americas by the nineteenth century. Fossils in their writings become activated much like the written text, as a thing, is activated by each and every reader. My activation of their works links them together as still another assemblage, another instantiation of vital matter. This is important at a time in which we are experiencing technological transformations, environmental and medical catastrophes, and the crosspollination of the arts and the sciences outside academia and within it.

Chapter 1: Antonio Gonçalves Dias and the Lyric of Prehistory

On September 2, 2018, an overnight fire destroyed the National Museum of Brazil. Founded in 1818 as the country's oldest scientific institution, half its 20 million artifacts were incinerated and permanently lost, including its entomology and native culture collections. Researchers have so far recovered around 2,000 artifacts from the ashes, such as a samurai mask, a bronze statue of the Egyptian goddess Bastet, and the Angra dos Reis meteorite. The museum's director, Alexander Kellner, reported to the Associated Press that the recovery process is slow and frustrating. He was even asked by an agency to provide proof that the fire actually happened. "I will suffer every day of my life because of this tragedy," he remarked, but also showed some optimism for the museum's reconstruction. Pedro Luiz von Seehausen, an archeologist specialized on ancient Egyptian funerary monuments, also showed some enthusiasm after recovering some Egyptian pieces. These artifacts were brought by order of the imperial family from Egypt to the museum. "We have a moral obligation to collect the pieces, even if they are broken in a million pieces," von Seehausen told BBC. [37]

One particular set of fragments fortunately recovered, albeit in deteriorated condition, were the remains of "Lapa Vermelha IV Hominid 1" or commonly known as "Luzia." When breaking news were appearing in the media about the museum's collapse, the possibility that Luzia's bone could be forever lost immediately garnered international momentum. Luzia was a Paleo-indigenous woman who lived in South America around 11,500 years BCE and who descended from the prehistoric migration group of humans who crossed the Bering strait. In 1974, her bones were recovered by French archeologist Annette Laming-Emperaire and her

[37] Tim Whewell and Jéssica Cruz. "Brazil National Museum: 'Little Surprises' salvaged from the ashes." BBC News, BBC. Published May 11, 2019. https://www.bbc.com/news/world-latin-america-48023691

team. She was nicknamed "Luzia" in honor of the australopithecine Lucy, whose remains were discovered in Ethiopia that same year. Bioarcheologist Murilo Bastos tells that "Luzia was very fragile. So we thought that she would not survive the fire. But she was inside an iron cabinet. I don't know why. That's amazing for us. Maybe she's more powerful than we thought." However, her skull had shattered into several fragments and Bastos had to collect them very carefully. "I was scared," he declared, "because I knew if anything happened with Luzia, it would be my fault. But then when I finished, I felt: "Well, we could save Luzia today." In addition to surviving nearly 12,000 years buried in a cave in Lagoa Santa, MG, she also managed to escape the flames that destroyed now irretrievable things, such as the recordings of extinct indigenous languages.[38] Despite having died thousands of years before colonization in the Americas, Luzia still lives in her broken bones to tell the tale.

When researchers were still unsure about whether or not her remains could be retrieved from the ashes, various media sources decried her likely disappearance as a loss for human history. Kátia Bogéa, president of the Institute of National Historical and Artistic Heritage (Iphan) in Brazil tragically concluded that Luzia had died in a manner similar to Gabriel García Márquez's *Crónicas de una muerte anunciada*: "Uma morte anunciada," she declared, "a gente perdeu nossa memória, nossa historia. A gente não vai ter mais Luzia. Luzia morreu no incêndio."[39] History Channel also published an article on its website that pondered on the effects that her disappearance could have for her fellow patriots. It highlights a patriotic and affective

[38] Ibid., n.p.

[39] Amanda Pupo, "'Luzia morreu', diz presidente do Iphan sobre fóssil." Terra, Terra Networks, S. A. Published September 11, 2018. https://www.terra.com.br/noticias/ciencia/luzia-morreu-diz-presidente-do-iphan-sobre-fossil-no-museu-nacional,5cc6652becb04c11f7afca26d04909e8sjbeoomo.html

rhetoric used to connect individual citizens as a nation/people: "Luzia has become known as Brazil's first woman, winning the hearts of many Brazilians in the process and becoming a national icon of sorts." Moreover, she wrote that "if her remains are confirmed lost, it will come as a huge blow to many of her countrymen, who are already struggling to cope with the museum's destruction."[40]

Mercedes Okumura, who is the coordinator of the Laboratory for Human Evolutionary Studies and lecturer of bioarcheology and human evolution at the Institute of Biosciences at the University of São Paulo, even went so far as to compare Luzia's lost to the destruction of art. "Isso é como se você fosse a Berlim e destruísse o busto de Nefertiti, como se fosse no Louvre e destruísse a Mona Lisa, é o equivalente para a ciência brasileira," she declared. Likewise, Luzia's destruction would also be the loss of a prehistorical icon that placed Brazil front and center in scientific research on the initial population of the Americas.[41]

Okumura's view of Luzia as a scientific Nefertiti bust or a Mona Lisa unleashes a question teeming with intriguing ontological and epistemological possibilities. What if we theorize fossil remains as art? What would we gain if we study art through a paleo-indigenous woman who roamed in what is now Minas Gerais and descended from the first humans who ever set foot in the Americas? More broadly, could natural history also be art history or literary theory? What can artistic creation and scientific discovery or, conversely, artistic discovery and scientific creation tell one another about the human condition? Luzia, after all, is classified as

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[40] Natasha Frost, "Museum Fire May Have Destroyed Western Hemisphere's Oldest Known Human Skull," History Stories, History Channel. Published September 5, 2018. https://www.history.com/news/brazil-museum-fire-luzia-skull

[41] "Especialista compara perda do fóssil 'Luzia' com destruição da Mona Lisa." Noticias, R7, Published March 9, 2018. https://noticias.r7.com/cidades/correio-do-povo/especialista-compara-perda-do-fossil-luzia-com-destruicao-da-mona-lisa-03092018

Homo sapiens who causes as much affective impact on current humans as any noteworthy artwork. Artists and scientists, she tells us, are not that distinct in the making. If she can be a Nefertiti or Mona Lisa, she can certainly be an ekphrastic subject in the realm of the natural sciences.

Ever since Luzia was brought forward from the cave of Lagoa Santa, her status as an icon and fellow Brazilian stirred an array of responses to and theories about origins. Walter Neves, currently a retired professor from the University of São Paulo's Institute of Biosciences, theorized in the late 1990s that Luzia's origins were African. By measuring her cranium, Neves and his team concluded that she belonged to an older migration route (circa 15,000 BCE) that came to the Americas. Specifically, they argued that she shares close morphological proximity with ancient Africans and Australasians, and not with the Asian mongoloids that are similar to current indigenous groups.

In 1998, the *Folha de São Paulo* published an article titled "A primeira brasileira não era uma índia," and a year later *The New York Times* released a piece in which Neves is quoted clarifying some points about Luzia's ancestry. Far from suggesting that Luzia's ancestors came directly from a transcontinental migration directly from Africa, he claims that they traveled from Southeast Asia. They migrated, he states, "from there in two directions, south to Australia, where today's aboriginal peoples may be their descendants, and navigating northward along the coast and across the Bering strait until they reached the Americas."[42] Interestingly, the article begins by introducing Luzia as a "human skull that is prominently displayed" as a cast at the National

[42] Larry Rohter. "An Ancient Skull Challenges Long-Held Theories." The New York Times. Published October 26, 1999. https://www.nytimes.com/1999/10/26/science/an-ancient-skull-challenges-long-held-theories.html

Museum of Natural History in Washington, D.C., showing that her image has made it to the other side of the hemisphere.

Luzia's origins also lead to a reconstruction of her face, an aesthetic endeavor to accurately portray how the first Brazilian woman would have appeared just before dying in her twenties. In 1999, a team led by Richard Neave at Manchester University reconstructed her face in accordance with Neves's version. Like the Brazilian archaeologist, the British forensic specialist also supported her non-mongoloid features, reconstructing her in light of "Negroid skulls." In fact, he told a *New York Times* reporter that he supports Neves's hypothesis without any prejudice. "When you do this sort of work, it is important to have no preconceived ideas," he claimed, "I personally would stick my neck out and say it is conclusive support of his findings and demonstrates [Luzia's non-mongoloid] origins."[43] Both Neves and Neave recurred to their expertise as scientific professionals to artistically reconstruct a real image of Luzia, one that would remain in the collective minds of researchers and the general public for the next two decades. This reconstruction, Neave implies, was made without any preconceptions after comparatively analyzing Luzia's skulls with other human remains. In other words, their archaeological methodology was an aesthetic one that relied on human perception adopted by comparative anatomy.

It thus follows that aesthetics, the challenge of rendering things visible, is far from being a realm of knowledge about "fake" things, those ways of being and knowing that stir away from science's truthfulness. Despite being entirely unshaken by their scientific knowledge regarding Luzia's origins as a Black woman, recent studies revealed that this was actually not the case. In

[43] Ibid., n.p.

2018, a team led by Cosimo Posth published in *Cell* a study on forty-nine DNA samples from various individuals in the Americas, including recent skeletal remains recovered from Luzia's burial ground in Santa Lagoa. André Strauss, a researcher at the University of São Paulo's Institute of Bioscience, told National Geographic Brasil that no Australasian genetic traces were found in any of the samples, thereby dispelling Neves's hypothesis. "Mas agora," he affirms, "o DNA mostra que o povo de Lagoa Santa é índio. Portanto, não existe essa conexão direita com a África proposta anteriormente. E não faz sentido a gente acreditar que eles tinham uma fisionomia marcadamente africana, como é retratada na reconstrução de Luzia."[44] Consequently, her face was redesigned.

To Neves and Neave's credit, nonetheless, the article does mention another scientific study that found up to six percent of genetic materials from Australasian ancestry in those same skeletons. It thus leaves "sem solução o mistério sobre a presença desses povos da Oceania na América."[45] Additionally, in 2015 an article published in *Nature* found that "some Amazonian Native Americans descend partly from a Native American founding population that carried ancestry more closely related to indigenous Australians, New Guineans and Andaman Islanders than to any present-day Eurasians or Native Americans."[46] In conclusion, the mysterious presence of Oceania in the Americas has not completely disappeared, but only grown more.

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[44] Miguel Vilela. "DNA de fósseis encontrados no Brasil, incluindo o povo de Luzia, reescrevem a história da ocupação das Américas." National Geographic Brasil. Published November 8, 2018. https://www.nationalgeographicbrasil.com/historia/2018/11/dna-estudo-fossil-fosseis-luzia-brasil-estreito-bering-america-eua-estados-unidos-clovis-povos-ocupacao-migracao-lagoa-santa-minas-gerais

[45] Ibid., n.p.

[46] Pontus Skoglund et al. "Genetic Evidence for Two Founding Populations of the Americas," *Nature* 525 (2015): 104-108, doi: https://doi.org/10.1038/nature14895.

All of these scientific findings cast a long shadow of uncertainties about Luzia's origins and the connections she generates between the Americas and other parts of the world. Who is this first Brazilian woman? When her destruction became a likely probability before her remains were found below the museum's ruins, why was she declared "dead"? More importantly, why was her death a loss of history, of art, and of memory? An easy and simple response would be to deduce that her bones simply became a textual signifier within the Brazilian imagined community. Under this reasoning, her figurations in the newspapers are only a projection seeking to naturalize her as an active member of the nation, and as the first Brazilian woman who ever died in Brazil. Yet, this conclusion has several flaws that undermine its very premise. For one, Luzia did not read newspapers and was not an active member of the Brazilian community. She lived and died as an illiterate human way before Western civilization. Secondly, she was already long gone before Brazil nationalized its citizens.

Nearly forty years ago, Benedict Anderson provided his landmark definition of the nation: "an imagined political community" where "members of even the smallest nation will never know of their fellow-members, meet them, or even hear them."[47] If we bring Luzia into this definition of the nation, at least two major issues appear: (1) she did not see herself as a citizen, and (2) she was already dead before the very idea of the nation became a reality. Whereas it might be tempting to say that fellow members don't really need to know Luzia personally to consider her a Brazilian, they *do need to know* that she is alive or was once alive at some point during Brazil's existence as a nation. She was neither of these. Not knowing fellow citizens does not preclude the possibility of getting to know them personally in the future or, if

[47] Benedict Anderson, *Imagined Communities* (New York/London: Verso, 1991), 6.

dead, to conclude that they also once felt a sense of belonging in the nation. In fact, the prospect of meeting new fellow comrades is one of the most hopeful promises in Anderson's definition of the nation. No matter how hard they try, current Brazilians will never meet the first Brazilian woman. They will think they do, but scientific discoveries will remind them otherwise.

A more intriguing alternative will be to examine how and why Luzia's bones undermine and disarticulate the fibers of the nation. In what ways do her uncertain but somehow present Australasian affiliations and mongoloid features destabilize racial paradigms sedimented in Brazilian society? Similarly, why are living citizens who saw her at National Museum in Rio or those who lamented her permanent disappearance affectively drawn to her? My claim is that the twentieth-first century Brazilian nation and its false promises have disappointed their citizens. Anderson's view that "regardless of the actual inequality and exploitation that may prevail in each, the nation is conceived as a deep, horizontal comradeship" is thus quite problematic.[48] Bogéa herself affirmed that Luzia's destruction was a direct consequence of the government's bureaucratic restrictions to support the National Museum. Jair Bolsonaro, then presidential candidate, harshly remarked: "Já esta feito, já pegou fogo, quer que faça o quê?"[49] Indeed, it seems as if the nation has frustrated its citizens by not giving them what was eagerly promised: equality and horizontal comradeship.

In addition to the increasing challenge to national borders, the celebration of diversity as direct opposition to social injustice, and environmental efforts to decenter the human, this chapter contends that there is also a desire for the prehistorical. This desire presents itself as a

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[48] Ibid., 6.

[49] Maurício Moraes. "#Verificamos: São verdadeiras as frases de Bolsonaro sobre incêndios no Museu Nacional e na Catedral de Notre Dame." Folha de S. Paulo. Published April 17, 2019. https://piaui.folha.uol.com.br/lupa/2019/04/17/verificamos-bolsonaro-museu-nacional-notre-dame/

longing towards forms of life that are no longer here, but which were once here as they left traces of their existence. This imposing proof is of major importance for those who, like Bógea and the museum researchers at the National Museum in Rio, have grown disappointed and weary of the nation. In effect, other filaments of belonging and comradeship need to be cast elsewhere, including the vast temporal amplitude provided by deep time. Luzia may not ever respond and fulfill to such desires, but her tangibly iconic presence and uncertainty is precisely what motivates living humans to attend her exhibition at the natural history museum.

The purpose of this chapter is to demonstrate that this human desire to know and affectively connect with extinct beings is a hallmark feature in one of the most important poets in Brazilian society, Antônio Gonçalves Dias. Although a towering figure in nineteenth-century Imperial Brazil and thereafter, this poet also raised major problems against that very same society that praised his poetic achievements.[50] He was a lower-class and mixed-race intellectual writing about racial hierarchies in a nation where slavery was still legal, the genocide of indigenous people common, and scientific racism very much alive.[51]

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[50] Fritz Ackerman affirms that Gonçalves Dias's *indianismo* was characterized as cultural pessimism because the poet was not at all enthusiastic about the seemingly harmonic mixture of races in the colonial period (1964 [1938], p. 114). Along these same lines, Haroldo Paranhos states: "Condenando os processos da colonização portuguesa adotados no Brasil, o ilustre maranhense levanta a voz em defesa dos índios, vítimas da cobiça e da ganância dos lusos, e ainda por cima malsinados, injuriados e martirizados pelos conquistadores d'além-mar." (1937, p. 103). José Aderaldo Castello, likewise, indicates that Gonçalves Dias "não glorificou a síntese étnica, o surgimento do brasileiro." (1999, p. 228). This distinct facet of indianismo – critically questioning rather than blindly embracing colonialism – that Gonçalves Dias espoused in his work was already noted in the nineteenth century by the Austrian critic Ferdinand Wolf: "Esta predileção por tudo o que é indígena de tal modo tocou o poeta que ele queixa-se de a América ter entrado em comunicação com a Europa, e não vê mais que os maus lados da civilização que vem deste continente." (1955 [1863], p. 267).

[51] Gonçalves Dias's racial background has been both assumed and scrutinized because the poet never specifically highlighted his Black ancestry. Sílvio Romero, for example, writes that the poet's talent resided in "a formação biológica" (i.e.: mixed-race status), which allowed him to give a complex and poetic portrayal of Brazil (1953 [1888], p. 1002). From a more dubious standpoint, José Veríssimo affirms that "Gonçalves Dias é nas nossas letras um dos raros exemplos comprobatórios da falaz teoria das raças. Parece que nele se reuniam as três raças de que se formou o nosso povo" (1969 [1916], p. 163).

That he was a citizen whose blood contained Brazil's three races was a fact that indelibly marked his life. Henrique Leal, a long-time friend of Gonçalves Dias, affirmed that the poet was particularly traumatized when the family of Ana María Ferreira Vale, a woman with whom he was deeply in love, refused marriage in light of his origins. Leal tragically wrote that writers of color were constantly discriminated against by denying them access to certain elite circles, something that haunted Gonçalves Dias:

> Não nos honram e não aplaudimos os homens de cor que são poetas, romancistas, dramaturgos ou publicistas? Para que então negar-lhes a partilha de nossos lares, quando o acaso do nascimento imprimiu-lhes uma tez mais tostada do que a nossa? E era esse ferrete o tormento do nosso maior poeta, que deixava avassalar seu claro espírito por tal preocupação, sem que as homenagens que lhe rendiam por toda a parte e os aplausos de admiração e tão peregrino gênio o tornassem superior a essa injustas distinções que não devem afrontar senão às mediocridades.[52]

Moreover, Leal proclaimed that being well-known poet was also the cause of further racial segregation, "e assim sucedeu a Gonçalves Dias, em que só conhecia esse desvio e cuja breve passagem entre os homens foi para ele um tecido de infortúnios e maguas."[53] Likewise, his lack

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Ronald de Carvalho also concludes that the poet's talent in centralizing the indigenous and natural dimensions of Brazil resided in the "sangue que lhe corria nas veias, e onde se cruzavam as tendências das três raças produtoras do mestiço brasileiro" (1968 [1919], p. 220). David Haberly's examination of Gonçalves Dias's work also aligns with the previous statements, as he claims that the poet embodied in his life and literary production "the three sad races," even when he denied his Black ancestry (1983, p. 19). Edgar Roquette-Pinto, on the other hand, puts into question Gonçalves Dias's Black ancestry and indicates that he might have been a *caboclo* (of white and indigenous ancestry) who simply was "*obscuri et mixti sanguinis*" (1948, p. 83).

[52] Ibid., 102-103.

[53] Ibid., 103.

of money fostered an even greater awareness of his marginalization. Writing about prehistorical indigenous populations murdered and mistreated by white colonizer was also a poignant reality for the poet's actual life. His lyrical voice was a desperate desire to find filiations with those who suffered during colonization and died in anonymity, undermining the fabric of a nation sustained by racism and inequality that marked his own life.

Classist and racial prejudice marked his lyric production and defined his personal growth in a country that, he felt at times, excluded him from its promises. He affiliated throughout his life with the artistic movement *Indianismo*, a major nineteenth-century undertaking in Latin America that sought to revendicate an idealized image of indigenous people ravaged by colonization. Most of the scholarly criticism surrounding his poetic production has focused on his treatment of nativiteness as literary arsenal for fueling nation-building initiatives. His poem "Canção do exilio," collected in his *Primeiros cantos*, has been scrutinized by scholars who focus on his deployment of exoticization and eroticization of the indigenous body in conjunction with local vegetation.[54]

In addition to being a prolific writer, Gonçalves Dias was also an active member of Rio's scientific community sponsored by the Imperial family in Brazil.[55] It is thus impossible to study his poetic production without examining his formation as a natural historian and ethnographer.

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[54] For a more detailed discussion about "Canção do exilio" and its influence, see Joshua Enslen's *"Song of Exile": A Cultural History of Brazil's Most Popular Poem* (forthcoming) and Mateus Roman Pamboukian's "O caso bug-jargal: tradução, transposição, e hipertextualidade no romantismo brasileiro" (2019). For a more general discussion about the theme of exile in Gonçalves Dias and Indianist poetry in nineteenth-century in Brazil, see David Treece's *Exiles, Allies, Rebels: Brazil's Indianist Movement, Indigenist Politics, and the Imperial Nation-State* (2000).

[55] For more information on Gonçalves Dias's engagement with the scientific communities in Brazil and the monarchy, see Kaori Kodama's "Os estudos etnográficos no Instituto Histórico e Geográfico Brasileiro (1840-1860): história, viagens e questão indígena," (2010) and "Em busca da gênese do Brasil nas províncias do Norte: Gonçalves Dias e os trabalhos etnográficos da Comissão Científica de Exploação" (2009).

Science, history, and poetry were for him inseparable lines of inquiry about the origins of the Americas' first human inhabitants. It is also fundamental to note that his entire lifespan coincided with the first decades of the National Museum, then known as the Museu Real. Born in August 10, 1823 in the city of Caixas in the state of Maranhão, he came into this world just as the Portuguese forces were being driven out their last Northeastern strongholds. In an autobiographical note requested by Ferdinand Denis, the poet remarks on his homeland: "A Independência foi ali proclamada depois de uma luta sustentada com denodo por um bravo oficial português que alí se fizera forte. Isto teve lugar à 1.° de Agosto de 1823. Nascí a 10 de Agosto desse ano."[56] A particularly interesting point that several critics have noticed, including biographer Lucía Pereira, is the poet's omission of his own individual origins and perils in this short biographical statement.

Gonçalves Dias moved to Rio de Janeiro after residing in Portugal during his adolescent years. At the age of 23, he witnessed with great delight the publication of his *Primeiros Cantos* (1846), an event that fueled his aspirations as a poet. His excitement was even greater when the renowned Portuguese scholar Alexandre Herculano wrote a glowing review of his poems in Lisbon. Gonçalves Dias wrote to his friend Teófilo in secrecy: "Todo o meu empenho, digo-te muito em segredo e todo cheio de vergonha, é ser o Primero Poeta no Brasil, e, se houver tempo, o primeiro literato. Creio que é nobre ambição – emprego somente vigílias e estudos: não usei, e creio que agora não me será preciso usar da intriga."[57] It is clear that he had great and almost naïve ambitions for his poetry, which explains his bitter resentment when he found himself again marginalized in poverty despite being a celebrated writer. His *Segundos* and *Últimos Cantos*

[56] Lucía Miguel Pereira, *A vida de Gonçalves Dias* (Rio de Janeiro: Livraria José Olympio Editora, 1943), 9.

[57] Ibid., 85.

were published in 1848 and 1851, respectively. Later his cantos were combined in a single book of poems titled *Poesias Americanas*. Both his birth and Maranhão's independence from Portugal occurred just five years after the museum was officially founded in the capital of the newly established Brazilian empire.

The first decades of the Museu Real were marked by an institutional initiative that fostered both local knowledge and international connections. Following its establishment in 1818, the museum in Rio became one of the rare institutions dedicated chiefly to world natural history. Its eighteenth-century antecedent was the Casa de História Natural founded in 1784, commonly known as "Casa dos Pássaros," whose main purpose was to send local specimens to the metropolis in Coimbra and Lisbon. The museum's location in the Portuguese monarchy's new capital in Rio immediately provided it with a metropolitan status. It also possessed natural products from various regions of the globe thanks in great part to its transnational network with other museums and collectors, especially Europe.[58]

Its collections were also a major source of information for foreign travelers who could not always explore the dangerous Amazonian jungles filled with wild animals, diseases, and aggressive indigenous groups. Some of Jean-Baptiste Debret's lithographs on indigenous war instruments and masks, for instance, were made using war artifacts specifically stored at the Museu Real. Domingo Jose Gonçalves de Magalhães affirmed in 1836 in a bibliographic review of Debret's *Voyage Pictoresque* in the journal *Niteroi* that all the war weaponry were *faithfully* copied from those at the museum: "todas as armas de guerra e instrumentos bélicos foram

[58] Maria Margaret Lopes. *O Brasil descobre a pesquisa científica: os museus e as ciências naturais no século XIX* (São Paulo: Editora Hucitec, 1997), 46.

fielmente copiados dos naturais, que se acham no Museu de Rio de Janeiro, assim como mantos de pena, cocares, capacetes e mais adornos selvagens." [59]

Magalhães, on the other hand, does not limit himself to praising Debret's artwork, but briefly describes some of them and provides his own interpretation. "A viagem Pitoresca e histórica ao Brasil é de um vasto plano," he affirms, "contendo três partes, cada uma é um objeto de um volume em folio. O primeiro é todo consagrado aos Indios, e a tudo que lhes é concernente; o estilo é notável pela consisão, e laconismo, as estampas pela verdade da natureza." [60] Furthermore, he even provides a timeline for Debret's lithographic subjects as they trace the beginnings of civilization in Brazil, as well as the current outlook of some indigenous people. In particular, Magalhães states:

> A conformação do crâneo, a configuração do rosto, a elevação dos ângulos externos dos olhos, o livre desenvolvimento das extremidades, foram perfeitamente concebidos pelo pintor naturalista. E a vista d'estas lythographias pode o Zoologista fazer uma perfeita ideia do que é um selvagem dos bosques do Brasil. Ao passo que o selvagem se vai civilizando, o pintor vai seguindo até o estado de rico proprietário, ou de soldado. [61]

Magalhães's stylistic observations reveal more about what the lithographs might mean when described within a narrative imbued with racial distinction and "progress." His is an ekphrastic

[59] D. J. G. De Magalhães. "Voyage pittoresque et historique au Brésil, ou Séjour d'un artiste français au Brésil, depuis 1816 jnsqu'en 1831 inclusivement; par *J. B. Debret*." *Nitheroy – Revista Brasiliense de Sciencias, Letras e Artes* T.1, no. 1 (1836)*:* 187.

[60] Ibid., 186.

[61] Ibid., 186-187.

Figure 1: From left to right: Antonio Gonçalves Dias, Manuel de Araújo Porto-Alegre, and Domingos José Gonçalves De Magalhães.

impulse that provides visual art with a sense of narrative by using language's temporal features. That Magalhães uses the word "perfeitamente" to describe Debret's realist painting style is revelatory of an intention grounded in using visual art as an accurate representation of reality. A verbal representation of a visual representation is what the writer seeks when it comes to examining the progress of civilization and its savage origins. In doing so, Magalhães deploys ekphrasis – which is expected, given that he was also a poet – to implicitly reveal the inextricability of representation and reality, image and narrative. It is only by imbuing Debret's painting with temporality that a critically comprehensible progress of civilization can be envisioned, one that begins with the savage icon.

Also telling in this example is a museological framing of ekphrasis as an inter-aesthetic venue of inquiry that goes beyond the museum's physical confines. Museum writing, both Debret and Magalhães imply, is making curatorial objects visible not only in museums, but also in other realms cutting across the arts and sciences. Keeping this initiative in mind, the national museum in Rio was the epicenter for a natural history about Brazil and its connection with the world. In fact, the museum was the space for the Instituto Histórico Geografico Brasileiro (IHGB)'s first meeting sessions. According to Margaret Lopes, the IHGB was the scientific association officially tasked with charting the country's official history. "Reunindo a elite imperial do país, o próprio imperador e vários diretores do museu," she confirms, "o IHGB foi associação científica que mais de perto se pode identificar com os projetos dos construtores do Império brasileiro, sendo responsável pela construção da história oficial do país."[62]

One of such directors was Manuel de Araújo Porto-Alegre (Figure 1). In addition to being a close friend of Gonçalves Dias, Porto-Alegre was also director of numismatics, liberal

[62] Margaret Lopes. *O Brasil descobre a pesquisa científica*, 135.

arts, and archaeology at the National Museum in Rio from 1842 to 1859. He was also an active member in the IHGB and invited his friend to be a member, which he accepted. Consequently, Gonçalves Dias interacted and had close ties with intellectuals who were actively involved with natural history at the museum. As member of the IHGB he also knew Emperor Pedro II and was personally involved in ethnographic and historiographical studies about Brazil.

Gonçalves Dias's interest in the natural sciences and racial relations were also visible in his artistic endeavors as a poet. In 1849, he founded with Porto-Alegre and Joaquim Manuel de Macedo (also an important member of the IHGB) the journal *Guanabara*, a prominent platform for Romanticism in Brazil. In an 1850-issue of the journal, Gonçalves Dias authored a review article on a Maranhão's historical work titled "História Patria," in which he advocated a study of indigenous cultures through poetry. Doing so would allow a proper recovery of forgotten cultures, placing the poet as a foundational figure for the nation's survival and future. Such a poet, he confirmed, must educate citizens about past indigenous people: "Convinha também que nos descrevesse os seus costumes, que nos instruísse todo esse mundo perdido, que nos iniciasse nos mistérios do passado como caminho do futuro, para que saibamos donde vimos e para onde vamos: convinha enfim que o poeta se lembrasse de tudo isto, porque tudo isto é poesia; e a poesia é vida do povo, como a política é o seu organismo."[63]

Rather than being marginalized at the borders of progress, then, the poet envisioned by Gonçalves Dias is the most important ethnographer and historian of the nation. Only poetry can deliver a fulfilling portrayal of lost indigenous groups. The mysteries of the past and the uncertainties of the future are enacted in their highest complexity within a historiographic or

[63] Antonio Gonçalves Dias. "História Pátria – Reflexoes sobre os Anais Historicos do Maranhao por Bernardo Pereira de Berredo." *Guanabara* 1, t. 1, (1850): 30.

ethnographic project that is lyrical at its roots. Instead of a writer rooted in sentimentalities devoid of facts, the poet showcases in his verses all the stratigraphical areas of knowledge concerning politics and the nation itself. Gonçalves Dias was thus deeply interested in a lyric of prehistory. His work was a poetics of origins that could envision from whence he came and where he was heading as a citizen of a nation whose bricks were made from the blood of Black and indigenous lives.[64]

Nonetheless, it is important to mention that his historiographical undertakings were ekphrastic impulses which, like a museum, textually curated myriad artifacts that served his own conceptions of race. These "relics" included weapons, indigenous language profiles, skulls, rocks, and even indigenous peoples themselves in a manner highly reminiscent of curatorial organization. Indeed, despite being categorized as a Romantic or a movement commonsensically ascribed to sublime chaos, the fact of the matter is that Gonçalves Dias was an extremely meticulous and systematic intellectual. In addition to generally composing poems following strict metrical rules and being an arduous member of the IHGB, he also authored a dictionary of the Tupi language. Likewise, he composed an ethnographic treatise on the origins of indigenous groups in South America and their abysmal superiority to those from Oceania. His writings were, in some ways, museological exercises in which verbal representations of visual entities met with a particular theory of origins that he personally espoused. The "things" he described, however, also reveal how much they influenced *him* by providing insight into his own racial prejudices and limitations.

[64] For more detailed information on Gonçalves Dias's engagement with indigenous studies and indianismo, see Cassiano Ricardo's *O indianismo de Gonçalves Dias* (1964).

At the request of Dom Pedro II, Gonçalves Dias gave a series of talks at the IHGB in 1853 that would posthumously be known as *Brasil e Oceania*. Divided into two sections and a total of fourteen chapters, the essay provides an account of how first peoples populated South America. He makes a comparative ethnographic study between these and the Oceanian populations, ultimately claiming first nations in South Americans are superior and more easily Christianized.[65] He provides a detailed account of these original populations, including customs, physical and moral traits, religious beliefs, and political structures. In particular, he focuses on the *Tupí* population in Brazil and the Malaysian, Polynesian, and Melanesian peoples in Oceania. He aligns these selected sources in order to strengthen his main argument and accentuate the inferiority of Oceanians. Like a museum curator, he orchestrates a series of descriptions of images about indigenous peoples to chart the origins of race in Brazil.

Gonçalves Dias's *Brasil e Oceania* had a bumpy editorial history, being first delivered orally and later published posthumously. He was not altogether pleased with his work, often complaining about the arduous readings he had to do to appear knowledgeable in the emperor's eyes. He informed Teófilo that his knowledge of Australian studies was not particularly profound and that he needed to see local Natives in Pará to complete his research: "o trabalho que me deu o Imperador está também na massa dos possíveis: poucos estudos tenho feito sobre a Austrália, e parece-me que o mais cordato é ir de passeio ao Pará e estudar mais de perto os nossos indígenas lucrando ao mesmo tempo ocasião de completar os outros meus trabalhos na tua companhia."[66] It

[65] For a general discussion about Gonçalves Dias and his ethnographic activities in *Brasil e Oceania*, see Kaori Kodama's "O Tupi e o Sabiá: Gonçalves Dias e a Etnografia do IHGB em *Brasil e Oceania*" (2007).

[66] "Carta a Alexandre Teófilo, 4 de abril de 1850." *Correspondência ativa de Antonio Gonçalves Dias*, n. 82 (Rio de Janeiro: Divisão de Publicações e Divulgação, 1964), p. 118.

is noteworthy for the author to inform his friend that he needs to go to Pará in order to complete his research on Australia. It implies, on the one hand, that his ethnographic work is also a verbal representation of what he would see if he were on site. On the other, it suggests that his authorial intention is to make a critical assessment of Amazonian indigenous groups by deliberately juxtaposing them to Australasians, thereby creating a verbal assemblage using these two distinct groups.

Because Gonçalves Dias never actually visited Oceania, all he had at his disposal were a number of sources about them.[67] These sources also contained a verbal representation of Australasian's physical and intellectual traits. Consequently, his work is also an assemblage of other ethnographic works that circulated widely and ekphrastically described people from Oceania. Instead of actually traveling to Oceania, the poet navigated within an intertextual network of racial profiles. Each of the authors he cites also recurred to the power of language to create in their readers' minds their own images of nonwhite races.

Striking in Gonçalves Dias's own ethnographic work is the acknowledgment that he assembled texts from diverse genres and authors. He treated them as components that, when bridged with one another, allowed him to pen a historically unique essay in Brazilian literature. He explicitly affirms that he had to collect, combine, and interpret an array of prominent studies important for drawing his own interpretations. "Pela minha parte," he confirms, "contentei-me de coligir, de confrontar e de combinar no que pude o que a tal respeito achei escrito, tirando conclusões que me pareceram justas e formando conjeturas que se me antolharam como as mais plausíveis, se não são verdadeiras." Along the same lines, he admits to the benefits of using

[67] For an insightful discussion about indigenous populations and the ethnographic projects of the IHGB, see Kodama Kaori's *Índios no Ímpério do Brasil: A etnografia do IHGB entre as décadas de 1840 e 1860* (2009).

sources of different types: "Mas, ainda assim, não será inútil este trabalho ou extrato, se o quiserem, de crônicas antigas, de livros pouco vulgares, de memorias e relações pouco lidas, e com dificuldade encontradas."[68]

By using words that specifically allude to collection, confrontation, and combination, the author explicitly deploys a vision of scholarship grounded in curatorial organization. Like a museologist, Gonçalves Dias recurs to the power of exhibited description to examine the connections and differences between Tupis and Australasians. His essay is an assemblage of parts that, when placed alongside one another, generate a set of unique properties about race in the Americas and Oceania – all of which undermine his own intentions. The artifacts featured in his essay should be approached as ekphrastic entities that force the poet to reflect on the relationship between meaning and the thing itself. "Ekphrasis," Stephen Cheeke states, "has been one means of a direct encounter between writing and the substantivity or thing-ness of nature."[69] It follows, then, that ekphrasis is being aware that there is a difference between words and things, that words are not things, and that words can never describe things in their totality. Likewise, DeLanda intimates that assemblages are composed of parts that may generate new and unexpected subjectivities.

Far from being merely passive products of textual processes, in *Brasil e Oceania*, Gonçalves Dias employs ekphrasis and assemblage to transform Tupis and Australasians into material beings, entities whose agential power challenges the poet's conceptions about race and the nation. The first explanation that Gonçalves Dias makes is that the conquering indigenous

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[68] Antonio Gonçalves Dias, *Brasil e Oceania*. *Revista Trimestral do Instituto Historico, Geographico e Ethnograhico do Brasil*. Vol. XXX (1867): 6.

[69] Stephen Cheeke. *Writing for Art: The Aesthetics of Ekphrasis* (Manchester: Manchester University Press, 2011), 121.

race in South America was the *Tupys*, which descended from the Caraibas in the Caribbean. So confident is the author that he creates a narrative of their origins: "Não contestamos as relações de semelhança que se poderão observar, e de facto se observam entre os *Tupys* e os *Caraibas*: há entre eles muitas analogias de linguagem, muita semelhança de costumes, muitas instituições idênticas."[70] He also contradicts the renowned Alcide d'Orbigny's view that the Tupis came from the southern tip of South America as *Brasilios-guaranienses*. d'Orbigny was a naturalist and former student of Cuvier who made major contributions in paleontology, archeology, and anthropology in the nineteenth century. He is particularly known for his work entitled *L'homme américain* in which he describes his findings about the origins of indigenous populations in the Americas. Gonçalves Dias disagrees with the French intellectual by asserting that the *Brasilios-guranienses* came from the north and then multiplied into different groups in the coastal and interior parts of the region.

One could interpret this step as a wise move to legitimize the Tupi's ancient origins in Brazil as *the* first inhabitants in South America with a claim to blood and soil. Yet, an equally compelling alternative would be to highlight their migratory condition as peoples who came from *elsewhere*, and who therefore had territorial affiliations beyond Brazil per se. Whereas Gonçalves Dias tries to enact a superiority of Tupis as an ancient Brazilian race, his ekphrastic impulse also yields a contesting interrogation. Specifically, one that highlights prehistorical migration routes that destabilize the very notion of Tupis as the superior race over all others since they, too, descended from others.

[70] Antonio Gonçalves Dias, *Brasil e Oceania*, 17.

Gonçalves Dias also makes a great effort to highlight the diversity and superiority of indigenous people by contesting certain works on human anatomy and physiology. He rejected crania measurement as a form of cataloguing because its application to races was simply not accurate. Some skulls were too similar with each other to distinguish a racial trademark, "porque mesmo entre as raças do antigo mundo, talvez menos confundidas e com certeza melhor estudadas que esta, tomando-se de qualquer delas, exceto a negra, um milheiro de crânios, acham-se alguns que pelos seus caracteres se assemelham a todas as outras."[71] He further explains that the head shapes of indigenous groups in the Americas are too diverse across climates and regions. To support his case, he references the British physician and ethnologist James Cowles Prichard, who in his *Natural History of Man* writes: "The American nations are spread over a vast space, and live in different climates, and the shape of their heads is different in different parts."[72] Gonçalves Dias then writes that "entre os americanos as formas da cabeça variam por tal modo, que Prichard rejeita a designação de *forma americana*, que alguns anatômicos quiseram achar, observando os crânios das diferentes raças."[73]

It is worthy of note, too, that in his insightful assessment of the arbitrariness of craniology, the poet separates the Black skull as a unique case. All crania may be deceptively similar to one another, but the Black one is a separate category on its own. One can only wonder: when citing Prichard about the American races, was Gonçalves Dias also thinking about the Black skull as an *American* skull? Why is there no verbal representation of it beyond a skittish allusion to its singularity?

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[71] Ibid., 88.

[72] James Cowles Prichard. *The Natural History of Man* (London: H. Bailliere, 1843), p. 356.

[73] *Brasil e Oceania*, 88.

Continuing his inclusion of other prominent physicians at the time, the author is drawn to ekphrastic descriptions on the American crania, despite refusing the discipline itself. He cites Sir William Lawrence's *Lectures on Physiology, Zoology, and the Natural History of Man*, affirming that "Lawrence considera o crânio americano como análogo pela sua forma ao do mongol, posto que seja menor que o deste."[74] Lawrence had indeed asserted that the American skull is similar to that of the Mongol, and the American variety has a darker skin tone as well as black and straight hair structure: "THE AMERICAN VARIETY is characterized by a dark skin, of a more or less red tint; black, straight, and strong hair; small beard, which is generally eradicated; and a countenance skull very similar to those of the Mongolia tribes."[75] In addition to being a verbal representation about the American variety, implied is also a transpacific migration. American indigenous people are like Mongols, Lawrence tells us, except for "the imperfect development of the forehead in the American forehead."[76] Gonçalves Dias takes particular issue with the adjective "imperfection," offering an alternative description that invalidates the association between cranial size and intelligence.

He also finds support in French psychiatrist Jean-Baptiste-Maximien Parchappe de Vinay, who in *Recherches sur l'encéphale sa structure, ses fonctions et ses maladies* wrote of the lack of correlation between sane and insane individuals. Parchappe points out: "De ces faits il résulterait d'abord cette conséquences curieuse et peut-être inattendue, que, s'il existe une différence sensible de volume entre les têtes d'individus sains d'esprit et les têtes d'aliénés, cette

[74] Ibid., 88.

[75] Sir William Lawrence. *Lectures on Physiology, Zoology, and the Natural History of Man* (London: Benbow, 1822), 488.

[76] Ibid., 489.

différence serait à l'avantage des insensés."[77] The poet interprets from this source that head volume is not an adequate method to measure human faculties: "delas se colige que não só a forma do crânio é pouco importante para o desenvolvimento das faculdades, como também que o seu volume nada influi sobre ela."[78] Nonetheless, Gonçalves Dias is quick to dismiss Lawrence's statement that Malayan heads are superior to that of Americans. In doing so, he is enticed about what craniology has to say about the preeminence of indigenous peoples in the Americas, even while explicitly opposing craniology altogether. By finding refuge within the same paradigm that he puts into question, he discloses his own racial prejudices and attraction towards scientific racism.

The description and narrativity of hierarchical racial structures, authorial insecurities, and prehistorical migration routes become all the more potent in the second half of *Brasil e Oceania*. Interestingly, Gonçalves Dias begins this section with the premise that there needs to be an understanding about which civilization is "newer." He makes particular emphasis that Oceania should actually be called the New World because Western civilization and christianization has been more recent there than in the Americas. From the start, he makes great effort to emphasize the differences – and not similarities – between these two parts of the world. To create his argument about who Oceanians are and how they look like, he recurs to two widely disseminated works: Louis Domeny de Rienzi's *Océanie ou cinquième partie du monde* (1836-1837), and Gustave d'Eichthal's *Histoire et origine des Foulahs ou Fellans. Études sur l'histoire primitive des races océaniennes et américaines* (1841). Using these two works as guiding sources,

[77] Jean-Baptiste-Maximien Parchappe de Vinay, *Recherches sur l'encéphale sa structure, ses fonctions et ses maladies*, (Paris: Librairie des Sciences Médicales de Just Rouvier et E. Le Bouvier, 1838), 28.
[78] Gonçalves Dias, *Brasil e Oceania*, 88.

Gonçalves Dias divides Oceania into three racial groups: Malayans, Melanesians, and Polynesians, illuminating along the way his curatorial tensions and his own personal dilemmas.

Of equal importance for him was his insertion as a thinker interested in transnational networks of intellectuals, and who could contribute significant information about the world to his fellow readers. His detailed representation of Oceanians is also an attempt to contribute more knowledge about the different races who populate the earth. He even places himself alongside Cuvier because "[a]dmirava-se o grande naturalista de que fossem tão pouco conhecidos os caracteres físicos das raças humanas, e não acabava de compreender a indiferença dos viajantes a semelhante respeito."[79] It only seems all the more appropriate that the poet himself should purport to fill this gap in the history of humanity and in the name of the emperor. The most lyrical writer of nineteenth-century Brazil would also be the one to provide his constituents with an ekphrastic exposition about his fellow racialized others at home and abroad.

It is with this mentality that he begins his initial portrayal of Oceania as a geographic location filled with natural and architectural astonishments. He provides a narrative description of the things that most draw him to this region, a place where he has never been and from which he was separated by thousands of miles across the Pacific Ocean. He introduces the continent as a world where earthquakes and meteorites dislocate the landscape and anthropomorphic orangutans confound philosophers. He also tells readers that it is home to ancient temples and mosques that rival in elegance to those of China, are superior to those of Mexico, and are comparable to Persian and Egyptian masterpieces. In a way, his narrative becomes a painting in which he foregrounds through rhetorical amplification and ekphrasis certain natural elements,

[79] Ibid., 298.

like eruptions and debris from outer space, to draw his readers into a wondrous spectacle about a world in which they have most likely never visited.

Yet, in a sort of anticipation, he remarks: "A vós porém não vos importam os prodígios e as maravilhas da terra oceânica."[80] What they want, the poet writes, are facts: "quereis factos, datas, nomes, e com isto a descrição de raças, de seus costumes, com considerações sobre a sua sociabilidade ou perfectibilidade."[81] This becomes a turning point in the narrative where Gonçalves Dias becomes aware of the scientific impetus and obligation to curtail digressively wondrous description and, instead, remain ostensibly objective.

With these facts, on the other hand, also comes a temporal dimension provided by a narrative of origins that emphasizes the antiquity of Oceanians, while at the same time stressing all that remains to be discovered and the complexity of what has been discovered. Even more so, the poet accuses his coeval readers of pretending to not care about those very same things that ensnare their senses. "Diante d'esses fenômenos," he clarifies, "que por todos os modos excitam a curiosidade, e deixam a imaginação como que estupefacta e assombrada, passais como o navegante espanhol."[82] Building onto this analogy of Spanish colonizers excited by curiosity and with their imagination stupefied and suspended, he makes an even more controversially insightful remark: "Passais de longe: mas o desejo que vos levou a devassar os segredos d'essas terras afastadas, talvez vos fez enxergar na molhe estupenda de granito o metal que se ria em vossos sonhos, e cujo nome porventura lhe imporeis come ele."[83]

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[80] Ibid., 301.

[81] Ibd., 303.

[82] Ibid., 301.

[83] Ibid.

The word "devassar" means here to invade and reveal what is hidden, and he equates this action with a desire from the colonizer to be mesmerized by whatever is discovered. During this very same process, however, the same things that European invaders discover are also what haunt their consciousness. The great granite geological formations that contain precious metals are so excessive and grandiose that they disturb the colonizers in their dreams. What seems to be a digressive description about Oceania is actually the wondrous motor that galvanizes a more rigorous examination of the races who populate those very same landscapes. Gonçalves Dias thus suggests to his readers that their obsession with the past and future of races is intricately tied to a spectacle about Oceania's geological mysteries.

Later in his essay, Gonçalves Dias further pursues his ekphrastic methodology to achieve a detailed profile of the races and satisfy the Emperor's request. In doing so, he does not fail to touch upon the issue of racial mixing. When providing an overview of who the Malayans were and their skillful art of navigation, Gonçalves Dias underscores the difficulty of disentangling populations who have lived and reproduced together since time immemorial, especially in Java and Sumatra. He affirms: "N'esta ultima, por exemplo, estão tão entrelaçadas as raças e diversidades da espécie, que uma só e simples classificação que nos abranja a todos é quase impossível."[84] It is actually impossible, he tells us, to distinguish a profile for each race because miscegenation has shaped and is currently shaping human history. Racial mixing as a prerequisite of existence would have been a controversial statement for Gonçalves Dias's elitist contemporaries, who desired precisely to categorize races and dilute the most "inferior" ones. This incentive for "dilution," the poet implicitly affirms, has already been happening for a long

[84] Ibid., 305-06.

time. Thus he debunks in the process the notion of white purity in Brazil even before American colonization.

According to Yuko Miki, miscegenation in imperial Brazil was not directed toward the inclusion of "Indians" and Black races, but, rather, to their erasure. In the particular case of indigenous peoples, their glorious enactment within *Indianismo* occurred alongside their daily extermination efforts by the government. "Between the frontier and 'gentle' state policy, history and anthropology, literature and law," Miki declares, "the promotion of miscegenation and the production of indigenous extinction went hand in hand in the second half of the nineteenth century, seamlessly uniting Indian inclusion and exclusion."[85] Keeping this wide-ranging genocide in mind, it is rather remarkable that Gonçalves Dias would turn miscegenation on its head and inform his readers that racial mixture is an indelible mark of human history. White elitists seeking to dilute other races were themselves already diluted by centuries of prehistoric transcontinental migration. This rhetorical maneuver builds his authorial ethos as a knowledgeable writer who has read extensively on the matter, despite being a racial minority from a low-class background.

In his development of possible relocation routes for ancient populations, a matter that particularly drew the poet's attention was the possible genealogical connection between Oceanians and *americanos*. One group of Oceanian peoples, according to Gonçalves Dias, must be left out of the question due to their inferiority: Black Australians: "os pretos ficariam quase fora da comparação, por lhe serem inferiores, sendo que os de muitas partes, como os *Australios*, estão no ultimo grão da escala da humanidade."[86] Black people, he states, simply could not be

[85] Yuko Miki. *Frontiers of Citizenship: A Black and Indigenous History of Postcolonial Brazil* (Cambridge: Cambridge University Press, 2018), 103-04.

[86] Gonçalves, Dias. *Brasil e Oceania*, 334.

compared to the glorious Tupis because the racial hierarchy between them was plainly too abysmal. How could the most savage of all races, the Black, be the ancestor of the splendid Brazilian indigenous people? It is at this precise moment that the author reveals his deeply-rooted prejudices against Black people and their placement within the chain of being. His exhibition of Oceanians is an ekphrasis of racial superiority that unveils his genealogical and biographical tensions, all the more anguished by Blackness. The fact that he himself had Black ancestry signals his own internal conflicts as a man who, albeit possessing the three races, was ineludibly torn apart by scientific racism.

The Black subject, in the form of the Australian, rebels against the textual curator by providing an alternative route to racial origins, becoming all the more possible precisely when the poet is repulsed by it. The Australian "artifact" unleashes anxieties in Gonçalves Dias's mind by destabilizing what would otherwise seem an organized hierarchy of races. He takes particular issue with the Melanesians, who include "Papúas," "Alfurds," "Endamenios," and "Australios." The author classifies all of them as "pretos oceanicos" because the gradation of races is not as trustworthy as one would expect, making it easier to place them under the same umbrella. Yet, he clarifies that it is fundamental to separate Papúas and Australios because they have a distinct origin from the other groups. He even rejects Comte de Buffon's claim that the Papuás share common features with the *Endamenios* and *Australios*.

> Os *Papuás*, segundo o dizer de todos os modernos autores, são relativamente mais belos e muito mais inteligentes do que os *Endamenios* e *Australios*, e todas as variedades d'essas criaturas miserandas, que Deus em um instante de cólera

> lançou ao mundo como uma transição pouco sensível entre o ultimo dos *hotentotes* e o primero dos *ourang-outangs*.[87]

This description is also a narrative that demarcates the origins of these two groups, recurring to a polygenist creationism that could explain the segregated singularity of Black Oceanians.

Gonçalves Dias performs an ekphrastic exercise that contrasts the evolutive beauty and intelligence of Papuans with the primitive and hominid *Endamenios* and Australians. These two later groups are walking this world, he argues, because God created them during a moment of anger, so different than how he paternally created Adam and Eve. The history of human evolution, he implies, finds its interstitial stage in the Australio, who represents the rough border between Africans and Orangutans. One also recalls his initial description of Oceania as a place where orangutans enchant the minds of philosophers drawn to the origins of life. In addition to being a curatorial exercise recurring to the paragonal tensions of word and image, Gonçalves Dias's essay also is a realm where Black Australians gains agency and shake the poet's racial foundations. So despicable are *Australios* for Gonçalves Dias that he fills several pages with their singularity in relation to the rest of Oceania, going so far as to compare them to low primates. He continues to portray them as poor entities residing in such an dismal position within the history of humanity. "[Q]uasi macacos, são efetivamente muito semelhantes a estes animais tanto no exterior como na quase nula concepção."[88] Further elaborating this comparison, he emphasizes that Australians are so elemental that they only have hearing and sight as senses, like all wild tribes: "Imundos, ocupando o ultimo lugar na escala da civilização, parecem o elo intermédio o homem e o orang-outang, cuja imobilidade imitam em certos movimentos prontos,

[87] Ibid., 358-59.
[88] Ibid., 365.

bruscos e como irrefletidos."[89] Prehistoric monkeys stuck in time, they become in Gonçalves Dias's work an ambivalence that puts into question the very notion of being human in relation to other primates.

Was Gonçalves Dias perhaps thinking about the missing link? What is the Australian, if not an enigma where racial classifications collide and where theory of knowledge finds an impasse? Not by coincidence, he admits that little can be extracted from their consciousness: "No moral e intelectual não puderam ainda ser bem estudados, porque uma como nuvem lhes empana qualquer d'aqueles estados da alma, cuja existência não podendo facilmente ser deduzida dos seus atos, quase é preciso adivinha-la."[90] Unable to gain access to the moral and intellectual dimension of Australios, the essayist finds himself at odds about what this inaccessibility might mean for his own theorization about the history of the human species and the history of consciousness. Indeed, his efforts are challenged by the vibrant materiality of Australians that emanate from his own writing and destabilize the cartography of origins that he tries to seamlessly construct. The Black Oceanian holds sway over the poet and tantalize him by disrupting his prehistoric timeline and showing him a world that he, as a man of the Brazilian empire, will never access in its totality.

The ambiguity that Australians generate in Gonçalves Dias about what it means to be human are also strikingly similar to contemporary discussions in animal studies. One of the most fundamental interrogations that this burgeoning field of study has made is to decenter the humankind as an all-knowable entity. Kari Weil theorizes the lines of difference between human and animal by examining their ethical as well as political implications, laying bare the dangers of

[89] Ibid., 366.

[90] Ibid., 366.

human exceptionalism and the promise of interspecies entanglements. To interact with animals, she writes, is to encounter a view of ourselves that undercuts our anthropocentric comforts: "As we see an animal who sees us, we confront a view of ourselves we may not have seen and, indeed, may not wish to see."[91] In orchestrating a written exhibition of Australios, the author sees himself undermined by the very same entity that he brought forth, and the artifact slips through curatorial projects by centralizing their very contradictions and brokenness. In ekphrastically invoking Black indigenous persons who appear as monkeys, they look back at the poet and disfigure his own humanist standing as a supposed defender of indigenous civilization. Impossible to access and yet indelibly present, the Australio sets the limits on how far the poet can go back in time.

The Australian consequently becomes for Gonçalves Dias an atavism, an anachronistic being that resembles a fossil verbally embodied in his pages. Language allows him to practice museum writing and to display Oceanic ancient bones to his readers, even if the ancient being slips from his hands. During this process of description, Gonçalves Dias accepts the constraints of time and historical contingency in narratively representing prehistorical beings. Ralph Waldo Emerson wrote in 1844, just three years before Gonçalves Dias's *Primeiros Cantos* was published, an essay titled "The Poet" in which he wrote about the connection between this genre and fossils. Emerson affirms: "Language is fossil poetry. As the limestone of the continent consists of infinite masses of shells of animalcules, so languages is made up of images, or tropes, which now, in their secondary use, have long ceased to remind us of their poetic origin."[92] The

[91] Kari Weil. *Thinking with Animals: Why Animal Studies Now?* (New York: Columbia University Press, 2012), 49.
[92] Ralph Waldo Emerson, "The Poet" [1844], in *The Selected Writings of Ralph Waldo Emerson*, ed. Brooks Atkinson (New York: Modern Library, 1950), 329-30.

word "secondary" most likely refers to John Locke's definition of secondary qualities as the effects things have on people, rather than the primary properties of the object itself. Keeping this conception of poetry's trope about origins in mind, Emerson tells us that language is filled with images whose primary properties have long been forgotten. Language users see and hear surface quality, and not the underlying etymological strata embedded in each word written and spoken.[93] The poet, however, "names things because he sees it, or comes one step nearer to it than any other."[94]

Gonçalves Dias, in a similar vein, seeks words beyond their secondary use and nearer to their fossilized origins, even though he fails to apprehend them entirely. He invokes Australians as those beings at the beginning of human civilization, but he will never understand them as they are. Therefore, he will never perform a truly convincing ekphrastic portrayal of their prehistorical existence. This frustration stems in part from the very idea of the fossil as an imperial artifact that used to understand forms of life predating the empire itself. As W. J. T Mitchell writes, "fossilism expresses the ironic and catastrophic consciousness of modernity and revolution."[95] All the Brazilian writer can do is make an assemblage of their existence on paper, only to have it backfire on him as it goes elsewhere and undermines his own existence. The fossil becomes a verbal representation of his own modern precariousness and signals that one day he, too, will become a dead image marginalized and misappropriated by the Brazilian empire.

Gonçalves Dias's fearfulness and desire for fossils and extinct beings is one that he cultivated since at least his early twenties. He thought about how to poetically retrieve as a poet

[93] For an interesting study that applies Emerson's "fossil poetry" to Anglo-Saxon linguistic nativism in nineteenth-century Britain, see Chris Jones' *Fossil Poetry: Anglo-Saxon and Linguistic in Nineteenth-Century Poetry* (2018).

[94] Ibid., 329-30.
[95] Mitchell, *What do Pictures Want?*, 184-85.

the long-gone indigenous groups who lived and died before and during colonization. The poetic form that he thought best suited his needs was the epic through his poem *Os timbiras*. He originally intended to write sixteen cantos, but only the first four were published in Europe, before he died in a shipwreck near Maranhão in 1864. In a letter written to a close friend, he conceived the idea of a regenerated genesis:

> Imaginei um poema...como nunca ouviste falar de outro; magotes de tigres, de coatys, de cascaveis; imaginei mangueiras e jaboticabeiras copadas, jequitibás e ipés arrogantes, sapucaeiras e jambeiros, de palmeiras não falemos; guerreiros diabólicos, mulheres feiticeiras, sapos e jacarés sem conta: emfim, um genesis americano, uma *Illiada Brasileira*, uma criação *recreada*. Passa-se a acção no Maranhão e vae terminar no Amazonas com a dispersão do *Tymbiras*; guerra entre eles e depois com os portugueses. O primeiro canto já esta prompto, o segundo começado."[96]

Imagining a poem of this caliber, the author writes, implicates unifying a set of agential matters with specific features that, when poetically arranged, generate an assemblage of emerging properties. This latter result allowed Gonçalves Dias to conceive an American genesis of a group that was defeated at the hands of the Portuguese. His purpose was one of political and historical revisionism: to trace the antiquity of indigenous groups by going beyond the written and historical record, and by taking his verses into the realm of prehistory.

A lyric of prehistory was Gonçalves Dias's opportunity to insert his own concerns about racial relations in Brazil into deep time. The author reproduced a poetic voice that could project

[96] Antonio Henrique Leal, *Phanteom Maranhense: Ensaios Biograhicos dos Maranhenses Illustres Já Fallecidos* (Lisboa: Imprensa Nacional, 1874), 89-90.

itself backwards into a long-gone era in which vegetal and animal lives comingled with the first humans of the Americas. Jaguar stripes, lianas, rattlesnakes, frogs, coatis, and trees form part of the poet's constellation of agential materials rendered ekphrastically in his poetry. The dialectical operations of word and image permitted him to recreate them in ethically grounded verses. His epic poem became a visualization process where matter and verse became dependent on one another, something that he had been formulating since at least his early twenties. According to Fritz Ackermann, *Os timbiras* may be interpreted to a certain extent "como protesto da natureza e de seus íncolas contra o conquistador, que, depois de roubar a terra ao vencido, escravizou o primitivo habitatante." Furthermore, he contends that sometimes the poem's verses "soam como suspiros de saudades de tempos que se passaram, de lugares queridos que nunca se hão de rever, de florestas desaparecidas e de uma vida que se extinguiu."[97]

Set in a temporally unspecified Pre-Columbian scenario using decasyllabic verses, *Os timbiras* begins with the poet invoking the shadow of the savage warrior and denominating himself as the singer of the extinct *povo*.[98] The first canto starts with an agreement between the Timbiras's leader Itajuba and the leader from the Gamelas, who engage in combat so that no more blood is shed and the winner dominates the losing tribe. Itajuba wins, but the Gamelas run

[97] Fritz Ackermann, *A obra poética de Gonçalves Dias*, translated by Egon Schaden (São Paulo: Conselho Estadual de Cultura, 1964 [1938]), p. 114.

[98] Shortly after its publication, *Os timbiras* was subjected to harsh criticism and was deemed an epic failure by important writers such as Bernardo Guimarães. Lúcia Miguel-Pereira hypothesizes that the epic's poor critical reception discouraged the author from completing it altogether (1943, p. 128). Manuel Bandeira, however, cites a passage from a letter that Gonçalves Dias wrote to his father-in-law in which he affirmed that *Os timbiras*'s poor reception was due not to its poetic deficiency, but to the fact that Brazilians generally do not like to read (Bandeira, 1952, p. 137-138). During the twentieth-century, prominent critics such as Fritz Ackermann (1938), Manuel Bandeira (1952), Alfredo Bosi (1970), Antônio Cândido (1959), Lúcia Miguel-Pereira, and Cassiano Ricardo (1956) have studied *Os timbiras* or at least mentioned it in their studies about Gonçalves Dias. For a detailed study about *Os timbiras*'s history of criticism, see Roberto Acízelo de Souza's "*Os Timbiras*: O poema que podia ter sido e que não foi" (2020).

to the forest and refuse to serve him, choosing instead to follow Gurupema, the son of their recently deceased leader. After a rendezvous the Timbiras notice that their member Jatir, son of Ogib, is missing, prompting Itajuba to order Jurucei as an emissary and go seek peace from the Gamelas.

In the second canto the Timbiras consult the shaman or Piaga for their prospect as a tribe, who in turn asks Tupã to descend in the warrior's minds and show them their future. All the warriors sleep except for Itajuba and Ogib, who lie awaken and worried about Jurucei's whereabouts. The third canto begins with the poet himself, who predicts the tragic future of the Timbiras and the destruction of the Americas at the hand of colonizers. The fourth canto tells of Jurucei's arrival to the Gamelas's territory, mesmerized at the richness he finds but unwilling to surrender to it completely. Jurucei tells Gurupema to redeem themselves by turning in the body of their dead chief to be buried in accordance with the Timbira's rituals. The Gamelas reject the offer. During this exchange, a *Tapuia* (foreigner in Tupi language) comes from afar and advises the Gamelas to accept the offer because he had a vision of a ruined tribe. The canto ends in a moment of heated argument when an unidentified tribe member shoots an arrow at Jurucei and Gurupema tries to find the responsible member.

The poet sets himself from the beginning as the envoy of these lost voices of prehistory, invoking the muse of the defeated warrior who is no longer alive. The speaker lyrically resuscitates him in a moribund and entropic condition:

> As festas, as batalhas mal sangradas
> Do povo Americano, agora extinto,
> Hei de cantar na lira. – Evoco a sombra
> Do selvagem guerreiro!... Torvo o aspecto,

Severo e quase mudo, a lentos passos,

Caminha incerto, – o bipartido arco

Nas mãos sustenta, e dos despidos ombros

Pende-lhe a rôta aljava...as entornadas,

Agora inúteis setas, vão mostrando

A marcha triste e os passos mal seguros

De quem, na terra de seus pais, embalde

Procura asilo, e foge o humano trato.[99]

Tribes in the Americas were bloody both in their rituals and their wars, all under God's genesis. Extinction was their untimely fate at the hands of the West, and the poet is determined to use the lyric's compressing power to bring back and exhibit them against a monarchy that cemented itself on a graveyard. The shadow of the warrior turns into a supernatural insertion onto lyric creation and possesses the poet's verses, exorcizing them into a painful retelling of what happened before they were obliterated from this earth. What proceeds is an ekphrastic revival of a phantom: a sinister and monstrous specter that is gravely silent, slowly walking without direction. His broken bow in his hands is a synecdoche of his broken self, as are his shoulders precariously exposed to the inclement weather. his wrecked body leaves behind useless arrows that demarcate his feeble steps.

The land, we read, once belonged to his ancestors. But their descendant is an exile, an extraneous being existing at the margins of life and at the periphery of civilization. Implied is also a temporal narrative that traces the death of a once great warrior, highlighting his

[99] Antonio Gonçalves Dias. *Gonçalves Dias: Poesia completa e prosa escolhida* (Rio de Janeiro: Editôra José Aguilar LTDA., 1959), 475.

deterioration into the spectral nothingness that he will eventually become. The narrative dimension of ekphrasis introduces the opportunity to find an ethical ground that accounts for the injustices of the West. Moreover, the poet centralizes the vanquished, rather than the victors, as was commonly the case with the ancient epic tradition. David Quint writes that epics including the *Iliad* and the *Aeneid* focused on the victors, but also gave some narrative space to the overpowered. He states that "these voices of resistance receive a hearing, as the epic poem acknowledges, intermittently, alternative accounts vying with its own official version of history: they are the bad conscience of the poem that simultaneously writes them in and out of its fiction."[100] Gonçalves Dias further expands this lyric resilience as an imperative protest against the erasure of official history.

One can also notice a refractive autobiographical component embedded in the last verses of the fragment above. Like the spectral warrior, Gonçalves Dias also found himself seeking asylum in his homeland and was also branded by the very same racial supremacy the lead to the extermination of his indigenous ancestry. Yet, one cannot avoid the first three lines of the poem in which the speaker is thankful that finally the surviving indigenous populations opened their piteous arms to Christ's cross. While the poet recognizes and values indigenous cultures, he also defends Christian indoctrination as the most desirable outcome. This paradoxical tension, according to David Treece, was also present in the indianismo movement in nineteenth-century Brazil: "Entre essas alternativas não poderia haver nenhuma posição intermediária que questionasse o valor da assimilação na sociedade branca da perspectiva da integridade e identidade cultural ou que denunciasse o caráter predatório da economia imperial para seus

[100] David Quint, *Epic and Empire: Politics and Generic Form from Virgil to Milton* (Princeton: Princeton University Press, 1993), 99.

elementos marginalizados."[101] In the particular case of *Os timbiras*, The simultaneous appraisal and disavowal of colonialism is present not only because the poem was dedicated to no other than Dom Pedro II, but also because Gonçalves Dias was someone seeking recognition from the same empire responsible for the genocide of his blood lineage. His allusion to the prehistoric and peripheral warrior is an apostrophic effort to engage in dialogue with an ancient someone who will ultimately not reply – precisely because the poet is too entangled within the coordinates of colonialism.

This inability to fully engage in reciprocity with the prehistoric man becomes even more concrete when he deploys the word "fossil" in a paleontological exposition of indigenous extinction. As canto three begins with the dawn approaching and awakening the Timbiras, the poet directly intersects and tragically proclaims the destiny of the once powerful Itajuba and his tribe:

> As três formosas tabas de Itajuba
> Já foram como os cedros gigantescos
> Da corrente empedrada; hoje acamados
> Fósseis que dormem sob a térrea crusta,
> Que os homens e as nações por fim sepultam
> No bojo imenso! – Chame-lhe progresso
> Quem do extermínio secular se ufana;[102]

The three marvelous communities once under the power of Itajuba, the speaker tells us, are now under a current of rocks. In a literal sense, "corrente empedrada" can mean rocky waters that

[101] David Treece, *Exilados, aliados, rebeldes: o movimento indianista, a política indigenista e o Estado-Nação imperial*, translated by Fábio Fonseca de Melo (São Paulo: Nankin/EDUSP, 2008), p. 111.
[102] Gonçalves Dias, *Gonçalves Dias: Poesia completa e prosa escolhida*, 498.

shape Brazil's geological contours over centuries. In another sense, however, the phrase may also point towards a metaphorical depiction of sedimentation. Rock formations are, in a way, stratigraphical layers in deep time that record the earth's history of life. The three villages, like giant cedar trees, now belong to rocks and their strata. The use of the pluperfect "foram", which is also used in the perfect preterit, indicates that this act of internment occurred both in the past and a time earlier than the historical past itself. The conglomerate burial where the villages petrify alongside ancient trees signals a concept of human history intermingled with natural history. This juxtaposition brings together four seemingly distinct disciplines: paleontology, archaeology, historiography, and, of course, poetry. Epic poetry allows him to employ prosopopoeia by imbuing with life the inanimate fossils with human qualities and, in doing so, challenge the official narrative of Western colonization. Ekphrasis and amplification also work with prosopopoeia because, together, they display with stirring affection and through a literary lens the fossilized remains of extinct human populations.

The fragment above also ushers forth Gonçalves Dias's poetic rendition of petrified bones. By the time he published his epic poem in 1857, the word "fossil" was already gaining modern currency as the artifact that provided natural historians with details (however tenuous) about prehistorical lives and environments. Fossils of extinct Timbiras, the poet informs us, are sleeping under an earthy crust, awaiting to be excavated and proclaim their own version of colonization. The use of "dormem" indicates a procedure taking place in the present, as if these earthly remains were lively entities in a dormant state awaiting extraction from the crusty layers of the earth. Humankind and the nation make a sepulcher of the land by interring the bones of prehistoric peoples in a mass grave, but the poet feels an ethical responsibility to excavate these osseous artifacts still teeming with life.

Challenging the notion of progress as the proud and secular extermination of nonwhite races, the speaker invokes a sense of prehistorical responsibility as he vitiates against a concept of modernity born out of genocide. Once again he takes the role advocate for extinct forms of life:

> Eu modesto cantor do povo extinto
> Chorarei nos vastíssimos sepulcros,
> Que vão do mar aos Andes, e do Prata
> Ao largo e doce mar das Amazonas.[103]

Crying over the vast crypts of the massacred that extends beyond national borders, the poet becomes singer of the dead and dying. African slaves, deforested landscapes, rubber trees, and other entities commoditized for elitist colonizers form an assemblage of resilience in his poetic creation, marshaling emerging properties that contest the official history espoused by imperialization. They respond back by casting a shadow upon the future of Western civilization in the Americas, darkening celebrations and haunting progress:

> Aos crimes das nações Deus não perdoa;
> Do pai aos filhos e dos filhos aos netos,
> Por que um deles de todo apague a culpa,
> Virá correndo a maldição – contínua,
> Como fuzis de uma cadeia eterna.[104]

Crimes against nations are unforgivable by God, and that is exactly what Portugal has done against Pre-Columbian communities. The poet thereby contradicts the paradigm of

[103] Ibid., 498.
[104] Ibid., 498.

Christianization as a justification for invasion and, instead, implicitly references the Biblical passage of Deuteronomy 5:9. The dormant fossils have casted a curse against Brazil, one that is intergenerational and needs to be passed down to children and grandchildren to absolve their parents and grandparents. This curse will be the sin whose torch will never be extinguished in the genealogical tree of humankind because its roots will always nourish itself from dead bodies. It will be the shackles and chains of new generations destined to live in the jail created by their forefathers.

Further building on this scaffolded enumerations of disasters, the poet predicts the infinite quantities of shadows projecting and intertwining their miseries onto future celebrations of the nation:

> Virão as nossas festas mais solenes
> Miríades de sombras miserandas,
> Escarnecendo, secar o nosso orgulho
> De nação; mas nação que tem por base
> Os frios ossos da nação senhora,
> E por cimento a cinza profanada
> Dos mortos, amassada ao pés de escravos.[105]

The future tense "virão" signals a prophecy from the poet. An insurmountable number of deplorable shadows will cast themselves onto the pompous and majestic celebrations of the nation, sneering, to desiccate the pride of a nation that has at its base the cold bones of the "mother nation." The allusion to cold bones gains more meaning when juxtaposed with its antipode, ashes, the once-fiery remains of the dead piled up at the feet of slaves. If God's curse is

[105] Ibid., 498.

Figure 2 “Inscripção da Gavia.” From: Manuel Araújo Porto Alegre and J. da. C. Barbosa. “Relatorio sobre a Inscripção da Gavia Mandada Examinar Pelo Instituto Historico e Geographico Brazileiro.”

true, then nothing other than suffering, guilt, and self-inflicted punishment awaits the Brazilian empire and its inhabitants. This is a haunted nation where the ghostly fossils of the murdered will forever be present. Not even the stirring and blinding brightness of Europe convinces the poet of the tragic prospects that await both Brazil and himself:

> Não me deslumbra a luz da velha Europa;
>
> Há-de apagar-se mas que a inunde agora:
>
> E nós?... sucamos leite mau na infância,
>
> Foi corrompido o ar que respiramos,
>
> Havemos de acabar talvez primeiro.[106]

The light of Western civilization will end, the speaker predicts. The recurrent use of the pronoun "nós" followed by a question mark and eerie ellipsis introduces an intimacy of guilt between him and his constituents. As much as he protests against racial injustice and colonial massacre, the poet ultimately acknowledges that he is part and parcel of it. He also suckled putrid milk as an infant, breathed the corrupted air of his nation, and will probably be "finished" before Europe dies out. The sucking of milk is an allusion to the fact that Indian women were the first wetnurses, before African slave women arrived. The shining new nation is not orderly or progressive, but it is founded on murder and dispossession. The creates this sentiment through an ekphrastic display highlighting Brazil's murderous origin and its cursed future.

Gonçalves Dias' interest in deep time and a "geology of morals," as DeLanda would claim, is also evident in his shorter poetry and experimentation with poetic form. The poem that opens his *Últimos cantos* is a five-part piece called "O Gigante de Pedra," which centers on a mountain range in Rio de Janeiro today colloquially referred to as "O gigante adormecido." One

[106] Ibid., 498.

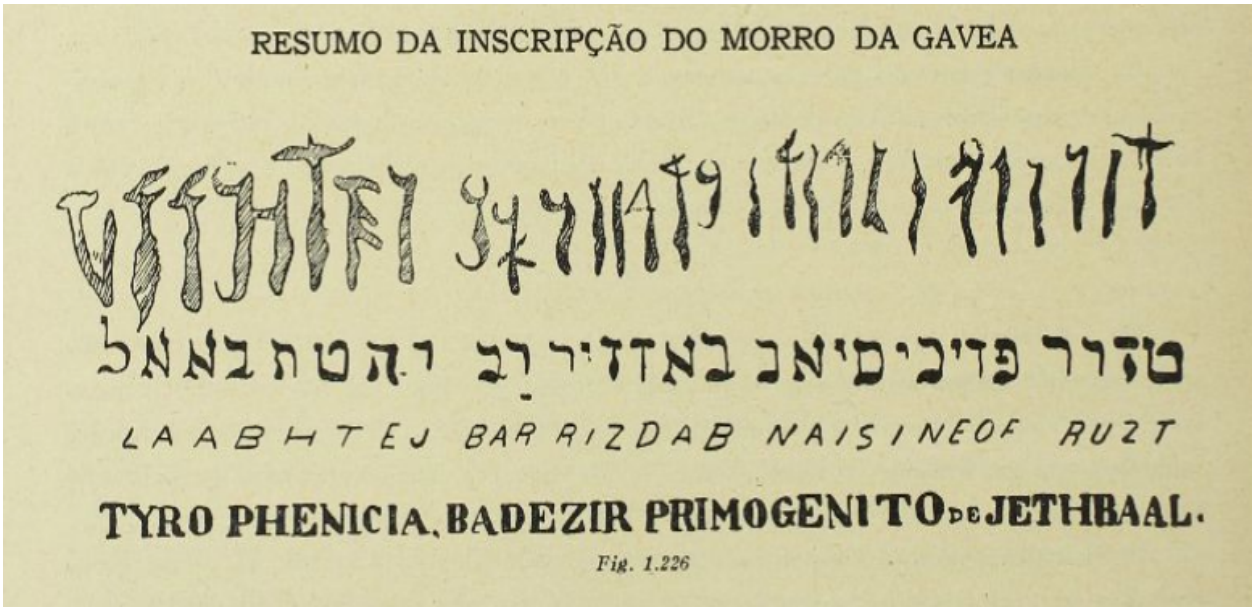

Figure 3. “Resumo da Inscripcão do Morro da Gavea.” From: Bernardo de Azevedo da Silva Ramos, Tradições da America Pre-Histórica, Especialmente do Brasil. Vol. 1.

particular mountain in this range that stirred controversy was the "Pedra da Gávea" for what some believed to be prehistoric scribes written on its side. In 1839, Araújo Porto-Alegre and Januário da Cunha Barbosa visited Pedra da Gávea on behalf of the IHGB due to increased archaeological speculation that the "letters" might be from an ancient civilization. Both authors published their findings in the IHGB's journal under the heading "Relatório Sobre a Inscrição da Gávea," commenting on the possible origins of such inscriptions and providing an image (Figure 2). Fully cognizant that the letters might only be the product of natural erosion and misleading traces, the authors nonetheless entertained the thought that one day a Brazilian Champollion or Cuvier may decipher "esta parte tão obscura da historia primeira do nosso Brasil."[107]

Almost a century later, noted Brazilian archaeologist Bernardo de Azevedo da Silva Ramos published the two-volume and controversial *Tradições da America Pre-Histórica, Especialmente do Brasil* (1930/1939). Transcribing Porto-Alegre and Barbosa's IHGB article and its image, Ramos demarcated what he believed to be Phoenician characters in the rocks, provides a transliteration in Hebrew, followed by a Latin translation, and finally the supposed meaning in Portuguese, "Tyro Phenicia, Badezir Primogenito de Jethbaal" (Figure 3). It allegedly alluded to Baal-Eser II, who was a ruler of Tyre in 850 BCE. Using this as conclusive evidence, the archaeologist proclaimed that the Phoenicians did arrive at the Americas; "e não seria um contrassenso admitir-se, com mais firmeza, que não lhes foi estranho o nosso continente, onde habitaram e deixaram uma variedade valiosa de símbolos e inscrições lapidares, até em formato colossal, como as de que ora nos ocupamos, perpetuando esta reconhecida

[107] Manuel de Araujo Porto Alegre, and J. da C. Barbosa. "Relatorio sobre a Inscripção da Gavia Mandada Examinar Pelo Instituto Historico e Geographico Brazileiro." *Revista do Instituto Historico Geographico Brazileiro,* tomo primeiro (1839), 91.

verdade, mas que tanto se tem procurado contraver."[108] Today most archaeologists hold that these Phoenician letters are no more than the effects of erosion.

The persistent interpretation of these geological marks as ancient record is the result of pareidolia, a psychological illusion that seeks to connect things that are completely unrelatable. Nonetheless, the supposed presence of "inscriptions" was the result of different epistemes and technologies for knowledge production. The rock of Gávea had deceived a significant group of scholars for more than a century, signaling how much power rock formations and erosion can have on humans and the nature of their reality. The mountain became a political agent activating an alternate inquiry into the origins of prehistorical migration routes, a fact that Gonçalves Dias was keenly aware as an active member of the IHGB and close friend of Porto-Alegre. His poem "O Gigante de Pedra" begins by providing an ekphrastic rendition of the mountain range, infusing it through anthropomorphism and a temporality extending beyond organic lifespan:

> Gigante orgulhoso, de fero semblante,
>
> Num leito de pedra lá jaz a dormir!
>
> Em duro granito repousa o gigante,
>
> Que os raios somente poderam fundir.[109]

Bennett writes that one useful technique for conceptualizing vibrant materiality is to critically attribute human subjectivity to nonhuman agents. Doing so allows us to use anthropomorphism as a method to decenter human exceptionalism. "In a vital materialism," she confirms, "an anthropomorphic element in perception can uncover a whole world of resonances and resemblances – sounds and sights that echo and bounce far more than would be possible were the

[108] Bernardo de Azevedo da Silva Ramos. *Tradições da America Pre-Histórica, Especialmente do Brasil*. Vol I (Rio de Janeiro: Imprensa Nacional, 1930), p. 436.
[109] Gonçalves Dias, *Gonçalves Dias: Poesia completa e prosa escolhida*, 353.

universe to have a hierarchical structure."[110] In a similar style, anthropomorphizing the Pedra da Gávea (not unlike the giant in Brazil's national anthem) permitted Gonçalves Dias to orchestrate a paradigm in which geologic material is also a historical being and witness preceding the written text itself. In the verses quoted immediately above, two words commonly attributed to human passion, pride and ire, are here redirected towards the mountain range that is sleeping but is not lifeless. The hardness of granite gestures towards a resilience impervious to human destruction. The raging arrogance of the giant becomes a pulsating agent against colonization and the ephemerality of human cruelty. Imbuing geology with feelings permits the speaker to subvert modernity and usher a vital materiality connecting inorganic and organic being into an assemblage of affective powers.

This enmeshment of various parts is also rendered visible through a literary form that combines more than one poetic genre. Parts one, three, and five are written in decasyllables like *Os Timbiras* but with alternating rhyme, while parts two and four take the shape of octosyllables, also with alternating rhyme, much like a ballad. This latter feature is not surprising, given that the poem contains an epigraph from a fragment of Victor Hugo's ballad "O géant." Fragmenting his poem and alternating between verse forms enables the poetic voice to straddle temporalities, shuttling back and forth between the immense timescale of the epic and the intense brevity of the ballad. While the epic sections I, III, and V focus on the mountain's durability against absolute erosion, parts II and IV magnify the transitory nature of seasons and organicity. Part II depicts time flying as a fugitive, the water cycle that spawns the seasons, the arrival of summer's stagnant warmth, and life through fruits, foliage, and seeds. But the end of part IV adopts a darker tone, with the advent of wooden ships that bring fire and blood aboard, covering the fields

[110] Bennett, *Vibrant Matter: A Political Ecology of Things*, 99.

with the smoke of death. Part V, nonetheless, takes a vengeful turn. The giant mountain, who has witnessed the demise of indigenous tribes as well as the viciousness of the colonizers, shall rise at the end and wash away the blood:

> Porém se algum dia fortuna inconstante
> Poder-nos a crença e a pátria acabar,
> Arroja-te às ondas, ó duro gigante,
> Inunda estes montes, desloca este mar![111]

The conjugation "porém" introduces an opposite destiny for Brazil and transforms the entire stanza into a prophetic vision about its future in deep time. Likewise, the word "se" inserts an alternate turn of events contrary to the implied perpetuity of Christian beliefs and the homeland, signaling instead the demise of both. The indeterminate connotation of "algum" gives these las lines an air of incertitude. When will the beliefs and homeland disappear? The answer lies between now and any time thereafter. The granite giant shall rise from its sleep and throw itself into the sea, sending the ocean crashing into the mountains and flooding the surrounding human establishments. Time and the face of the earth changed, the poet tells us in a previous stanza, but the giant is still present and ready to wake in the end:

> Nas duras montanhas os membros gelados
> Talhados a golpes de ignoto buril,
> Descansa, ó gigante, que encerras os fados,
> Que os términos guardas ao vasto Brasil.[112]

[111] Gonçalves Dias, *Gonçalves Dias: Poesia completa e prosa escolhida*, 357.
[112] Ibid., 357.

Sculpted by an invisible chisel and resting in the sea, the mountain becomes an ekphrastic subject as it is given a narrative of origins and, by extension, a life of its own. The giant is currently reposing, but it is also holding geological oracles for Brazil's future. "Términos" implies limits, interruption, and finite duration, all given by the prehistorical rock giant. The speaker's words provide the mountain with a voice through prosopopoeia, rendering its power perceptible to human grasp. James A. W. Heffernan writes that ekphrasis is centered on "the conversion of fixed pose and gesture into narrative, the prosopopeial envoicing of the silent image, the sense of representational friction between signifying medium and subject signified, and overall the struggle for power – the *paragone* – between the image and the word."[113] The image of the giant is literally that of a still, immobile landform that becomes through Gonçalves Dias's poetic intervention a kinesthetic entity in defiance of its pictorial stasis. Its prosopopeial embodiment in poetry provides the mountain with visibility as it influences and judders other forms of life. It amalgamates emerging properties from the paragonal tensions between word and image, organic and inorganic, human and natural history.

One can only imagine how Gonçalves Dias might react to current paleontological and archaeological research finding on ancient peoples in the Americas. The discovery of Luzia and her supposed Black ancestry as well as current genetic findings linking certain indigenous groups to Oceanians would have most certainly been a ghastly surprise for him. Likewise, the burning of the Museu Nacional would have seemed to him a tragedy, since he dedicated most of his life to fill the pages of Brazilian natural history. Fossils, prehistoric human groups, migration routes, and what he considered to be ambiguously human groups were of paramount importance for his own take on ethnography, historiography, and their combined strength in poetry. His was a

[113] Heffernan, *The Museum of Words*, 136.

search for origins through the lens of natural history in its exhibitory capacities, which could provide him with coordinates as to his own place in relation to his homeland and belief-system. Pereira writes of Gonçalves Dias's travels to the Amazonian region during an ethnographic project for the Comissão Científica de Exploração, affirming in a somewhat essentializing tone that his life was characterized by a relentless pursuit of an American genesis that would explain his own: "Essa viagem, essa navegação solitária pelo rio que cortava a bravia terra maranhense, ainda tão povoada de índios, era uma tomada de contato com tanta cousa esquecida, uma volta ao passado da infância, ao longuínquo passado da raça."[114] Manuel Bandeira, for his part, indicates that Gonçalves Dias was deeply interested in the Scientific Commission, for it provided him with an opportunity to change "the face of Brazil."[115] His scientific and artistic endeavors alike depended on highly schematized hierarchal exclusion of "hominid" and "transitional" Black Oceanians and Australasians, and a fossilized revival of currently extinct South American indigenous groups and geologic formations. All of the artifacts in his textual display, however, manage to truncate his intentions and reveal not only a darker side of himself, but also another path for origins that extend beyond the nation and into prehistory's deep time.

Unlike a textual cabinet of curiosities that described the wonders of a New World to an audience residing in another continent, Gonçalves Dias's museum writing centered on a territory in which he was born and a general public with whom he interacted on a daily basis. He orchestrated a poetics of paleontological, archaeological, and ethnographic approaches by using his own personal experience as a racialized intellectual whose ancestry was the subject of

[114] Pereira, *Gonçalves Dias*, 56.

[115] Manuel Bandeira, "A vida e a obra do poeta." *Gonçalves Dias: Poesia completa e prosa escolhida* (Rio de Janeiro: Editôra José Aguilar LTDA., 1959), 39.
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colonial genocide and imperial subjugation. His involvement in natural history and a national project, on the other hand, should not overshadow the similarities that he does share with the prototype of cabinet of curiosities. The very essence of wonder propels his artistic voice, for that matter, by bringing to life his version of extinct indigenous groups in their diverse emotional features. A recurring rhetorical device that he employs to accomplish this prehistorical resuscitation is prosopopoeia, or the personification of an absent being. In his poems, dead indigenous populations are given a voice teeming with emotional outburst and a desire to rewrite the history of colonialism, as is the case in *Os Timbiras*. Another compelling example is "O Gigante de Pedra," in which Gonçalves Dias ascribes human qualities to a mountainous formation that experienced the early and glorious days of indigenous peoples. Moreover, he employs apostrophe by having his poetic voice address an inanimate object to provide it with a platform of expression about the fragility and temporality of human existence. The giant stone is the sole individual that witnessed the beginnings of humanity and the genocide of colonization, and will ultimately be the individual to drown the nation and its "order and progress" belief.

Chapter 2: Domingo Sarmiento and Fatherly Fossils in Argentina

On November 20, 2019, *The New York Times* published Becky Ferreira's "When Snakes Had Use for a Pair of Legs" with the subtitle: "The fossil discovery in Argentina will help resolve mysteries over when snakes began their transition to their current form."[116] Ferreira's piece details Fernando Garberoglio's recent discovery of a fossil set belonging to a specimen from the extinct snake genus *Najash*, found in the northern area of Patagonia (Figure 8). The Najash is a Cretacean genus characterized by the presence of well-developed hindlegs outside a rib cage, suggesting that snakes' ancestors bore long hindlegs millions of years after losing their front limbs. Exceptionally preserved thanks to the Patagonian sand dunes that once existed in the area, fossils from a Najash specimen became Garberoglio's object of study after he first encountered them in 2013. Six years later, Garberoglio and a team of researchers published their findings in *Science Advances,* which reached a broad audience thanks to journalists and authors including Ferreira.

Unburied from the Patagonian sediments, where it had been interred for millions of years before primates appeared on the earth 65 million years ago, the Najash has generated a proliferation of discourses across media and disciplines. Ferreira's article emphasizes the scarcity of snakes' ancestors in the fossil record, and the importance of Garberoglio's research as it sheds light on their evolutionary history, particularly how it reveals that "the murky evolutionary history of snakes is still full of secrets."[117] Not long after Garberoglio and his colleagues published their results, other news outlets such as CNN and Smithsonian covered the discovery and the various evolutionary implications it suggests.

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[116] Becky Ferreira, "When Snakes Had Use for a Pair of Legs," *The New York Times.* Published November 20, 2019. https://www.nytimes.com/2019/11/20/science/snakes-legs-fossil.html

[117] Ibid., n.p.

In contrast, a number of websites highlighted the biblical undertones of the Najash fossil, since נָחָשׁ (*nāḥāš*) – Hebrew for "serpent" – is referenced in the Hebrew Bible and the New Testament. The species' binomial nomenclature is in fact *Najash rionegrina*, or "Hebrew serpent from the Patagonian province of Rio Negro." Five days after *The New York Times* distributed Ferreira's article, *The Jerusalem Post* published the piece "Is the Bible Right? Newly Discovered fossils show snakes had legs." The evangelical company Christian Broadcasting Network also circulated a similar article on their website *Faithwire* and titled "New Fossil Discovery Backs Up Genesis, Indicates Snakes Had Legs." The first sentence reads: "A recent fossil discovery has granted more weight to the Biblical narrative as told in the book of Genesis."[118]

Thus, for evangelicals, the Najash fossil set supports the Book of Genesis's creation of the world by corroborating that snakes once had legs before being punished by God. For natural scientists, on the other hand, Garberoglio's discovery suggests "that snakes lost their front legs much earlier than had previously been believed but also held onto their hind legs for millions of years."[119] In either case, its fossils activate a series of ontological and epistemological implications for understanding origins of the human and the nonhuman in the world.

Despite its apparent mineral fragility, ancient snake bones gain agential power as they become reconstructed not only in software programs, but also through textual means. Rather than losing ontological status once transferred to textuality, the ontology of the *Najash* as such becomes massively distributed across virtual space and printing distributions. In doing so, the fossil triggers and disseminates speculative ways of understanding the nature of reality: one that

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[118] Will Maule. "New Fossil Discovery Backs Up Genesis, Indicates Snakes Had Legs." *Faithwire.* Published November 25, 2019. https://www.faithwire.com/2019/11/25/new-fossil-discovery-backs-up-genesis-indicates-snakes-had-legs/

[119] Ferreira. "When Snakes Had Use for a Pair of Legs," n.p.

prompts imaginative audacity on the part of readers, but with the understanding that there is an autonomy of things beyond the limits of human knowledge. Because fossils are ancient remains scattered across time and space, we will never fully understand them. But it is precisely this status as withdrawn entities that gives them agential status and allure that sparks wonder, so much so that it can generate alternate approximations to human and nonhuman relations.

In the specific case of Argentina, fossils have been excavated and put on display for at least two hundred years not only in public museums, but in various textual documents. Both the Pampas and the Patagonia territories have been identified as sites of bones buried millions of years before the existence of Argentina as a nation. In 1933, Ezequiel Martínez Estrada published his well-known book *Radiografía de la pampa*, an acerbic evaluation of Argentine society emphasizing its deterioration as a culture founded upon barbarism disguised as civilization. Such result, he argues, stemmed directly from the encounter between European conquistadors and the arid and unyielding lands. Filled with spatiotemporal vastness that escapes European timescales, the Pampas refused to succumb and provide material prosperity to its exploiters. It only gave uncertainty, pain, paralysis, and solitude – all of which corroded Argentine civilization well into the twentieth century.[120]

Martínez Estrada writes that what triumphed over anthropocentric domination was prehistoric and telluric infinitude. Forces undetectable to the human eye impacted and shattered the dreams of recently arrived inhabitants, debunking them into an inferior and animalized condition. All that remained was the victorious earth: "era la victoria de la tierra, el triunfo de la prehistoria; la derrota de un sueño irracional traído al seno de una naturaleza en toda la fuerza del

[120] For a more general discussion about Martínez Estrada and his complicated views on Argentina in *Radiografía* and beyond, see Teresa Alfieri's *La Argentina de Ezequiel Martínez Estrada* (2004) and Adriana Lamoso's *Ezequiel Martínez Estrada: cultura, política y redes intelectuales* (2017).

Pleistoceno."[121] The first epoch of the Quaternary period, the Pleistocene directly preceded the Holocene. The earth as such became an agential being whose prehistorical presence debunked the fantasy of territorial expansion. A fatal flaw of colonialism was its driving motor that sought to make the discovered land a *tabula rasa* without realizing that the earth already possessed a history of its own. In fact, the land's ancestry thrusted itself onto Iberian history, destabilizing its ethnocentric and anthropocentric paradigms.

The Pampas and the Patagonia turned, in Deleuze's sense of the terms, abstract machines that deterritorialized the empire's historiography, opening nonlinear pathways and decentralizing human white male exceptionalism. In short, they become heterogenous and self-organizing agents like imperialism with its transnational networks, making human history inseparable from natural history. As DeLanda confirms, "in a nonlinear world in which the same basic processes of self-organization take place in mineral, organic, and cultural spheres, perhaps rocks hold some of the keys to understanding sedimentary humanity, igneous humanity, and all their mixtures."[122] Similarly, Martínez Estrada introduces a nonlinear understanding of Argentine civilization by x-raying the rocky formations that sustains its very foundation.

A fundamental part of imaging and exposing strata is deciphering one of its internal properties: fossils. But rather than empirically using ancient bones to decode a particular geological age, Martínez Estrada is far more interested in their ontological status and their influence over humanity's past and future. Fossils, he tells us, only testify to a *planetary* history from which there is no experiential nor teleological outcome, as if humankind did not also

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[121] Ezequiel Martínez-Estrada. *Radiografía de la Pampa*, edited by Leo Pollmann (Paris: Colección Archivos, 1991), 12.

[122] DeLanda, *A Thousand Years of Nonlinear History*, 70.

participate in this very same history. In his evaluation of fossils, Martínez Estrada declares them to be "astral" bodies interred under the enormous force of the land: "la naturaleza ha vencido toda resistencia que se oponía a sus leyes y el resto zoológico es posición, menos que cadáver; es tierra con la que entronca su calidad de astro. El fósil es un cuerpo astral."[123] Fossils, he explained, are the evidence of nature's destructive powers over forms of life across the ages. Its presence is not a cadaver per se, but a piece of earth imbued with a paranormal and nonphysical dimension.

I would like to dwell on the astral meanings and implications of prehistoric bones that Martínez Estrada's work conjures. Because astral is anything related to the stars and other heavenly bodies, Estrada subtlety performs an exercise in astrothesia (a vivid description of stars) while defining the nature of fossils. Despite being far away from human touch, astronomical objects still have tremendous influence over our sensorial capacities and environmental surroundings. The location of celestial bodies, for instance, determines large-scale changes between stars and other planets, thereby influencing material and magnetic forces in a particular globe. Fossils might then be objects lying under the earth but having astronomical influences over other living and nonliving entities. Like planets and stars from outer space, they exert complex and powerful impact upon other entities as they enter various assemblages.

Another version of the astral with strong connotative power is its association with ethereal entities living in other realms not fully accessible to living things. They include souls, spirits, ghosts, angels, demons, and other supernatural bodies withdrawn from unmediated human access. Albeit their implicit immateriality, however, Western civilization has referenced – or at the very least hinted at – the material effects and affects of astral entities over living ones.

[123] Martínez Estrada, *Radiografía de la Pampa*, 86.

These usually shuttle between dimensions, sometimes condensing them into a constellation of material and immaterial things. In a similar manner, one could theorize "astral fossils" as entities that recede into unknown realms and yet proceed into our own, making kin and enemies along the way without ever fully revealing themselves to others.

In this context, the word "astral" implies a sense of transcorporeality as it gives fossils the potential of crossing other dimensions and intermeshing in our present world and whatever lies ahead of us. Such undertakings are not, of course, exempt from violence and pain. When Martínez Estrada textually exhibited ancient bones, his fatalism and misery increased. He concluded that conquistadors had no previous settlement history in the new territory, one that might have helped them buttress their own ambitions. As a writer unable to escape and rescue his compatriots from the geologic forces of the Pampas, he himself had no other option but to accept its dominion over humankind.

The Patagonia also had a major role in discussions about Argentina's prehistory and the temporal paradoxes it presented. In 1875, Francisco Moreno requested funds from the Sociedad Científica Argentina for his expedition to unearth the prehistorical information in Patagonia. In doing so, he sought to enlarge Argentina's age as a nation and, more broadly, to contribute to international discussions on the origins of the human race.[124] By discussing the location of fossils and human artifacts, he also touched upon the significance of the land itself as a vessel

[124] For detailed information about Argentina's presence in international expositions centered on anthropology, paleontology, and archaeology, see María Silvia di Liscia and Andrea Lluch's edited collection *Argentina en exposición: Ferias y exposiciones durante los siglos XIX y XX* (2009). On the 1889 Paris fair, see Ingrid Fey's "Peddling the Pampas: Argentina at the Paris Universal Exposition of 1889." (2000). On the general participation of Latin American nations in exposition fairs, see Leoncio López Ocon Cabrera's "La América Latina en el escenario de las exposiciones universales del siglo XIX" (2002) and Carmen Norambuena Carrasco's "Imagen de América Latina en la Exposición Universal de París de 1889" (2003). For the specific case of Mexico, see Mauricio Tenorio-Trillo's *Mexico at the World's Fairs* (1997).

containing prehistorical life in its full vitality. For the renowned archaeologist, the Patagonia was invaluable because it offered the rare opportunity of studying human ancestry's living fossils:

> Sin verdaderos sufrimientos, se transporta realmente desde el refinamiento de la civilización y la ciencia, a los tiempos fósiles. En el transcurso de dos meses el viajero puede recorrer palpablemente 200.000 años y puede ver a su abuelo armado unas veces de una filosa piedra, disputando su alimento a las fieras, y otras, combatiéndolas con las armas de acero que su nieto, llevado por la fuerza irresistible el progreso, ha conseguido fraguar, metamorfoseando, con la evolución de su inteligencia, el cuchillo o la flecha de sílex.[125]

Using the word "palpable" to label the seamless possibilities of physical approximation to vibrant fossils renders Moreno's description of the Patagonia on paper a line of correspondence between seeing and touching. By reading with our eyes, we can touch the Patagonia and its fossils. Palpable means to handle, touch, and feel tangibly perceptible material things. It implies tactile contact as we place our bodies in close contact with something or someone else. In this case, the writer is asking readers to use their sight through synesthesia to examine and interact with deep time. He asks them to palpate two hundred thousand years and their ancestor into existence. He ekphrastically conceives a verbal representation of the fossilized grandfather as he arms himself with flint stones to combat against other intimidating prehistoric animals.

Employing the word "metamorphosis" to characterize the evolution of humankind also bears certain implications. Usually ascribed to supernatural transformations of shape, form, and substance (i.e. Ovid's *Metamorphosis*), it is here readjusted to signify evolutionary change so drastic and differentiated that it almost resembles a magical act. Moreno suggests that modern

[125] Francisco Moreno. *Viaje a la Patagonia Austral* (Buenos Aires: Solar/Hachette, 1969): 218.

humans have not just progressed but significantly metamorphosed from their ancestors, and that they must enter the temporal elasticity of the Patagonia to truly understand how and why they have been transformed. He performs a definition of this territory that centers on what Gabriela Nouzeilles describes as a "chronotopical infinity stretching between modernity and barbarism" where travel means to "veer off the path of history."[126] So extensive and immeasurable is the Patagonia that Moreno must have devised a curatorial organization using words and images to make sense of them – challenges he addresses using the museum and its institutional validation.

The natural history museum is the prime venue where fossils make themselves known because they enter and assemble in a public space as they move and are moved by humans. Martínez Estrada's fascination with geologic sediments and the fossils they contain is but one example among numerous scholars and specialists that stretch back to the long nineteenth-century in Argentina. Fossils then started to sprinkle across various social strata while the Argentine nation tried to define itself as a distinct territory in the world. Natural history museums proved to be essential for a national poetics of display that attracted populations eager to see and be marveled at mounted skeletons, even if such mountings were not scientifically accurate.[127]

Just as important for these intellectuals, I argue, was a museum exhibition at a textual level, or a museum writing style that aesthetically displayed the ethical importance of fossils. Irina Podgorny and Maria Margaret Lopes affirm that various adjacent texts were being produced just as museums started to collect artifacts and physically display them, including catalogues and museum journals. They explain that these written works became invaluable

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[126] Gabriela Nouzeilles. "Patagonia as Borderland: Nature, Culture, and the Idea of the State." *Journal of Latin American Cultural Studies* 8, no. 1 (1999): 35.

[127] Irina Podgorny, *El argentino despertar de las faunas y de las gentes prehistóricas* (Buenos Aires: Eudeba, 2003), 35.

because the images and descriptions of collections traveled beyond exhibition rooms, making them accessible to those who could not otherwise visit the institution itself. "Cada osamenta, cada planta, cada insecto se comparaba con los especímenes existentes de las colecciones descriptas," they affirm, "inventariadas y representadas en estos museos de papel, sustitutos del viaje y del traslado."[128] To think about these so-called paper museums and their effectiveness, on the other hand, we must also inquire as to the manner in which they verbally represented those artifacts. Centered precisely in the power and limits of words to make us see, ekphrasis is a useful literary technique to examine museum writing in Argentine literature and cultural production in the nineteenth century.

Expanding beyond Podgorny and Margaret Lopes's emphasis in museum catalogues, I contend that museum writing and fossil ekphrasis were also present in works written by certain Argentine literary authors. Rather than representing an artistic group deviated from scientists and their projects, these writers made indelibly clear how science was part and parcel of their intellectual life. More importantly, they emphasized the artistic and inventive dimensions inscribed in scientific writing as an activity deeply rooted in the ethics and aesthetics of fossils and natural history.

Fields such as biology, botany, geology, and paleontology were for them almost next-door neighbors that they consulted to address important dilemmas about the nature of their existence, Argentina, human races, the human race, and nonhuman species. In 1915, Leopoldo Lugones published a book praising Argentine paleontologist Florentino Ameghino, titled *Elogio*

[128] Irina Podgorny and Maria Margaret Lopes. *El desierto en una vitrina* (Mexico: Limusa, 2008), 115.

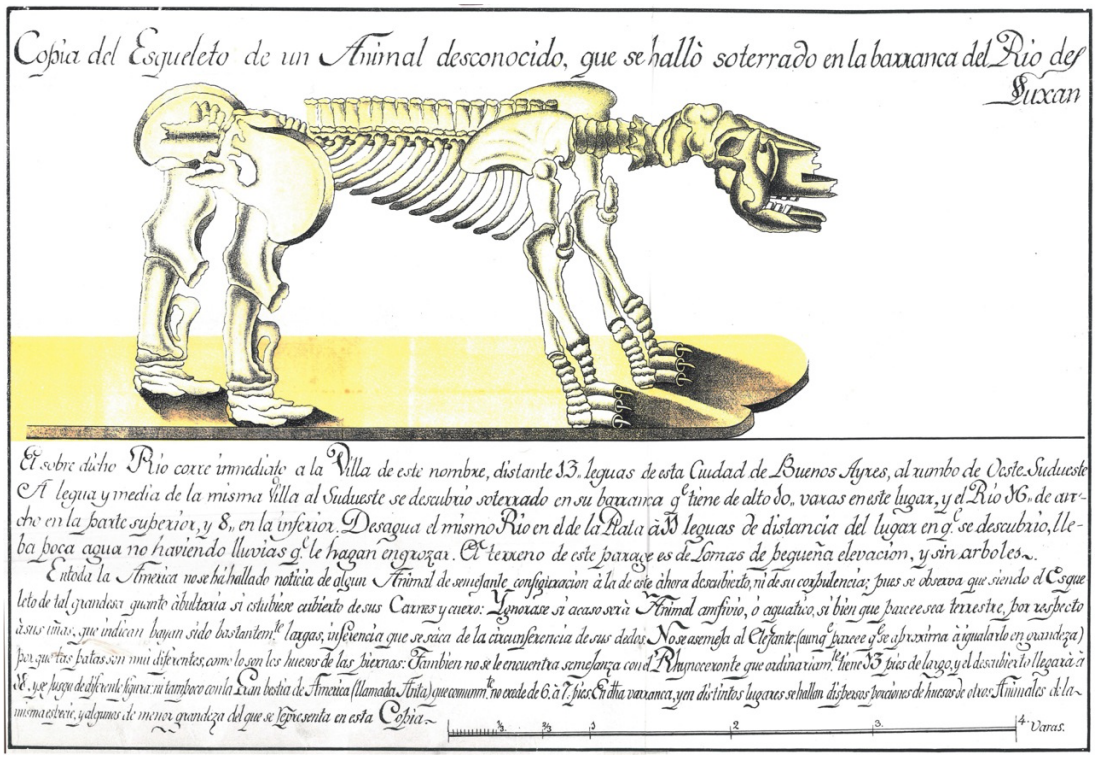

Figure 4: “Copia del Esqueleto de un Animal desconocido, que se halló soterrado en la barranca del Rio del Luxan.” In Manuel R. Trelles, “El Padre Manuel Torres.” *Revista de la Biblioteca Pública de Buenos Aires*.

de Ameghino, where he also expressed the importance of paleontology in Argentina. He starts by describing a plate about the *Megatherium* featured in the Natural History Museum in London and which includes a description in Spanish of its bones originally found in Luján in 1787 (Figure 4).

Of this plate description, Lugones states: "comenta una imagen bastante fantástica, en la cual los huesos aparecen estilizados como piezas de máquinas o elementos de arquitectura."[129] By starting his commentary with the word "fantastic," Lugones reveals that the visual representation of bones has created an imaginative impact on him, and that it has touched a sensitive fiber in his mind. The bones, he tells us, are not just bones: they are stylized in a particularly effective manner reminiscent of machines and architecture. The simile he creates between a fossil exhibition plate and two prominent forms of human expression reveals an artistic dimension inscribed in the very nature of natural history museums. He even escorts his readers to the exact location of this plate, like a curator guiding his visitors and showing them various artwork pieces along the way: "en el fondo del pabellón que remata la galería de los mamíferos y aves fósiles, donde el museo de Londres exhibe la prodigiosa escultura de esas faunas extintas, está colgado, a la izquierda de la ventana, un curioso documento."[130] Instead of starting with the document itself, the author performs a spatial introduction of its location because his readers would first need to enter the museum before arriving at the plate. He employs a kind of pragmatographia that describes an action taking place at an institution of knowledge.

Fossil assemblages, instead of being mere instruments of scientific explanations, are prodigious sculptures on their own and capable of stirring deep-seated emotive responses in

[129] Leopoldo Lugones. *Elogio de Ameghino* (Buenos Aires: Otero & Co., 1915): 12.

[130] Ibid., 11.

visitors who look at them, not unlike the cabinet of wonders. By verbally representing a visual representation of extinct fauna and textually approximating his readers to them, Lugones performs what W. J. T Mitchell calls "ekphrastic hope" and the "overcoming of otherness." Under this light, "the impossibility of ekphrasis is overcome in imagination or metaphor, when we discover a 'sense' in which language can do what so many writers have wanted it to do: 'to make us see.'"[131] Lugones desires precisely to overcome the otherness of the Megatherium's through the act of writing. His is a longing to connect writer, reader, and bones across media forms and in an interobjective enmeshment. Yet, as Mitchell writes, the other side of ekphrastic hope is ekphrastic fear, or when we realize that words are not – and should never be – things.

The distance between the two is paramount for a critical freedom provided by writing's resourceful opportunities. Krieger Murray writes that ekphrasis resides in this liminal position that shuttles back and forth between the desire and aversion of the natural sign.[132] There is indeed an ekphrastic ambivalence inscribed within Lugones' curatorial efforts. He approximates us to the fossil in its illusionary immediacy but also makes us aware of his own rhetorical sophistications and individual interpretation of bones on display.

Ekphrasis also allows the Megatherium to participate in an interaesthetic and transatlantic circulation as it navigates outside a plate housed at the London museum and into the pages of the Argentine poet. The giant sloth is able to disarticulate national boundaries and activate a number of notions about prehistory in the Americas, placing human and natural history under the same critical radar. In 1887, the *Revista de la Plata* (*Magazine of La Plata*) published an article extract from *La Nación* titled "Museo Paleontológico de la Plata." Detailing the inauguration of the

[131] Mitchell, *Picture Theory*, 152.

[132] Krieger, *Ekphrasis: The Illusion of the Natural Sign*, 10.

Museo de la Plata under the directorship of Moreno, the article provides ample details of its spatial structures. Organized – at least on paper – into twelve different halls, each contained a particular organization on extinct life. The first one was destined for minerals relevant to geologic formations; the second for large-scale Pleistocene animals, and the rest for a timeline of morphological evolution.

The last two halls, however, were reserved for the anthropological section, or the evolution of humankind: "empezando por los antropoides, nuestros antecesores inmediatos, se observa gradualmente cómo el eje vertebral y las extremidades modificadas por causas mecánicas de adaptación, van operando la estación vertical que da al hombre su excelencia y su nobleza" (439).[133] Just as museum visitors were meant to be left aghast at the exhibitions, so were newspaper readers meant to be stunned through a textual experience of the human skeleton.

The report provides a story of humankind's evolution through its vertebra and extremities starting with the anthropoid, that category of genesis where human and nonhuman distinctions were not yet clearly established. Evolution and adaptation would provide an anatomical verticality to humans, which the article depicts as "excellent" and "glorious." The author imbues verbal representation with an ethical dimension that is not as readily grasped in its visual form. By adjudicating excellence and glory to exclusively human anatomical features, the author recurs to ekphrasis to make an explicitly political and moral effort to distance the human species from its less-than-human ancestors.

[133] Irina Podgorny. *El argentino despertar de las faunas y de las gentes prehistóricas*, 439.

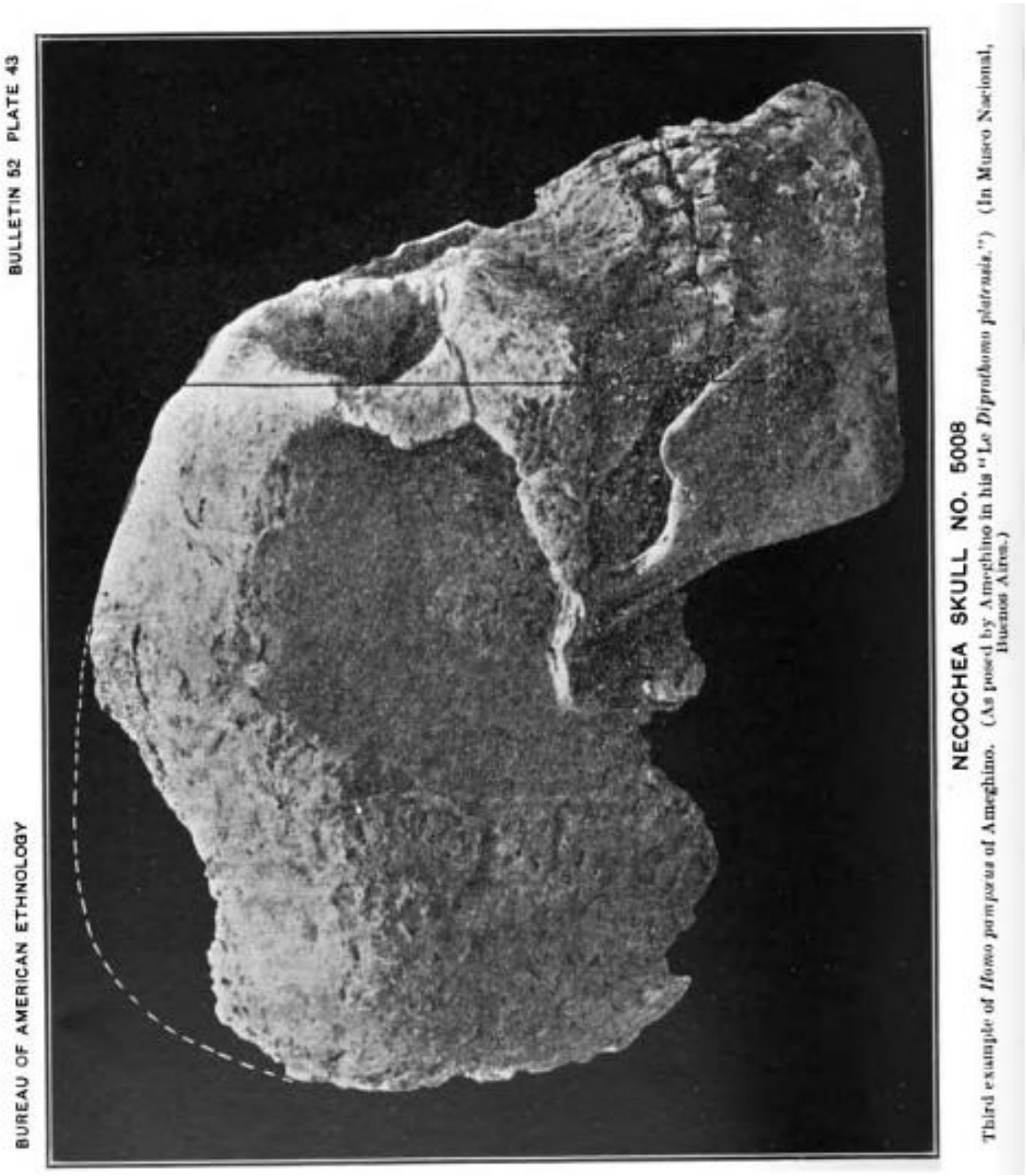

Figure 5 “Necochea Skull No. 5008.” In Aleš Hrdlička, *Early Man in South America*.

Rather than being separated into segregated realms of fact and fiction, fossils merge the sciences and the arts into a captivating form of speculative realism. Ancient bones become immanent things and deterritorializing agents that alter the human-made social condition in which they circulate. And yet, there is also an implicit recognition of fossils an *unknowable* things withdrawn from complete human access. In effect, underneath their intellectual grandeur, these Argentine scientists knew that they could never understand prehistoric life in its entirety. All they could do was devise exhibitions to validate their theories and justify their own insecurities surrounding biological origins – only to be haunted and outsmarted by ancient bones. Ameghino even went so far as to affirm that Patagonia was the origin of humanity across the world – a common, unifying cradle for the infinitely differentiated civilizations ever established on the planet (Figure 5). [134] He indicated: "La mayor antigüedad de la fauna de Mamíferos fósiles en Sud América, incluyendo los más antiguos monos fósiles conocidos, prueban que los remotos antepasados del Hombre evolucionaron en este continente."[135]

For the controversial paleontologist, the Patagonian secrets were also the secrets of human germination, and the evidence for his theory rested on human remains found adjacent to or otherwise carved onto Pleistocene animals. Leila Gómez states that finding prehistorical worlds just outside the city in Argentina generated the illusion of multitemporal coexistence.[136]

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[134] Throughout the twentieth century, several eugenicists and intellectuals would argue that ancient civilizations in the Americas were founded by Caucasian people before degrading through miscegenation with the "Yellow" races with whom they came to the Americas. For more detailed information, see Ruth Hill's "Primeval Whiteness: White Supremacists, (Latin) American History, and the Trans-American Challenge to Critical Race Studies." On Ameghino's theory of Homo pampaeus, see Ruth Hill, "Ariana Crosses the Atlantic: An Archaeology of Aryanism in the Nineteenth-Century River Plate."

[135] Florentino Ameghino. *Doctrinas y descubrimientos* (Buenos Aires: La Cultura Argentina, 1923): 172.

[136] Leila Gómez. *Iluminados y tránsfugas. Relatos de viajeros y ficciones nacionales en Argentina, Paraguay y Perú* (Madrid/Frankfurt: Iberoamericana, 2009), 47.

But what does this desire for temporal expansion meant for the nation's unified promises? An obvious conclusion would be that prehistory was included in nationalist discourses in an effort to naturalize it. I, however, contend that the search for prehistorical origins in fossils also did something unexpected: it disarticulated the very fabric of the nation by dismantling its borders, decentering Western civilization, and bringing Quaternary animals as powerful historical agents against human exceptionalism. Ameghino's theory on the origins of humanity is an exemplary case in point.[137]

The paleontologist's main purpose in his major work published in 1880, *La antigüedad del hombre en El Plata*, was to conclusively prove the coexistence of prehistorical humans with the surrounding megafauna. Indeed, Podgorny states that "Ameghino's ideas on human ancestors [were] a result of the controversies over the origin and dispersion of mammals."[138] His description of these animals is indeed intimidating: toxodon as large as elephants; glyptodon covered in thick, osseous armor; appalling carnivores with tusks of more than ten inches and sharp as a dagger. Many of these species have no direct descendants, so he tells us, which means that they were unique in the quaternary Pampas. All of them were also coeval with the fearless prehistoric man of the Southern Cone: "durante la época en que prosperaba esa fauna singular, únicamente propia de las pampas argentinas, el hombre también poblaba estas comarcas, y más de una vez vio, contempló y admiró las macizas formas de los extraordinarios seres que lo

[137] For more information about the history of archaeology, anthropology, and paleontology in Argentina, see Irina Podgorny's *El argentino despertar de las faunas y de la gente prehistórica. Coleccionistas, Museos y estudiosos en la Argentina entre 1880 y 1910* (2000), *El sendero del tiempo y de las causas accidentales. Los espacios de la prehistoria en la Argentina* (2009), and (with M. Margaret Lopes) *El desierto en una vitrina. Museos e historia natural en la Argentina, 1810-1910* (2008).

[138] Irina Podgorny, "Bones and Devices in the Constitution of Paleontology in Argentina at the End of the Nineteenth Century," *Science in Context*, vol. 18, no. 02 (2005), p. 252.

rodeaban por todas partes."[139] Ameghino employs here a nationalistic reading of prehistory by repatriating megafaunal life into the uniqueness and antiquity of argentine soil, which in turned contributed to his own racial project for the nation. As Ashley Kerr writes, "Ameghino developed an overarching narrative that aimed to explain the prehistoric past of Argentina in order to shed light on the racial present."[140] The use of the imperfect preterit indicates an uncertain but extensive timescale in which these animals once prospered alongside humans, and "comarca" gives his description an air of locality specific to the region.

He likewise portrays ancient humans as living creatures who also possessed the capacity to be mesmerized at the sight of massive animals, just like contemporary visitors who enter a natural history museum to see their bones. The author becomes a curator who uses museum writing to showcase an ekphrastic story about the bones and human artifacts that he excavated. It was not enough to simply enumerate them. He also needed to add a layer of his own interpretation to make sense of them, and to invite his readers to emotionally connect with their ancestors. This process, in turn, depended on stirring the emotions in the reading process leading to intellectual discovery, much like a textual cabinet of wonders.

In theorizing the origins of humanity, Ameghino on the other hand also disfigured the nation as an autonomous, imagined community. In nationalizing prehistoric origins as Argentinian, he brings forth a dispersal of humanity across the globe to the point of engendering national borders. If humans come from the Pampas and Patagonia because they are the cradle of civilization, then it follows that humanity as such is Argentinian and that Argentina encompasses

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[139] Florentino Ameghino, *La antigüedad del hombre en el Plata* (Paris: G. Masson; Buenos Aires: IGON hermanos, 1880), 9.

[140] Ashley Kerr, "From Savagery to Sovereignty: Identity, Politics, and International Expositions of Argentine Anthropology (1878-1892)," *Isis*, vol. 108, no. 1 (2017), 67.

the *entire* world. What happens when science informs us that there is only one nation on earth? As a monogenist, Ameghino must have known that evolution and adaptation often imply migration, unless there is an explicit geographic barrier that prevents it from taking place. Charles Darwin himself confirms this view: "Hence it seems to me, as it has to many naturalists, that the view of each species having been produced in one area alone, and having subsequently migrated from that area as far as its powers of migration and subsistence under past and present conditions permitted, is the most probable."[141] When the Argentine paleontologist indicated that the "singular" fauna was "únicamente propia de las pampas argentinas," he was also including *Homo sapiens* under this umbrella.

This fact is all the more ineffaceable when he insisted several times that human remains were found next to megafaunal bones, therefore implying an intimate coexistence – even when humans were anthropoid apes. Migrating elsewhere, they actually defaced the local uniqueness of their origins by ubiquitously populating the entire globe. Argentine ancestry was present in all continents, and so Argentina was in all continents, rendering the whole notion of localized nationality inaccurate.

Ameghino thus used his sense of deep time and the discursive as well as material power of fossils to create a politically charged vision of geohistory. In a similar vein, he presented his concept of world creation using a sense-driven exposition of ancient creatures. Rather than merely listing megafauna, he created a festival of the senses for the reader, as if the animals described were part of a stimulating visual display. By framing his overview of extinct life through an ekphrastic lens, he managed to textually generate an exposition of the world by

[141] Charles Darwin. *On the Origin of Species*. Edited by Gillian Beer. Revised Edition (New York: Oxford University Press, 2009), 260.

Argentine means, while also erasing Argentina's national boundaries and its illusions as a unique nation distinct from all others.

Ameghino was not the only intellectual interested in how prehistory does and undoes the nation. Domingo Sarmiento, one of Argentina's most important historical figures and canonically considered to be one of his country's most important nation-builders, was also very fond of fossils, prehistoric humans, and national history. In his magazine published in New York in 1867 and titled *Ambas Américas* (*Both Americas*) he described his experience visiting the Museum of Comparative Zoology (MCZ) at Harvard University. Then known as the "Agassiz Museum" for its founder, Louis Agassiz, the MCZ became for the Argentine statesman an introduction into the meticulous classification by one of the most renowned scientists at the time.

Yet, Sarmiento first introduces readers to the contours of a particular city dear to him: Cambridge, MA. If Lugones starts with the London museum, he begins with the city where the museum is located: "He pasado dos días en este recinto en donde se respira ciencia; donde hay observatorios de astronomía particulares, y os muestran un descubrimiento o una clasificación nueva que están haciendo en los cielos."[142] By referring to Cambridge as a *recinto*, the author implies that Cambridge is a special perimeter marked by scientific advances, a distinctly *North American* one that invested its time in classifying the environment and celestial bodies. [143]

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[142] Domingo F. Sarmiento. *Ambas Américas*. *Obras de D. F. Sarmiento*. Tomo XXIX (Buenos Aires: Imprenta y Litografía Mariano Moreno, 1899): 83.

[143] Sarmiento's relationship to Argentina and the United States in terms of critical race studies has been extensively analyzed. For a comparative study between Sarmiento and other prominent intellectuals, see Juliet Hooker's *Theorizing Race in the Americas: Douglass, Sarmiento, Du Bois, and Vasconcelos* (2017). For a general and thorough discussion about Sarmiento's travels in the United States, see Nancy Brandt's "Don Yo in America: Domingo Faustino Sarmiento's Second Visit to the United States" (1962) and Elda Clayton Patton's *Sarmiento in the United States* (1976). For more information about U.S. influence on Sarmiento's conception of education, see Watt Stewart and William Marshall French's "The Influence of Horace Mann on the Educational Ideas of Domingo Faustino Sarmiento" (1940), and Thomas Genova's "Sarmiento's *Vida de Horacio Mann*: Translation, Importation, Entanglement" (2014).

Yet, he also inserted himself as an Argentine national by recurring to an unexpected fellow comrade and countryman, the Megatherium: "visitando el Museo, dije al general Bancks, viendo el esqueleto (copia) de un *Megaterium*; he aquí un compatriota mío, cosa que dio lugar a muchos comentarios."[144] "A compatriot of mine" suggests a form of filiation to another entity by being from the same community, and it usually refers to *human* groups. But the statesman expands the term not only to nonhuman forms of life, but to *extinct* nonhumans. The Megatherium as such becomes an Argentine citizen by being subjected to a textual restoration process, an exhibited dislocation and relocation to the Southern Cone. In doing so, Sarmiento demonstrated a certain appreciation for the United States without losing attachment to his homeland. As Juliet Hooker writes, *Ambas Américas*'s respect for the North American nation was also skepticism towards US imperialism and dominion over Latin American nations.[145] Despite being technically a copy, Sarmiento's Pleistocene compatriot became a trans-American concatenation of anxieties and desires.

Sarmiento's engagements with fossils and natural history museums permeated most of his intellectual career, even writing a biography about naturalist and fossil hunter Francisco Javier Muñiz. Considered to be a pioneer of Argentine paleontology, Muñiz is commonly known for his study of the fearsome *Muñifelis bonaerensis* or *Smilodon* saber-toothed cat. Sarmiento's biographical structure of Muñiz's life forges a certain degree of interrelatedness between disciplines. This approach is coeval with the nature of "fossil," or the way in which biology,

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For detailed discussion about Sarmiento and orientalism, see chapters 4 through 6 in Nadia R. Altschul's *Politics of Temporalization: Medievalism and Orientalism in Nineteenth-Century South America* (2020).

[144] Ibid., 83.

[145] Juliet Hooker, *Theorizing Race in the Americas: Douglass, Sarmiento, Du Bois, and Vasconcelos* (New York: Oxford University Press, 2017), 104.

aesthetics, history, and geology find common ground on human and nonhuman origins. A colonel, a doctor, a paleontologist, and a naturalist, Muñiz was for a paragon of interdisciplinarity for Sarmiento. A formation as his was needed to truly inquire the methods and consequences of studying ancient bones. Each chapter of his biography is divided into selected and diverse topics about the figure in question, including an introduction listing all of Muñiz's awards and appointments, and chapters focused on certain parts of his intellectual career.

In doing so, Sarmiento exhibits through the biographic genre an orchestrated reading of his life –grounded in a literary-based stratigraphical approach. Argentina's former president, however, demonstrated a particular interest in Muñiz's commitment to paleontology and its broader impact on evolutionary theory.[146] Sarmiento's selection and organization of Muñiz's documents likewise suggested a curatorial method reminiscent of paleontological classification. By reproducing some of the colonel's documents in his biography, the stateman was also staging a particularly textual method in which bones, aesthetics, and exposition became interchangeable. That is, literature became a traceable form of paleontological research forged at the crossroads of the arts and the sciences.

The former president of Argentina was most interested in the kinds of value-laden extinct animals that the colonel-turned-paleontologist disinterred from the lands of Lujan and the pampas. Referencing Humboldt as the wisest of men in modern times and the discoverer of a world older than its name would signal, Sarmiento reflected on the importance of the New World's antiquity. He claimed: "Este es el gran rol de la América en la reconstrucción genesiaca que se viene operando. El día que se exhumó del rio Luján el gigantesco Megaterium, puestos de

[146] Adriana Novoa and Alex Levine. *From Man to Ape: Darwinism in Argentina* (Chicago: University of Chicago Press, 2010): 34.

pies sus huesos, casi completos en el Gabinete de Historia Natural de Madrid, se abrió un nuevo capítulo a la historia de la creación."[147] No longer a territory outside scientific studies, the New World had become the epicenter of natural history. Far from being on the margins, America in the continental sense was the beginning of genesis, both in biblical and scientific terms. That Sarmiento chose to classify this process as a "chapter" necessarily leads us to an examination of how writing itself functions in paleontological discoveries.

Because there are no historical documents of ancient inhabitants in the Americas, Sarmiento argued that anthropology needed to find documentation in other materials, like Peruvian huacas and Mexican mounts. Here the author established a paragonal relation between word and image because archaeological materials need to be narrated so that they make sense to the general public. Language is the mechanism through which scientific findings are disseminated, and so things will unavoidably acquire coordinates within the ethical paradigms of modernity.

In chapter five of Muñiz's biography, Sarmiento's description of fossil discoveries, for instance, directly leads him to juxtapose the Giant Sloth to stone tool findings in the Sahara and to compare the latter to the blurry pages of human history. Animal and human species find a contact zone in his writings, to the point of interchanging "species" with "race" when he states that the Lujan river is "un osario de razas extintas."[148] By juxtaposing both kinds of findings, the Argentine statesman introduced a line of correspondence between the human races, the human as a race, and the nonhuman. Muñiz has performed an exhumation and initiated an inquiry into the

[147] Domingo F. Sarmiento, *Francisco J. Muñiz*. *Obras de D. F. Sarmiento* (Buenos Aires: Imprenta y Litografía Mariano Moreno, 1900), 270.

[148] Ibid., 231.

mysterious secrets of geology where animals are still floating undetected in the sediments: "la existencia de distintos animales formados, flotan en la atmósfera de una época sin condensarse una creación pampeana que ha dejado sembradas sus osamentas en la dilatada extensión de las llanuras."[149] Animals formed throughout the ages, Sarmiento informs us, are floating in aeriform and underground as particles scattered in the vast plains.

By employing the word "atmosphere," Sarmiento adjudicated the astronomical power of heavenly bodies to those enigmatic animals in buoyant motion under the earth, for they also molded the ecosystems and genealogical trees of various lifeforms. The task of scientists and citizens alike was to place those animals into discernably thick paradigms, to bring them into closer aggregation so that the history of life – including that of humanity – can be understood. These now extinguished lives left traces of their vibrancy that had to be harvested, for their seemingly fragile structure had the potential of growing into larger and more complex paradigm-shifting assemblages.

Throughout the biography, the author cites the writings of his main subject extensively and from a variety of sources including letters and formal reports. In one particular case, Sarmiento quotes a list written by Muñiz in 1857 to another intellectual and as part of a shipment sent to the museum in Buenos Aires. Rather than distantly and succinctly list what is inside the boxes, Muñiz provided an emotionally laden verbal representation of the animals from which the bones came. He started with "la magnífica cabeza del Toxodon," followed by a "extremidad semejante del pesado Maghaterium [*sic*]: el brazo poderoso y la terrible mano unguicolada." He

[149] Ibid., 230.

finished with a "pie de Milodon, animal de formas tan extraordinarias, como lo son las de aquellas otras especies."[150]

One of the most defining features of ekphrasis is that authors create an affective thread with the artwork's features that they define, rather than simply listing them. Of John Keats's "Ode on a Grecian Urn," for instance, Spitzer affirmed that the poem's ekphrastic success resides in that it "turned a lengthy numeration of factual detail, difficult to visualize, into one continuous, emotion-laden address of the urn and into a dramatic search for the message contained therein."[151] Muñiz and Sarmiento did something very similar by scaffolding extinct animals and their biocultural significance. The Toxodon's head became imposing, sublime, and ambitious in its creation by demanding nothing less than awe from its audience. The arm of the megatherium held control and influence over both intellectuals as they revived it in its full violence. The clawed hand causes terror and is formidable in its reference to death through its claws. Perhaps Muñiz and Sarmiento were thinking about Thomas Jefferson's *Notes on the State of Virginia* where he described the Megalonyx, also a giant sloth but known to him as a feline. Rather than simply counting features, Sarmiento and Muñiz discovered in these bones a dramatic search and message from prehistory in its ethic and aesthetic proportions.[152]

A very similar situation arises with the fossil horse, since Sarmiento devoted considerable space to underlining its significance as an extinct species from the Americas. After Muñiz sent some fossils from extinct horses to the Public Museum in Buenos Aires, its director Herman Burmeister exhibited them at the Universal Exposition in Philadelphia. Burmeister also

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[150] Ibid., 234.

[151] Spitzer, "The 'Ode to a Grecian Urn,'" 218.

[152] For detailed information about the giant sloth's cultural significance, see Juan Pimentel's *The Rhinoceros and the Megatherium: An Essay in Natural History* (2017).

published a study titled *De los caballos fósiles de la República Argentina* in both German and Spanish and eight plates. In addition to citing a brief quote from Burmeister describing the most probable physical profile of the fossil horse, Sarmiento also added his own narrative about its origins: "Como se ve, es contemporáneo del Megatherium y con él extinguido, mientras que en Asia y Europa sobrevivió a las catástrofes que lo sepultaron en América, sirviendo allá al hombre del Asia central con los centauros, los escitas, para unir a las tribus humanas, destruir y rehacer naciones con Genjiskan, Atila, Artigas y los bárbaros a caballo."[153]

Here it is as if Sarmiento guides us through a natural history museum and points out the extinct animal. He tells us that this species of fossil horse died in the Americas but survived in Asia and Europe, acting as a major force in mythology and the unification of barbaric tribes. Horses' migratory past, his narrative implies, is a main bastion of human history that did exist in the Americas prior to European colonization. The ekphrastic strategy that Sarmiento employs here on the fossil horse underlines the antiquity of the Americas as an ethical affront against European misconception of it as a new world. In doing so, on the other hand, Sarmiento also undoes his homeland's borderlands as Ameghino did by introducing prehistorical migration in the equation, and thereby interrogating the "Argentinian" identity of the horse.

Like Sarmiento, Muñiz also performed a narrative practice on a fossil to demonstrate the changes of the Pampas and the disfigurement of its physical contours. The passage that Sarmiento selected focuses on a group of petrified trees that the paleontologist had discovered. Muñiz found himself "en un lugar en donde un grupo de bellos árboles extendieron sus ramas sobre las costas del Atlántico, cuando aquel océano, rechazado hoy a 700 millas de distancia, venía a bañar los pies de la cordillera." These trees, he explained, had emerged out of volcanic

[153] Ibid., 234.

soil raised above sea level but later found themselves at the bottom of the ocean. During that time, the trees' land were covered by a layer of sediment and subsequently by enormous outpourings of submarine lava, causing a fusion of volcanic rock and sedimentation.

Tectonic plates once again exerted their influence and made a mountain range 7000 feet tall out of what previously had been ocean floor. Muñiz proceeded to elucidate on the trees' destiny:

> Por otra parte, las fuerzas siempre en acción que modifican constantemente la superficie de la tierra, habían ejercido su imperio, porque aquellas inmensas acumulaciones de capas se encuentran al presente cortadas por valles profundos, y los árboles petrificados salen hoy día del suelo cambiado en roca, allí donde en otro tiempo elevaban sus verdes copas. Ahora todo está desierto en este lugar; los líquenes mismos no pueden adherirse a estas petrificaciones que representan árboles de otros tiempos. Y sin embargo, por inmensos, por incomprensibles que estos cambios hayan de parecer, todos se han producido en un periodo reciente, si se le compara con la Historia de la Cordillera, y la Cordillera misma es absolutamente moderna comparativamente a muchas capas *fosilíferas* de la Europa y de la América.[154]

Usually ascribed to humankind, here imperial agency is attributed to geologic forces constantly shifting the landscape and the delineations that separate water and land. The earth's crust is the single ruler and source of authority over the extensive territory now known to humans as the Pampas. Its dominion is complete, unmeasured, and boundlessly pervasive. Though recent in comparison with the rest of the world, this vast terrain has altered its physical characteristics so

[154] Ibid., 242.

significantly that its previous form would have been unrecognizable to modern Argentinians. It not only underwent sedimentation while submerged, but its successive mountainous formation were eviscerated into valleys and its green ecosystem replaced by a desert where not even lichen can survive.

Muñiz placed the petrified tree as a biostratigraphical entity whose very process of submersion under water and burial inland starkly contrasted with the green leaves it formerly possessed. The Pampas's current landscape known to modern Argentinians was only an ephemeral deformation of what had been, and would be long after they became extinct and all the nations of the world disappeared. This untimely fate becomes visible to us when Muñiz's geologic ekphrasis finally asserts that the Pampean changes were recent in comparison with other, much older fossilized crusts in the Americas and other parts of the world. Thus, Muñiz provided a rhetorical exercise of chronographia, or a vivid representation of a previous time, and performed topographia, or a vivid representation of a place. Additionally, he engaged in t*opothesia* by describing an imaginary place that is no longer visible due to massive geological changes taking place over millennia.

In addition to exposing deep time and humans' precariously short existence in it, Sarmiento was also particularly attracted to one of Muñiz's most famous discoveries: the Smilodon or saber-toothed cat, which he coined *Felis-Muñis bonaerensis*. In 1845 Muñiz published a paper on the bones of a saber-tooth that he discovered, which he quickly communicated to intellectual figures including Charles Darwin. He then shipped its fossils to the Public Museum in Buenos Aires, where they are currently located. When referencing the saber-tooth, Sarmiento underlined its significance by linking it to the *Machaerodus* genus already known to the scientific community abroad.

He then went even further by emphasizing the *mythological* importance of this extinct big cat, connecting it to Heracles and his violent encounter with the Nemean lion:

> Tiene para mí un particular interés el Machaerodo [*sic*]. De las fábulas griegas, entre ellas las doce hazañas de Hércules, no es la menor haber extirpado el león que asolaba las campañas de Nemea, y entre los fósiles encontrados en Grecia, a más de seis variedades de monos, fósiles cuya posibilidad negaba Cuvier años antes, se encontró un terrible carnívoro fósil con dientes, incisivos, muelas y uñas formidables, dotado además de cuchillo tajantes a guisa de espadas de dos filos que debieron servirle para hacer tajada de la carne que los otros instrumentos de aquel arsenal le procuraban. Este debió ser el espantable león Nemeo, extirpado por Hércules, acaso por haber dado, como Muñiz, con sus huesos fósiles más tarde.[155]

Here Sarmiento brings us to the dimension not of science, but mythology, where paranormal beings and forces are sites of historical explanation and justification for the origins of the world. The supernatural undertones of the Nemean lion and Muñiz's saber-tooth is as scientific as it is magical in its embodiment, confounding the history of life with its frightening attributes. Its extraordinary presence blurs the lines between biological and magical thinking by positioning them as two modes of inquiry that seek the same goal: to know from whence this magnificent creature came.

The first of the twelve tasks assigned to Heracles was to slay a creature that devasted the villages of Nemea, in a manner probably similar to the saber-tooths that ravished the

[155] Ibid., 243-244.

establishments of the Pampas's prehistoric humans. Adrienne Mayor argues that so-called "monsters" featured in classical art and literature, like giants and ferocious animals, were actually based on fossils of extinct species profusely scattered across the lands of ancient Greece and Rome. Mythology and folklore presented valuable interpretations for these bones, but "because modern classical scholars tend to read myth as fictional literature, not as natural history, the significant contributions of popular traditions to ancient paleontological thought have not been appreciated."[156] Sarmiento, however, was intuitively aware of mythology's scientific contributions as he ekphrastically conveyed the ferocity of the Nemean lion in his own interpretation of the Smilodon. Just as important is the bridge that he constructed between the Argentine saber-tooth and classical literature, for it denationalized the autochthonous aura of Muñiz's discovery and showcased a transoceanic component inscribed within Pampean natural history.

Muñiz's own relationship with fossils and museum acquired, like Sarmiento's later, an ethical element based on the excavations he performed and how he verbally represented them to readers. As a former doctor who worked for the police department and whose job was to write reports on the condition of found bodies, the forensic paleontologist wrote about excavations in a very specific manner: he stressed how prehistoric animals must have been agonizing as they were drowning in the mud and their extremities settling into fixed positions: "Ellos hicieron, probablemente, los posibles esfuerzos para desenterrarse del lodazal o de la masa fangosa que los circundaba y que poco a poco los absorbía. La disposición respectiva de los miembros indica ese azaroso conflicto." He described their bodies' intensity of movement while futilely trying to escape: "En la intensidad de los movimientos que ejecutan para salir del peligro, afirman, como

[156] Adrienne Mayor. *The First Fossil Hunters* (Princeton: Princeton University Press, 2000): 192.

es natural, las extremidades posteriores, mientras se empinan y manotean. De este inútil afán resulta que más abisman aquellas partes cuanto más activos y repetidos son los conatos por desatollarse." Finally, he confirmed that these animals suffered an agonizing death and showed that the position of their bones was clear evidence of this: "agotadas las fuerzas y rendido el animal, si suponemos al cieno tal cual consistente, natural es que los miembros anteriores que remueve en alto hasta lo último, y principalmente la cabeza que la erige cuanto es posible para respirar y prolongar la agonía; natural es, decimos, que esos miembros queden más supinos que los otros después de la muerte."[157]

Describing a work of art is a deeply ethical exercise that provides a voice to express projected emotional states like pleasure and pain. As Cheeke indicates, ekphrasis can be "a moral protest, or act of love, an act of the closest attention and concern, not to be confused with the idea of being 'immortalised' in art, but instead closer to the idea of defiance, of recording the simple and outrageous fact of *having been there*."[158] Muñiz's detailed description encapsulated more than just dry facts. It also registered the last agonizing moments of animals whose bones would later illuminate natural history's dark corners.

He conveyed a verbal recounting of these animals' strenuous situation, their labors to save themselves out of imminent death. Beset on all sides by a glutinous material that is smothering them, their existence was engulfed, devoured, and plunged into the underworld. The mud is sticky and tenacious in clinging to these forms of life, stifling them into extinction by deluge. Describing this event as an "*azaroso* conflicto" means that this combat for survival is tragic, unfortunate, exposed to the uncertainties of danger and inclemencies of weather. It is

[157] Sarmiento, *Francisco J. Muñiz*, 46-47.

[158] Cheeke, *Writing for Art*, 118.

perilous and venturesome without aim or purpose other than death itself. “Azaroso” is an adjective suggesting constant and unfortunate pain as well as a drastic alteration or interruption from to entity’s natural course of existence. Exhaustion is being consumed and drained from life’s energy. It means to be extremely enfeebled, consumed, depleted, and expended by the sullen dangers of the Pampas.

These animals had no choice but to surrender their bodies entirely to the bottomless, lowest depths of the earth from which survival is unlikely. A man connected with science and the law, Muñiz was a professional in charge of excavating prehistoric animals and communicate their sufferings just before death. His forensic report is an ekphrastic act of responsibility and attestation, of earnest attention and care, and of moral impetus for life beyond human confines. As Podgorny and Margaret Lopes affirm, Muñiz was a forensic doctor whose “descripción que hace de los instantes finales de un hombre asesinado guarda estrecha similitud con la descripción de los megaterios hundiéndose en el cieno.”[159]

Muñiz and Sarmiento reframed paleontology as an obligation to record prehistory through a narrative act filled with thick and affective complexities, and not just as a callous inventory of geologic revolutions. Museum writing for them was an endeavor to capture extinct forms of life in their teeming vibrancy, making perceptible to human senses their ethical force and their influence over humans’ ontological foundations. Muñiz and Sarmiento aspired to kinesthetically capture the movements, bodily contours, and legitimacy of extinct lifeforms. In a similar vein, Sarmiento’s selection and exhibition of Muñiz’s documents through specific chapters and interpretation is an assemblage that compels us to acknowledge and feel that “scientists and animals are fleshy creatures which are enacted and enacting through their

[159] Podgorny, and Margaret Lopes, *El desierto en una vitrina*, p. 57.

embodied choreography."[160] As Marco Caracciolo highlights, there is a fundamental correlation between forms of human expression and nonhuman collectivities, and "that literary strategies put readers in a position to develop kinesthetic empathy for verbally represented bodies, including animal assemblages."[161] Similarly, fossil assemblages, as these two Argentine intellectuals signal to us, have the capacity of bodily attunement capable of evoking empathetic sensation. The text that Sarmiento assembled develops into an orchestra of interrelated human and nonhuman agents. This process, in turns, makes the text itself a vibrant matter filled with museum artifacts in which readers, as museum visitors, can affectively engage.

The museum as a concrete institution was very important for Sarmiento and his concept of civilization, ushering forth a correlation between social progress and collections as learning devices.[162] In 1885, he gave a short but thought-provoking speech during the inauguration of one part of the Museo de la Plata. The speech is mainly centered on the importance of the museum as a public institution capable of advancing public engagement with the modern sciences. After providing a condensed and allegorical account on intergenerational responses to civilization, he centers on the importance of paleontology and anthropology as fields of study that uncovered a previously unappreciated dimension of Argentina: its prehistorical richness. By discovering the kinds of animals and populations that walked in South America, his nation could finally justify

[160] Vinciane Despret. "Responding Bodies and Partial Affinities in Human-Animal Worlds." *Theory, Culture and Society* 30, nos. 7-8 (2013): 6.

[161] Marco Caracciolo. "Flocking Together: Collective Animal Minds in Contemporary Fiction." *PMLA* 135, no. 2 (2020), 251.

[162] For more information about Sarmiento and his engagement with scientific intellectuals and natural history museums, see Adriana Novoa and Alex Levine's *From Man to Ape: Darwinism in Argentina, 1870-1920* (2010).

its entrance into the international scientific networks centered precisely in charting the history of human and animal beings.

Furthermore, Sarmiento remarked that Argentina then possessed and publicly exhibited alive prehistorical humans, a singular advantage that European scientists did not have because their ancient ancestors are gone.[163] Under the leadership of Moreno, its founder and director, the Museo de la Plata's main objective was to collect these valuable historical artifacts before they disappeared. More importantly, Sarmiento underlines the necessity of younger and future generations to advance scientific progress and, by extension, chart a rich human and natural history of their nation. He finishes his speech by recognizing Muñiz, who he believes is the main protagonist behind Argentine science and its international presence thanks to fossil discoveries and previously unknown information on the evolution of certain species.

Throughout his succinct speech Sarmiento employs rhetorical strategies that facilitate the effective delivery of information to his contemporaries. The first element he brings to their attention is the Pampas and how much its geography has changed since civilization cemented itself in Argentina. Buenos Aires is an improvised city, he proclaims, because its tremendous advancement is evident in how much the land has changed from "La Pampa, lisa como en el mapa" to "esperando la simiente de los bosques que habrán de cubrirle."[164] Employing the gerund conjugation of *esperar* means that the Pampas is currently subsuming itself under civilization as we speak, a verbal rendition of its transformation. Soon the maps will be

[163] For more information about the exhibition of indigenous artifacts and indigenous peoples in international exhibitions, see Ashley Kerr's "From Savagery to Sovereignty: Identity, Politics, and International Expositions of Argentine Anthropology (1878-1892)."

[164] Sarmiento, "El Museo La Plata." *Obras de D. F. Sarmiento* (Buenos Aires: Imprenta y Litografía Mariano Moreno, 1900): 310.

inaccurate because the open land will be covered by eucalypt trees. Sarmiento was very sensitive to temporal dimensions, always attentive to future changes and progress, and his writing reveals an underlying desire to control temporal narratives.

This pleasure towards radical change at the expense of barbarism is expressed in his compressed allegorical piece concerning an ancient peasant who comes down the mountain to see what his descendants have accomplished in building a city. La Plata, he proclaims, has experienced tremendous growth as a city because "es una ciudad ideal, de amplitudes grandiosas, donde antes había estrecheces, dotada de palacios, para cada función del organismo."[165] Furthermore, this city has "plazas, estaciones, avenidas, capitolios, bancos, bibliotecas, tan vastos que se ve que no es para el presente que se construyeron, sino para una generación venidera y una gran ciudad presunta."[166] This *accumulatio*, or piling up, of modern infrastructure and institutions, combined with the suppression of the conjunction "y" ("and") known as *asyndeton*, are common means of amplification. Sarmientos awes his readers with a vivid description, or hypotyposis, of La Plata as a city that, as DeLanda defines it, would be historically unique: "an individual entity with a date of birth" that exists as immanently as humans, "alongside them in an ontological plane that is populated exclusively by historically individuated entities."[167]

The city is as historically complex and new as its inhabitants, and is capable of exerting far-reaching properties that only future generations will experience them. It is a complex system where there is not a single temporal flow, but rather a multiplicity of flows in each of its parts.

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[165] Ibid., 311.

[166] Ibid., 31

[167] DeLanda, *Assemblage Theory*, 13.

The time current of humans coexists alongside that of trains, plazas, traffic, libraries, banks, schools, etc. La Plata then encapsulates Sarmiento's dream for civilization due to its complexity and epicenter of massive influence that shapes and is shaped by its citizens.

The museum would be, of course, one of such institutions filled with artifacts containing rich information about human and natural history. Modern sciences like paleontology and anthropology unearthed for Sarmiento the golden key to legitimize Argentina as a nation. "La paleontología venía, pues," he confirms, "a ser el prólogo de la creación animal y la antropología a inscribirse en la primera página de la historia humana."[168] Both of these newly created fields were interrelated with each other, for both deliver insightful and previously hidden knowledge about the historical uniqueness of the Americas.

Additionally, he portrayed this enlightening discovery as a document capable of rewriting history. Indeed, ancient bones and artifacts were pretextual entities that modified the archives by destabilizing their organizations and reordering them entirely. This was in strict alignment with what Moreno proclaimed in 1881 about the fossil man's major benefit: to revise historiography. The fossil man, he claimed, "remontó nuestro origen mucho más allá de las edades señaladas por los documentos escritos, y asignó al género humano un comienzo en tiempos para los cuales el del periodo histórico no entra en cuenta."[169]

By going beyond the written record, the prehistoric human's fossil bones expand and intertwine human history with natural history. This interspecies relationship comes to light when Sarmiento highlights that modern sciences "ligan la creación animal a las razas humanas, a la

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[168] Sarmiento. "El Museo La Plata," 312.

[169] Francisco Moreno. "Antropología y arqueología: Importancia del estudio de estas ciencias en la República Argentina." *Conferencias en la Sociedad Científica Argentina*. (Buenos Aires: Imprenta de Pablo E. Coni, 1881): 6.

topografía e historia de nuestro país" and even some alive "specimens" (i.e. indigenous peoples) can be witnessed as exhibition at the museum. He accentuates the vibrancy of these fossils that are, quite literally, alive and "mas o menos" tamed by civilization. He then injects "aliveness" and agency to the artifacts that he seeks to control and classify within an institutional space. Argentina's main benefit, he proclaims, is to have the unique opportunity of researching alive ancient bones fully embodied in indigenous peoples. His main assignment for the museum was to collect and exhibit these artifacts or "documents" before their degradation, to place them within a notion of deep time that debunks the mistaken notion of the Americas as a "new world."

Also significant is Sarmiento's equation of the museum with a book filled with plates featuring its exhibitions. Both Moreno and Ameghino were paramount figures who could provide museums with invaluable collections, and Sarmiento recurred to the metaphor of book-making to make this point: "El señor don Francisco Moreno, primer Director del Museo que su paciente industria ha coleccionado durante veinte años, secundado por el señor Ameghino, ya conocido por un antropologista americano, habrán terminado luego con los geólogos europeos que los acompañan de clasificar y ordenar las páginas de este estupendo libro con láminas, que contiene la historia de un millar de siglos."[170] Labeling paleontology as a prologue and archaeology as the first chapter of human history, he juxtaposes language and materiality as museological practices. Thus, he combined literature and museum studies into an emerging paradigm capable of providing ethical and aesthetic evaluation of the origins of human races, the human race, and nonhuman species.

Although it might be tempting to deduce that Sarmiento wanted to naturalize prehistoric artifacts as Argentinians, it is also possible to conclude that he blurred national boundaries and

[170] Sarmiento. "El Museo La Plata," 313.

nationality itself through migration routes. Displaying the vitality of fossils in his homeland is also an invitation for European thinkers to revise their own genesis as a civilization. How were their ancestors connected with Argentina and the Americas? Is it really valid to conceive human populations spread across the world and in different continents as fundamentally different? Is the concept of the nation itself an illusion debunked by the very presence of fossils? While most scholarly thinking has focused on Sarmiento's nationalization of prehistory, I am more inclined to believe that prehistory *denaturalizes* humans and nonhumans by breaking down nationalistic affiliations.[171] In exchange, they make visible other kinds of unexpected relationships over vast geographic distance, species lines, and temporalities.

In the particular case of Argentina, prehistorical tracings and their surprising connections were also visible in theories surroundings the origins of language. In a speech for a conference focused on the paleolithic age, Ameghino presented on Darwinian thinking as the definitive method to study human evolution. Even though declaring to remain within the confines of paleontology in his speech, he also makes a commentary on the evolution and dispersal of language across the globe. He is particularly attentive to the now lost tree trunk from which various languages branched out into their current geographical locations, much like zoological

[171] In "Ariana Crosses the Atlantic: An Archaeology of Aryanism in the Nineteenth-Century River Plate," Ruth Hill argues that Sarmiento's conception of Aryanism created the "illusion of national unity" in remote areas of the nation (101). In a similar vein, in "From Savagery to Sovereignty," Ashley Kerr contends that the Euro-Argentine elite used nineteenth-century world fairs "to cultivate a white, modern identity for the nation that would distinguish it from other Latin American countries and permit it to enter the global capitalist system not just as provider of raw materials but as cultural equal." (63). In "Filling in the Picture: Nineteenth-Century Museums in Spanish and Portuguese America," Irina Podgorny and Maria Margaret Lopes indicate that Latin American museums "provide a paradigmatic model for understanding the local articulation of global scientific (and artistic) practices and disciplines" (6). Although I do not disagree with these statements, I do argue that Aryanism and the conceptualization of transoceanic ancestry through fossils also challenged national identity by reconfiguring its geographic and epistemological borders. Rather than providing a secure and uncontested foundation about what it means to be Argentine, ancient bones generated relational possibilities with other human populations, geographic spaces, and nonhuman species beyond Argentina's boundaries.

history itself. “Lo que es importante, lo que es cierto e indiscutible,” he indicates, “es que las lenguas también se transforman con el tiempo.” Like there is evolution for life, there is also evolution of language and a missing link for them all: “Nadie se atrevería a negar sin disparatar, que el español, el francés y el italiano derivan del latín, y que este no esté ligado con el antiguo griego, al antiguo sajón, el sánscrito, etc., denotando esto a su vez un origen común para todos dichos idiomas.” It is this common ancestor that is unavailable, and so a name encapsulating all of them is needed.

For Ameghino this common genus is Aryan: “El nombre de esa lengua no se ha conservado en ninguna parte; era preciso bautizarla, y cual nosotros lo hacemos con los animales extinguidos, designaron esa lengua fósil, puesto que es perdida, con el nombre de lengua aria primitiva.”[172] Like animals, he explains, languages are also individuated historical entities that descend from a lost Aryan ancestor.[173] To baptize is to be initiated and legitimized into a way of being and knowing. It is a process of synchronization with the ethical imaginary that dominates a particular prevailing society, which is itself always transforming. The fossil is precisely this kind of entity that must be given a certain kind of reading within the available system of knowledge. Doing so, however, allows the fossil – which already had a uniquely configured history before discovery – to unsettle the very foundations of modernity by unleashing alternate ways of conceiving origins. This unexpected turn of events involves both things and language itself as a thing in constant transformation.

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[172] Florentino Ameghino. “Un recuerdo a la memoria de Darwin. El transformismo considerado como ciencia exacta.” *Obras completas y correspondencia de Florentino Ameghino* (La Plata: Taller de Impresiones Oficiales, 1915): 6.

[173] For more information about the conceptualization of Aryanism in Argentina and the Americas, see Ruth Hill’s “Ariana Crosses the Atlantic: An Archaeology of Aryanism in the Nineteenth Century River Plate.”

For Sarmiento, a sudden change of course in human history would take place through the Aryan fossil and in the very same populations that he sought to permanently exterminate indigenous populations at the outskirts of civilization. His undertakings to reveal on paper the significance of Pleistocene fossils is directly related to his theory on the origins of race. In direct opposition to Georges Cuvier and Charles Lyell's view that there were no prehistorical humans before the use of metal, Sarmiento believed in their prior existence. In fact, he staunchly supported paleontological evidence suggesting the existence of European primitive ancestors still surviving in the Americas.

Praising paleontology and anthropology as foundational and modern fields of study, he affirms that the discovery of crania as well as paleolithic tools "revelan los diversos grados de civilización y las razas de los pueblos primitivos transformados en Europa, sobreviviendo en América."[174] He even praises the tireless fossil and prehistorical arts collectors, without whom progress would not have been possible. Rather than upholding a strict dichotomy, Sarmiento espouses stratified degrees of civilization interlaced with one another, placing the Americas as exhibitor of Europe's prehistorical populations. The so-called New World is anything but new: it is a mysteriously elusive, revealing, and continuously expansive land of mass filled with geologic narratives.

As a political figure deeply devoted to the future of his homeland, one of Sarmiento's most disturbing sides involved the genocide of indigenous and *caudillo* populations. Once *Facundo* was published in 1845, its author's intention to perform an ethnic and racial cleansing of Argentina became widely known. In a biography on caudillo Vicente Peñaloza or *El Chacho*,

[174] Sarmiento, *Francisco J. Muñiz*, 272.

Sarmiento explicitly portrays caudillos as prehistorical entities akin to fossils, both of whom are testaments to first human life in the Americas.[175] He finishes his biography with this words: "estas biografías de los caudillos de la montonera, figurarán en nuestra historia como los megateriums y cliptodones [*sic*] que Bravard desenterró del terreno pampeano: monstruos inexplicables, pero reales."[176] He conflates biography, a genre conventionally grouped with body of texts, with a museological exhibition of human evolution in natural history and, in doing so, underlines the importance of ekphrasis and a correspondence between language and matter.

In 1883, just three years before his inaugurating speech for the Museo de la Plata, Sarmiento wrote his penultimate book, *Conflicto y armonías de las razas*, which would become for scholars a decisive work to understand the author's hemispheric theories on racial relations. The prologue is dedicated to none other than Mary Peabody Mann, the wife of US public education leader Horace Mann, both of whom he met during his first trip to the United States in 1848. As one of Argentina's leading public education reformer, Sarmiento was hugely influenced by Mann, "cuyos consejos me guiaron en la juventud para traer a esta América la educación común que él había difundido con tan buen éxito en aquella."[177] In writing to Peabody Mann about US success in contrast to Spanish America's cultural and political problems, he tells her that the latter has deep-seated problems extending beyond current governments.

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[175] Qtd. In Hill, "Ariana Cross the Atlantic…" Sarmiento here performs what Jens Andermann calls a "paleontologización del otro" by chronologically distancing himself from the prehistorical "barbarism" of caudillos and, in doing so, excluding them the nation's modern civilization (p. 125). For more information, see Andermann's "Moreno: La patria petrificada" in his *Mapas de poder: Una arqueología literaria del espacio argentino* (2000).

[176] Domingo F. Sarmiento, *El Chacho*. *Obras de D. F. Sarmiento*. Tomo VII (Santiago de Chile: Imprenta Gutenberg): 374.

[177] Domingo F. Sarmiento, *Conflicto y armonías de las razas en América* (Buenos Aires: La Cultura Argentina, 1915): 43.

Rather than just focusing on Argentina, as he did in *Facundo*, he now sees the necessity of examining the subcontinent as a whole. He affirms that "la generalidad y semejanza de los hechos que ocurren en toda la América española, me hizo sospechar que la raíz del mal estaba a mayor profundidad que lo que accidentes exteriores del suelo lo dejaban creer."[178] The major problem is, as the title makes clear, racial conflicts that persistently and surreptitiously disrupts any promising visions for the hemisphere.

The statesman thus understood race as a biocultural notion that needed to be properly examined across national borders and cultures to understand how and why "[p]ara nuestro común atraso sud-americano avanzamos ciertamente; pero para el mundo civilizado que marcha, nos quedamos atrás."[179] Rather than just going forward, Spanish Americans were actually devolving at the same time into barbaric conditions due to increase political violence and instability, despite having advanced in terms of education and urban planning. Equally guilty was miscegenation.[180] At this point, Sarmiento makes the imaginative rhetorical move of comparing Spanish America's ambivalent prospects to a chiaroscuro, writing that "el Perú, Bolivia, el Paraguay, el Ecuador retroceden o se esconden en la penumbra que señala el límite de

[178] Ibid., 44.

[179] Ibid., 45.

[180] Ashley Kerr states that race, sex, and gender in nineteenth-century Argentina were narratives of literature that collided with each other during the formation of scientific discourses. She indicates that literary works from writers like Lista, Zeballos, Holmberg, and Zorrilla de San Martín "were also a way for River Plate intellectuals to continue popularizing their theories, as the emotion and literary devices of the texts made their ideas more accessible for a general audience. Without fiction, we cannot understand how scientific projects become collective identities" (124). For more information, see Ashley Kerr, *Sex, Skulls, and Citizens: Gender and Racial Science in Argentina (1860-1910)*.

la luz y de la sombra, lo que muestra que una causa subsiste y opone resistencia en todas partes."[181]

In this way, the simultaneous harmony and conflict of the races is an aesthetic as much as an ethical dilemma because it means finding effective ways of portraying its root problem in the Americas. The hemisphere is a stark contrast of light and darkness, civilization and barbarism, evolution and stagnancy, education and ignorance, anarchy and government. It is this dialectics of light and darkness in its various social manifestations which leads him to conclude that there is "una tendencia general de los hechos a tomar una misma dirección en la española América, a causa de la conciencia política de los habitantes, como a causa de una inclinación Sud-este del vasto territorio que forma la Pampa, corren todos los rios argentinos en esta misma dirección."[182] Here the author juxtaposes the history of civilization to the history of geology, signaling that political theory is more than just present political manifestations.[183] It is about evaluating the biological and geological sediments that affect and shift the very foundations of politics and culture itself. It is this inquiry into the origin and mixture of races that Sarmiento thinks one needs to grasp if one wants to truly understand Spanish America's detrimental conditions.

The author's own background as an intellectual who traveled constantly is also, he explains, a valuable asset for his own curatorial presentation about racial harmony and conflict in the Americas. "Puedo, pues, decir que tengo todos los sentidos comunes de los países, bajo cuyas

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[181] Ibid., 49-50.

[182] Ibid., 55.

[183] For more information, see Hill's "Ariana Crosses the Atlantic," Jens Andermann's *Mapas de poder*, David Haberly's "*Facundo* in the United States: An Unknown Reading," Aarti S. Madan's "Sarmiento the Geographer: Unearthing the Literary in *Facundo*," and Mónica Quijada Mauriño's "Los 'Incas arios': Historia, lengua y raza en la construcción nacional hispanoamericana del siglo XIX."

instituciones he vivido, sin excluir los Estados Unidos, de cuya naturaleza participo," he states.[184] On the other hand, he states that is was in his homeland where he really started to think about the profound fibers of life to comprehend his continent's history. "Pero fue en San Juan," he writes, "donde empecé a fijarme en la influencia de las razas en la América del Sur, y en el espíritu distinto que las caracteriza."[185] Moreover, he emphasizes how this experience helped him to reevaluate what he formerly knew about history: "y tomando cada día más cuerpo e intensidad esta preocupación, me ocurrió que debía releer la historia, y aun la redacción verbal de los sucesos, para ver la sustituciones y cambios, esclarecimientos y reflejos que ofrecería, mirándola a la luz de esta nueva antorcha."[186]

To name the races in South America as spirits is to animate them as vital principles, to provide them with a kind of consciousness that shapes the formation of human populations as they unite and collide with each other. Naming history as the spirits of races implies that there is an incorporeal and deeper filament that activates various populations across the ages with their life force. Sarmiento imbues race as a guiding and governing principle of power that possessively operates within the ontology of humankind. Each race becomes an agent defining a group of peoples' character and the parameters of their existence. Despite being conventionally given an exclusively immaterial connotation, the writer explicitly states that its influence manifested in him a material source of anxiety.

Race was a readily *physical* concern for Sarmiento, and he was worried about its swaying effects on his fellow citizens, his nations, and his continent. To say that he was concerned about

[184] Ibid., 57.

[185] Ibid., 57.

[186] Ibid., 57-58.

influence of race is to say that he was uncertain about the future, creating a troubling state of mind in his consciousness and a desire for a particular outcome: white civilization. By the same token, he was also apprehensive and fearful with regards to the history of races and what it could do to undermine the very networks of modernity that he helped create and defended most of his life. He therefore needed to make an archival revision of what he knew and had yet to know by using information provided by paleontological and anthropological discoveries.

This simultaneous desire and uneasiness for historiographical reconsideration led him to place himself as an intellectual figure of equal capacity to his international predecessors. He considers himself a Robert Wilson, whose *A New History of Mexico* corrected William Prescott's *History of the Conquest of Mexico*. Yet, he is cautious enough to avoid being placed as a simple impersonator of other great writers by remarking that he is an original contributor who, "citando tantos autores antiguos sobre tiempos coloniales, no haya buscado ni solicitado, sino rarísimos libros al poner por escrito el que le envío." He then proclaims to be an intellectual who "pocas veces se me ocurre citar autoridades."[187]

Not citing previous authorities permits the author to originally curate an interpretation of racial relations in the Americas using Argentina as an epicenter. This move, in turn, permits him to express the difficulty this project has taken him and the original contributions that it will make to critical race theory as someone who is both from the Americas and has traveled extensively to other nations. Sarmiento's tactic in a way matches Mariano Siskind's approach to cosmopolitanism "as a strategic literary practice that forces its way into the realm of universality, denouncing both the hegemonic structures of Eurocentric forms of exclusion and nationalistic

[187] Ibid., 58.

patterns of self-marginalization."[188] As a scholar who had all the senses of the nations that he visited, Sarmiento applied his cosmopolitan aspirations to undermine both European-based science and destabilize Argentine nationalism. His attention to racial relations was similarly a commentary on the limits of both the nation and the European metropolis.

It is in this kind of interrogation that the fossil comes into place as an artifact legitimizing *and* disarticulating both through evolution as well as prehistorical migration routes. The first chapter is a prolegomenon with the subtitles "¿QUÉ ES LA AMÉRICA? – ¿QUÉ SOMOS NOSOTROS? – NOSCE TE IPSUM – LA ATLÁNTIDA – POBLADORES PRIMITIVOS – CIVILIZACIÓN DEL MAIZ." A prolegomenon is an introductory treaty that establishes the general foundations on the material to be examined. In Sarmiento's particular essay, it attempts to question the very racial foundations that have shaped Argentina and the Americas. ¿What are we? ¿European? ¿indigenous? ¿miscegenated? ¿Argentine? Each of these queries encapsulates different realms of knowledge and reality that the author entangles due to their interrelated answers. We can't really know who we are, Sarmiento affirms, without first examining what each categorical question contributes to a biostratigraphical assessment of Argentina, the Americas, and their concentric relations.

Rather than simply describing the current political and precarious conditions of Spanish America, as he certainly could, the author focuses on strict biological and geological motivations underneath all the continent's present cultural chaos. "Es nuestro ánimo descender a las profundidades de la composición social de nuestras poblaciones,"[189] he asserts. A descent involves going downwards into a subterranean extension and below the visibly clear surface. It

[188] Mariano Siskind. *Cosmopolitan Desires: Global Modernity and World Literature in Latin America* (Evanston: Northwestern University Press, 2014): 6.
[189] Domingo F. Sarmiento. *Conflictos y armonía*, 63.

implicates dwelling underground alongside the nether and sublunary regions of this earth, rather than looking upwards into the celestial heavens. To descent encompasses excavating for hidden materials without which the history of life would be incomplete. To do so with "ánimo" is to perform the task with disposition of strength, energy, and great effort to expose what has until now remained concealed from human knowledge. A descent, on the other hand, also means to morally and psychologically subordinate oneself to a lower state and condition. Sarmiento's descent underground thus means a lot more than just the act itself, for it comprises hard work to reexamine his previous cemented foundations – and even to open other realms of being and knowing at the expense of his own morality.

Indicative of his geological initiative is an equivalent interest in water formations as an analogical bridge for historiography. A keen concern for Sarmiento was the entanglement and separation of races with similar or distinct origins in the Americas.[190] To make this interest aesthetically visible is to compare them to an act of tracing the currents and sedimentations of water systems. He states, "si por medio del examen hallásemos que procedemos de distintos orígenes, apenas confundidos en una masa común, subiríamos hacia las alturas lejanas de donde estas corrientes bajaron, para estimar su fuerza de impulsión, o la salubridad de las aguas que las forman, o los sedimentos que la arrastran consigo."[191] Like current bodies of water undergoing confluence, so are the races of humankind in the so-called "New Word" disorganized to the point of becoming impossibly difficult to distinguish.

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[190] For an interesting study on Sarmiento and his transatlantic conception of race, see Ricardo Cicerchia's "Journey to the Centre of the Earth: Domingo Faustino Sarmiento, a Man of Letters in Algeria," in which he states he studies "Sarmiento's deeply ingrained ambition as a statesman, his obsession with the dilemma of Argentinean politics, his ideological preconfiguration of otherness, and the deployment of narrative strategies that manipulate observation and experience" (666).

[191] Ibid., 63-64.

This causes perplexity and bewilderment in Sarmiento, who explicitly dismisses miscegenation as an asset because "nadie quiere serlo, y hay millares que ni americanos ni argentinos querrían ser llamados."[192] Consequently, the writer must perform what DeLanda calls a "nonlinear" approach to assemblages and we utilize rock formation alongside human institutions to discern a more complex view. "From the point of view of energetic and catalytic flows, human societies are very much like lava flows; and human-made structures (mineralized cities and institutions) are very much like mountains and rocks: accumulation of materials hardened and shaped by historical processes."[193] In the specific case of Sarmiento's view, human races are like energetic water currents that flow from rock formations as they sediment and mineralize themselves into social structures and institution across the continent. The self-organizing and historically unique assemblage of race disconcerts Sarmiento precisely because it does not fit within his own racial paradigms. Rather than denying this fact and embracing social construction, he both embraces and wrestles against the agential powers of rocks and races.

Another evidence of the writer's recognition of geological processes' power over human evolution is his discussion of mythology and plate tectonics as scientific truths. Form him, there is indeed a certain geologic and paleontological accuracy behind mythology, as in the case of the battle between Minerva and Neptune that is "un simple recuerdo de las antiguas emersiones e inmersiones de la costa." He then proceeds to explain the validity of Atlantis as an explanation for the ever-shifting tectonic plates that once united the continent and facilitated the dispersal of human population. To support his argument, he draws from Antonio Snider-Pellegrini's *La*

[192] Ibid., 63.

[193] DeLanda. *A Thousand Years of Nonlinear History*, 55.

Figure 6 “Avant La Separation.” In Antonio Snider-Pellegrini, *La création et ses mystères dévoilés*.

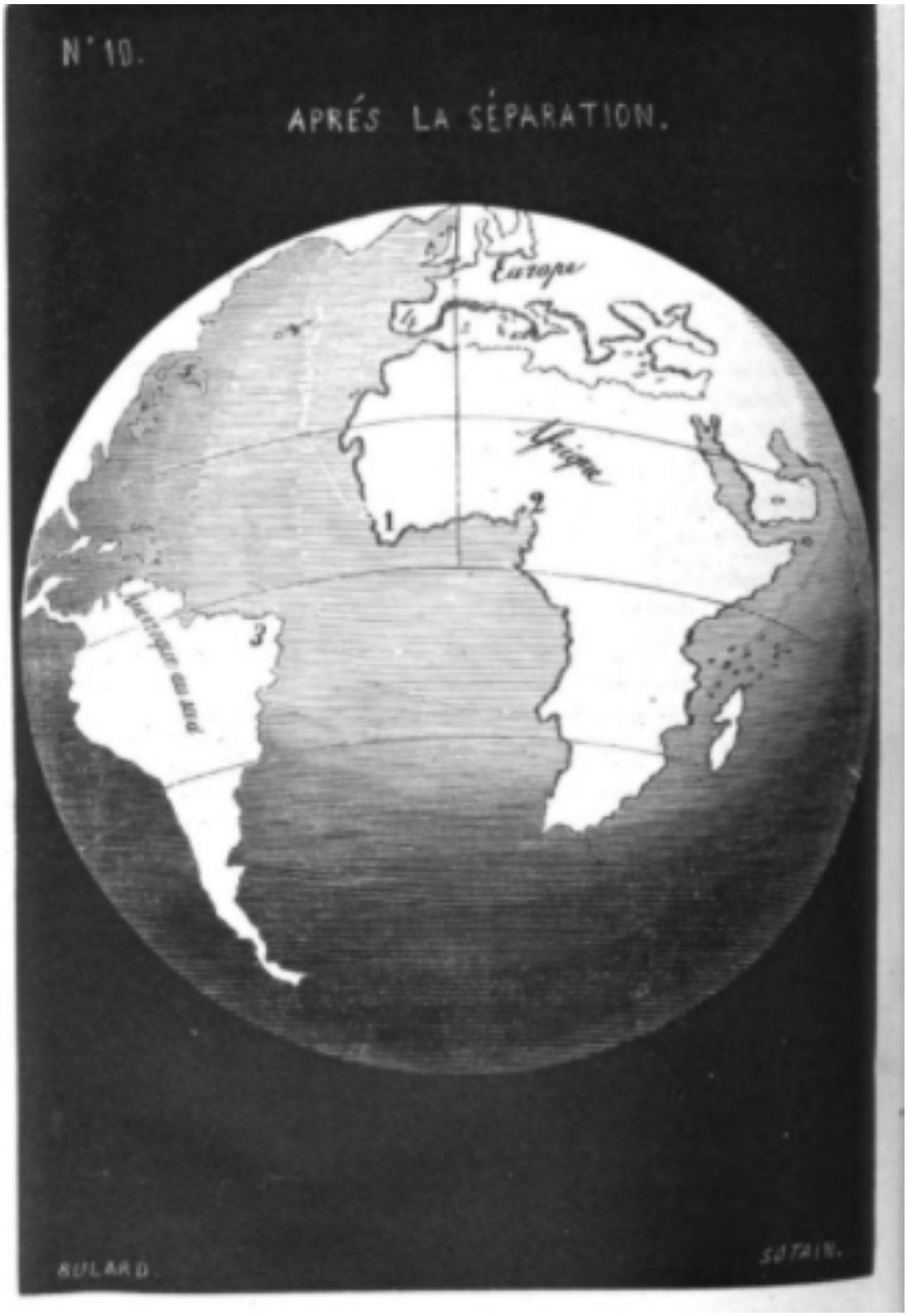

Figure 7: “Aprés La Separation.” In Antonio Snider-Pellegrini, *La création et ses mystères dévoilés*.

création et ses mystères dévoilés (1858), who illustrated a before-and-after separation of continents (Figures 6 and 7).[194] He also extensively quotes a speech that Moreno gave to the Sociedad Científica Argentina on how humankind spread throughout the globe when all the continents were together. Part of the fragment that Sarmiento cites emphasizes that the Buenos Aires Museum and the Anthropological and Archaeological Museum were sources of ethnographic facts.

"En ambos," explains Moreno, "las piedras, las plantas, los animales embalsamados, los huesos y los utensilios del hombre, objetos sin vista agradable muchas veces, cuentan a quien lo desea, lo que fue y lo que es la vida de los mares, los ríos, las selvas, las llanuras y las montañas argentinas."[195] The artifacts of various natural and human-made kinds, the museum director indicates, have the capacity of narrating as live witnesses an account of events to which humans do not have complete access, events that happened or are currently happening. Despite not being aesthetically pleasant (and because of it), these various things displayed in a public museum communicate and transmit a certain of way of knowing and being in the earth to those desiring this information. Rather than being a source of total authority who controls objects and visitors, the curator turns into a mediator and another audience member willing to listen to artifacts. In doing so, visitors and scholars alike open themselves to the opportunity of learning more about the nonlinear ways of life and rocks.

Along these lines, Sarmiento also recurs to the curatorial opportunities of museum writing to address the concrete reality of race, geology, and fossils. The author is perfectly aware that he is not in a museum with a specific audience but addressing himself to unspecified readers

[194] On these two images and their racial significance, see Hill's "Ariana Crosses the Atlantic."
[195] Sarmiento. *Conflictos y armonía*, 68.

scattered across time and space. As a result, he turns this scenario into an advantage by ekphrastically displaying prehistory. During Moreno's exposition defending the Americas' antiquity by pointing out the equal distribution of stone flints and other paleolithic handcraft, Sarmiento asks: "¿han estado los habitantes de América en comunicación con el resto del mundo antes de cortarse toda conexión territorial entre los continentes primitivos?" He responds by retelling the following: "El Director de nuestro Museo Antropológico, para contestarnos, toma de entre los objetos exhumados al lado de una calavera, como los escarabajos y estatuetas que acompañaban a las momias egipcias, un objeto brillante, que enseña levantándolo entre el pulgar y el índice." Moreno then explains: "¿Es un carbunclo, un rubí enorme? No, es obra humana; un esmalte de vidrio de cuatro colores fundidos, una cuenta, en fin, que no es mostacilla de la fábrica de Murano, en Venecia, sino de la fabricación egipciaca del segundo imperio faraónico, allá por las dinastías XVIII o XIX."[196]

The writer describes to us the actual moment when the curator takes the artifact and shows it to the visitors – and, by extension, readers – by holding it in his hand. This act is a verbal representation of curation itself, an aesthetic technique that makes attractively noticeable an object with the capacity of unsettling ethical foundations on which Sarmiento depends. Using the word "brilliant" to introduce the artifact means that it has drawn attention to Sarmiento and readers for its lustrousness and beauty as a human-made object capable of uniting two seemingly distant continents into a monogenous view of race. The task of vicariously sensing this product of human ingenuity is museum writing, facilitated by the power of language to imaginatively allow readers to appreciate artifacts as museum visitors.

[196] Ibid., 71.

The spread of prehistoric populations affected by tectonic plates and hydrography permits Sarmiento to introduce his Aryan theory of origins, which supports the view that all human groups descended from the Indo-Iranian regions. The fact that all continents were adjacent once meant that Aryans could easily expand to both Africa and the Americas without having to cross over vast oceans. It has been argued that Sarmiento advocated for an Old World Aryanism that met its New World counterpart during colonization, and that the expansion of modernity through colonization was actually a historical revision of the human race. As a result, "Sarmiento rhetorically links continents and communities, Mediterranean and Atlantic cultures, Old World and New, engaging in a historical revisionism that is simultaneously transatlantic and hemispheric, intra-European and inter-American."[197] In fact, something that quite frankly surprised the statesman was the relative lack of interest from European scientists in the Americas despite of its rich prehistorical background. Before doing so, however, he underlines once again the significant collection of the Anthropological Museum in Buenos Aires that verifies the former or current existence of giant Patagonians. He affirms: "Viven todavía en Patagonia los gigantes con cuyas exageradas noticias está lleno el mundo; pero en el Museo están muchos cráneos para no dejar embustera a la fama."[198]

For the author, then, the museum was a prominent public institution that confirmed the accuracy of paleontological and archaeological discoveries, reaffirming its importance for a more robust knowledge of prehistory in the Americas. With this view in mind, he criticizes European

[197] Ruth Hill, "Ariana Crosses the Atlantic: An Archaeology of Aryanism in the Nineteenth-Century River Plate," *Hispanic Issues On Line* 12 (2013): 104.

[198] Sarmiento, *Conflictos y armonía*, 74.

observers' lack of awareness at the sight of live prehistorical specimens both outside and inside museums:

> Pero lo que por demasiado sencillo y por ser de ordinario los observadores europeos que vienen de paso, no han proclamado todavía, es el grande hecho que los actuales habitantes de la América, que hallaron salvajes o semisalvajes los contemporáneos de Colón, son el mismo hombre prehistórico de que se ocupa la ciencia en Europa, estando allí extinguido y aquí presente y vivo, habiendo allá dejado desparramadas sus armas de sílex, mientras aquí las conservaba en uso exclusivo, con su arte de labrarlas, y con todas las aplicaciones que de tales instrumentos de piedra hacían.[199]

What is extinct in Europe is alive in the Americas, a fact so obvious that has not captured the attention of European visitors. Truth hidden in plain sight. To say that this information is "sencillo" and "ordinario" means that it is readily available to the public and not restricted to a few specialists focused on limited-access excavation sites. This statement, in turn, invites us to think of the discovery of prehistorical entities as democratic efforts within the reach of the general population. Ancient humans are vibrantly alive, he informs readers, and are constantly moving and fabricating tools.

Institutions like the Museum de la Plata are, in a way, zoos showcasing prehistorical beings, making them more wondrously substantial than a European museum and a "grande hecho." The museum de la Plata – and museums in the Americas, for that matter – become assemblages where organic and inorganic things, dead and alive specimens, and ancient and modern humans enter into complex and nonlinear forms of existence. That is, the museum ceases

[199] Ibid., 74

to the domain of curatorial interpretations and, instead, becomes a rich site filled with unpredictable and unforeseen meanings and revisions. It turns into a place where racial as well as human and nonhuman boundaries turn blurry as they lead us into startling dimensions on what it means to be a living thing. Kerr writes that the "natural sciences were a fundamental element in these efforts, as every aspect of the Argentine land and people was measured, recorded, and compared."[200]

For Sarmiento himself, that surprise comes into an ekphrastic moment of epiphany when he realizes his close relationship with that most despised of beings: indigenous peoples. "Al hablar, pues, de los indios," he intimates, "por miserable que sea su existencia y limitado su poder intelectual, no olvidemos que estamos en presencia de nuestros padres prehistóricos, a quienes hemos detenido en sus peregrinaciones e interrumpido en su marcha casi sin accidente perturbador a través de los siglos."[201] Misery and ignorance, two things which Sarmiento battled against during his entire life, here come together under the image of the prehistorical father. That is, a being that has been walking on this earth despised by those very same descendants that he engendered. In a sudden and startling ethical impulse, he turns the otherwise distant museum artifact into a verbal representation grounded in parental filiation.

A father is a figure that demands authority, progeny, foundation, and dominance. The indigenous father, much to Sarmiento's chagrin, is actually the progenitor of the human race and the one who, ironically, made possible the edification of the civilization's pillars. One the one hand, this is a way of saying that the "modern" Indian is not human – that he is a prehistoric caveman and not really a person for the nineteenth-century modern citizen. On the other,

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[200] Kerr, "From Savagery to Sovereignty," p. 65.

[201] Ibid., 75.

however, this same prehistoric father has continued to walk, germinating behind him the first descendants of humankind who would later preside the erection of the first cities. By extensively researching the until now hidden and evasive materials of prehistory, Sarmiento inevitably ties loose ends and finds himself a descendant of his nemesis.

Despite having obvious differences from the cabinet of wonders, Sarmiento's museum writing also depended on the quality of wonder for its success, since its execution channelizes a more efficient acquisition of knowledge. To this end, he employs a variety of rhetorical devices that highlight both his authority on the matter (*ethos*) and the topic of discussion. He repeatedly uses, for instance, amplification by arranging words and clauses in a pattern of increasing potency to underline the political value of fossils and natural history museum. He recurs to his status as a recognized intellectual as he provides a personal experience about interacting with and textually assembling ancient bones. Doing so permits him to point prehistorical living things and their geography before his readers' eyes, allowing them full license to believe in a manner not unlike Gumilla's work according Ewalt. Sarmiento's ekphrastic approach to fossils even signaled for him profound transformation (*metanoia*) as prehistory and its creatures provided a fundamental change in his own interpretation of modernity's sense of direction in the Americas

Chapter 3: On the Missing Link or the Caliban of Science: Francisco Calcagno's *En busca del eslabón* (1888)

On August 28, 2019, the scientific journal *Nature* published an article titled "A 3.8-million-year-old hominin cranium from the Afar region in Ethiopia," detailing the skull of the oldest Australopithecus yet to be found: *Australopithecus anamensis* or MRD. Excavated at an Ethiopian site in 2016, MRD, so the authors suggest, had coexisted and overlapped with the younger *Australopithecus afarensis* (commonly known as "Lucy") for at least one hundred thousand years. Contradicting the until now widely accepted hypothesis of anagenesis or the linear evolution of a species that causes the extinction of its predecessor, the article revealed that hominin descent is far more complicated. The authors conclude: "MRD shows that despite the widely accepted hypothesis of anagenesis, *A. afarensis* did not appear as a result of phyletic transformation. It also shows at least two related hominin species co-existed in eastern Africa around 3.8 Myr ago, further lending support to mid-Pliocene hominin diversity."[202] What this conclusion dismisses is the possibility that *A. anamensis* became extinct once *A. afarensis* appeared, implying that both species overlapped for an extended period of time after becoming separated by speciation.[203]

In addition to dismissing a linear trajectory of evolution, the findings also reveals a complicated biological history inherent in the genealogical tree of human ancestry. As Colin Barras subtitles his article in the news section of *Nature*, this ancient cranium "suggests early

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[202] Yohannes Haile-Selassie, et al., "A 3.8-million-year-old hominin cranium from Woranso-Mille, Ethiopia." *Nature* 573 (2019), 219.

[203] For an extensive overview of the missing link, fossils, and their scientific and social consequences, see John Reader and Andrew P. Hill's *Missing Links: In Search of Humans Origins* (2011). For more information on paleo-art and the biological history of humanity, see John Gurche's *Shaping Humanity: How Science, Art, and Imagination Help Us Understand Our Origins* (2013).

hominin evolutionary tree is messier than we thought."[204] Instead of being a straight route that connects one extinct species with its living descendant, the human evolutionary tree is a rich enmeshment of different species. Prehistorical human ancestry is a mysterious amalgamation of various lifeforms, all of whom are somehow connected by an indefinable lineage. This ancestry is ever-expanding across time and space, human and nonhuman, fiction and nonfiction. The discovery and rediscovery of bones testify to this elusiveness by forming, I suggest, a poetics of display constantly being renovated across the generations and thanks to new discoveries.

One important task remains: to make sense of such process within an ontological and epistemological paradigm familiar to the public at large. Specifically, to assign the institution of knowledge that should be trusted with disseminating accurate – and often politically charged – scientific discoveries in an age of increasing globalization. One of such institutions is the museum of natural history. As an establishment in close contact with the public and its urban areas, natural history museums are highly complex assemblages that arbitrarily connect agential objects with one another. Eugenio Donato writes that while literature "invariably ends in fiction's dispersion into the infinite, non-natural labyrinthine web of textuality" (217), the museum tries to encapsulate the universe into an absolute microcosm.[205]

He believes that such process materializes through fiction, merging "a heap of meaningless and valueless fragments of objects which are incapable of substituting themselves either metonymically for the original objects or metaphorically for their representations."[206] In

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[204] Colin Barras, "Rare 3.8 million-year-old skull recasts origins of iconic 'Lucy' fossil." *Nature*. Published August 28, 2019. https://www.nature.com/articles/d41586-019-02573-w

[205] Eugenio Donato, "The Museum's Furnace: Notes Toward a Contextual Reading of *Bouvard and Pécuchet*," in *Textual Strategies*, ed. Josué Harari (Ithaca: Cornell University Press, 1979), 217.

[206] Ibid., 223.

this light, the bones that curators collect are mere objects devoid of any preconceived agency, acquiring it only by means of a predetermined exposition. Meaningless implies that these objects have no previous history of their own, that they are devoid of agential power and expression, that they are not responsive to interpretation. To classify museum artifacts as worthless outside of fiction means that they are, by themselves, deficient in generating alternative routes of discoveries. The only thing that matters, Donato suggests, is an imaginative narrative that links all these things that would otherwise be no more than a repository of miscellaneous detritus of little value.

Yet, assemblage theory as espoused DeLanda provides agency to components that are part of institutions. These have certain properties of their own that, when "plugged" into certain assemblages, generate relations of exteriority and emergent properties. Emergence and exteriority retain the autonomy of objects, but also provide them with larger, intersubjective connections as they enter into new interfaces. He states: "we need to conceive of emergent wholes in which the parts retain their autonomy, so that they can be detached from one whole and plugged into another one, entering into new interactions."[207] As institutions entrusted with value, natural history museums are emergent wholes that organize and reorganize organic as well as inorganic materials. Contrary to what Donato would claim, natural history museum are not "eternally present with transparent origins and anthropocentric ends."[208] Rather, they are institutions that must constantly renovate their poetics of display, participating in the assemblage and shifting configuration of fossils through new discoveries, and as they enter into the furtive logic of ancient bones. It may then be said that natural history museums contain artifacts and

[207] DeLanda, *Assemblage Theory*, 10.

[208] Donato, "The Museum's Furnace," 238.

specimen that hold powerful agency as they slip from the hands of curators who try to understand them.

Writing within a framework of a geological epoch induced by humans, or the Anthropocene, Bruno Latour reconceptualizes the earth and its materials as agential and vulnerable subjects. The human is no longer a transcendental being that exists on a different plane, but an agent on the same ontological terrain as other organic and inorganic beings. Far from being focused exclusively on the material world, however, Latour pays close attention to storytelling as a promising venue to address what he calls geostory: "Storytelling is not just a property of human language, but one of the many consequences of being thrown in a world that is, by itself, fully articulated and active. It is easy to see why it will be utterly impossible to tell our common geostory without all of us – novelists, generals, engineers, scientists, and citizens – getting closer and closer within such a common trading zone."[209] Geostory in the Anthropocene happens when all participants – materiality and discourse, human and nonhuman – are imbricated in the same ontological constellation that composes the biosphere. As a center of agency, the natural history museum is the epicenter where the fossil makes itself known by material and textual means to the human, nonhuman, and posthuman. It is an organized body subservient to the larger community and with the ability of disseminating valuable insight or geostory for the advancement of society as a whole and without explicit concealment.

Museum studies has also recently recognized the importance of various disciplines coming together to understand the tangibility of things. In 2016, the edited anthology titled *Philosophy and Museum* was published by Cambridge University Press, containing several articles addressing the coming together of disciplines, such as philosophy, to understand the

[209] Bruno Latour, "Agency at the Time of the Anthropocene," *New Literary History* 45, vol. 1 (2014): 7.

nature and future of museums. As one of the contributing authors, Ivan Gaskell diagnoses that the museum as an institution has ceased to generate big ideas and, instead, become echo chambers for ideas that come from elsewhere. Yet, he believes that the development of what he calls the Tangible Turn has the potential to reinvigorate the importance of museums as learning centers through material things and, I would add, language itself.

Part of the process involves recognizing the variable nature of things themselves, but museum scholars are "not helpless in the face of the physical instability, cultural mutability, and the manipulability of tangible things. They can learn to work with them, however slippery they may be."[210] As a result, he challenges the stable categorization of museum collections and the institutional inertia under which they are located. Tagging these things as tangible likewise adds an affective dimension to the museum experience, one enfolded in intimacy and close encounters. To have a tangible experience with artifacts means to be touched by them both physically and emotionally, a palpable impact in deep-seated proximity. It is both an intellectual instant and a personal moment of affection spanning beyond disciplinary fragmentation and breaking down societal barriers. In some ways, Gaskell and Latour have similar goals: to give agency and subjectivity to all the organic and inorganic materials that surround us, and to destabilize western conceptions of classification.

Dr. Yohannes Haile-Selassie, Curator of Physical Anthropology at the Cleveland Natural History Museum (CNHM), is the principal researcher of the team that discovered the bones from *Australopithecus afarensis*. The same day that Haile-Selassie's team published their finding in *Nature*, the CNHM published an article on its website under the subheading "The Face of Lucy's

[210] Ivan Gaskell, "The Museum of Big Ideas," in *Philosophy and Museums: Essays on the Philosophy of Museums*, ed. Victoria S. Harrison, Anna Bergqvist, and Gary Kemp (Cambridge: Cambridge University Press, 2017), 71.

Ancestor Revealed." After providing a relatively accessible account of the event (certainly more so than the scientific version) alongside an almost four-minute video, the last sentence of the report reads: "Haile-Selassie and his team will continue to search the Woranso-Mille site in hopes of finding even more clues about our ancestry. Follow developments in this remarkable story on our website and social media." Implied in this piece is that general readers should monitor the museum's website for more information as they unfold the hidden mysteries of ourselves. The main researcher for this fascinating discovery is one of the world's most important experts in paleoanthropology, also working at a leading natural history museum open to the general public.

According to its website, The CNHM houses and preserves more than five million specimens and artifacts, making it one of the most prestigious of its kind in the United States. The museum even includes a casting of the original remains of Lucy, who was discovered by a team lead by former CNHM curator Dr. Donald Johanson in 1974. Since she was unburied from the Awash Valley in Ethiopia, Lucy has garnered tremendous amount of attention from the world and has turned into an icon of paleoanthropology. Haile-Selassie is quoted on a CNHM website page exclusively dedicated to her: "over the years, through research publications and the media, she was able to easily connect with people all over the world as an individual—not as a fossil specimen." Lucy has been revived and now lives in the form of images, castings, and other reconstructions in several natural history museums across the world.

Thanks to multimedia forms of communication and showcasing, Lucy is able to link with her contemporary descendants. She created filaments between populations separated across the ages and residing in different geographic locations. She managed to seamlessly unite peoples from different backgrounds but who share the same biological tree, a genealogy rooted in deep

time and in unison. She is not a subsidiary extension of a species, Haile-Selassie informs us, but an individual. Being an individual suggests singularity, an exceptional agent with a unique set of features and abilities that can create distinctive impacts in those with whom she interacts. Lucy is then like a person whose irreplaceable presence extends far and wide, creating a vast array of emotions across continents and instigating unexpected moments of intimacy.

Lucy's skeleton has been extracted from geological layers and put on display for visitors of all sorts, revealing in the process a deep-seated source of power of the CNHM as a public institution. Its vision as an epicenter of education is, however, far from being the exception. The most renowned Cuban zoologist in the nineteenth century, Felipe Poey, already wrote in 1838 that the then colony of Cuba needed a natural history museum as a major project of civilization for the island. He declared several scientific and moral advantages in the establishment of a natural history museum in Havana:

> Primeramente, un museo de esta naturaleza presentando a la juventud habanera una serie de producciones indígenas y exóticas, conservadas con limpieza y con orden, y acompañadas de tarjetas instructivas, atraerá los ojos y luego los ánimos al estudio y mayor conocimiento de dichos objetos. Es indispensable que muchos, por imitación y por hallarse rodeados de producciones nuevas y preciosas, emprendan colecciones semejantes, aprovechándose de la facilidad para nombrar las especies y clasificarlas por el orden del gabinete patriótico, que será un libro abierto a todos. Cuando así se halla formado un cierto número de aficionados, se formará una sociedad de historia natural; y los aficionados pasarán a ser naturalistas; o sin haber juntado algunas copias de libros y periódicos científicos,

> con los cuales los archivos se convertirán en bibliotecas, y la sociedad, con estos materiales, emprenderán la publicación de sus memorias.[211]

For Poey, the natural history museum was an essential instrument of society and a favorable extension of the government, using science as a conduit into citizenship. Poey saw in the establishment of such an institution the chance to connect the upcoming generation of citizens with snapshots of evolutionary history.

The manner in which he described the ideal natural history museum signals properties that are not just scientific, but aesthetic in the making. Displaying natural history should be, he explained, an experience submerged in an environment that is structured, systematized, and arranged as an organ for the nation. Visitors requesting to observe a specimen must do so in a hygienically pleasant space without distractions. By witnessing indigenous and striking artifacts, he presumed that the next cohort of leaders on the island would feel compelled to create their own collections using the national museum as a principal model. He hoped that the museum would help young Cubans to develop a keen sense of naming species, which in turn would motivate the establishment of a society focused on the history of nature.

The word "preciosas" in the passage cited is adjudicated not to economically valuable things, but to artifacts of science that have great moral and spiritual value for a more enriching understanding of the earth's pas and, by extension, our own. Linking nation, biology, education, pleasure, and social responsibility, a Havana-based natural history museum was for Poey the ultimate key for the complete modernization of one of the last Spanish colonies in the Americas.

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[211] Felipe Poey, "Memoria sobre el establecimiento de un museo de historia natural en La Habana," in *Felipe Poey y Aloy: Obras*, edited by Rosa María González López (La Habana: Imagen Contemporánea, 1999), 334.

Poey's museological endeavors, on the other hand, were also ingrained with an acute sense of textuality. For him, it was not enough to exhibit a collection of heterogenous artifacts and specimens. One also needed words to provide them with a narrative flow that, albeit not providing total unity, could still give such objects a sense of temporal placement within an exhibition. Having labels, for instance, allowed for a sense of orderliness and arrangement that, despite being an curatorial illusion, could still provide young spectators with a sense of grounding. In this same line of thought, Poey associated the benefit of a museum to the creation of an archive that each citizen would make simultaneously with collections. These very same archives would then turn into libraries in which the new society of natural historians could include its memoirs.[212]

Contrary to Donato's definition, for Poey the museum and the library were synonyms, not antonyms. A museum was like a library precisely because it could generate a combination of aesthetic appreciation as well as an ethical impetus for discovering the underlying secrecies lying inside natural artifacts. He envisioned a visitor experience that not only focused on the material collections and exhibitions, but also on what is written about them. It was essential that such a process took place, so he implied, for it was precisely the textuality of the museum that would trigger the rise of new natural historians as well as other archival establishments, such as the library. Poey envisioned a public institution in which objects of display and exhibitions were accompanied by words, making it a material as much as a textual experience. At the center of the social and moral project of the museum also lay an artistic one, given that there are were "right" ways of arranging a display of materials.

[212] For more information on the relationship between literature and ethnography in nineteenth-century Cuba, see Daylet Domínguez's *Ficciones etnográficas: literatura, ciencias sociales y proyectos nacionales en el Caribe hispano del siglo XIX* (2021).

If, as Poey concluded, the power of display also resides in the text, then there is an underlying relation between ethics and aesthetics at the core of the natural history museum. He understood what Latour would later define as "Earthbound": "the speech of the Earthbound will no longer have to alternate wildly – as was the case for Humans and their 'facts' – between the exact transcription of the world or an arbitrary sign unconnected from its referent."[213] Poey's view also matched Gaskell's, who emphasized that tangible things "offer portals to the past of exceeded richness and variety."[214] Like DeLanda, Poey also highlighted the autonomous importance of parts that compose assemblages. He then prompts scholars to ask: What could literary studies gain from such point of contact and what could museum studies achieve through literature, an assemblage of words and things?

One of the most important writers of nineteenth-century Cuba and Poey's son in law, Francisco Calcagno addressed precisely these questions in his work *En busca del eslabón*. Published in 1888, almost immediately before Cuban independence, the novel tackles head-on the artistic dimension of natural history and museum writing. It does so by focusing on of the most controversial topics of the nineteenth century: the search for the intermediary form that could ultimately verify the connection between humans and apes and, particularly, on what such finding could reveal about human races, the human as one race, and nonhuman ancestry. A weighty figure in Cuban intellectual life at the time and a staunch abolitionist, Calcagno's trajectory as a writer was inclined to a tendency for encyclopedic-like knowledge and a desire to classify cultural figures on the island.

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[213] Latour, "Agency at the Time of the Anthropocene," 16.

[214] Gaskell, "The Museum of Big Ideas," 73.

One of his most important and best-known works is the *Diccionario biográfico cubano*, in which he described major intellectual peoples and their unique contributions to Cuba. Among them was Poey. The opening lines of the entry read: "Natural de la Habana, famoso entomologista, profesor público e ictiologista: y hoy catedrático de zoografía, en la Universidad. Sus vastos conocimientos é incansable laboriosidad han hecho sonar su nombre en el extrangero [*sic*] con tanta popularidad como en su país natal: su historia es la del desarrollo científico en Cuba, en sus últimos cincuenta años."[215] Calcagno placed Poey directly in relation to the public sphere, making him an intellectual of both science and citizenship. His selection of words such as famous, public, and popularity are markers that categorize his own father in law as a man for the island and its inhabitants.

Calcagno's dictionary also reflected a desire to collect and exhibit in a particular way, not unlike Poey's museological approach. In addition to being an avid reader of authors who wrote scientific romances, such as Jules Verne, Poey's son-in-law was also interested in evolutionary history and the placement of the human in relation to biology and geology. Born in 1827, he studied philosophy and letters at the University of Habana and during his youth traveled to England, France, and the United States. His father, Juan Francisco Calcagno, was an Italian doctor who wrote one the earliest treatises on cholera in Havana. In 1877, he joined the Sociedad

[215] Francisco Calcagno, *Diccionario biográfico cubano* (New York: Imprenta y Librería de N. Ponce de Leon, 1878), 512.

Travesuras del oxígeno

Figure 8 "Travesuras del oxígeno." In Historia de un muerto, 1875.

Antropológica de la Isla as a founding member. In addition to publishing novels and essays about pressing matters at the time like abolitionism, Cuban independence, and the dangers of US annexation, he was also interested in the relationship between science and literature.

In 1875, he published a book called *Historia de un muerto: Meditación sobre las ruinas de un hombre* that centered on the chemical dimensions of the human body. Its main argument is that living things are made from an assemblage of organic and inorganic chemicals that make life as we know it possible (Figure 8). The elements, he claims, are eternal in that they are always separating and combining in myriad ways that both precede and succeed an organism's existence. To make this point, he centered *Historia de un muerto* around the cadaver of a human body and its various stages after death. The cadaver appears ekphrastically, only through verbal representation. In particular, he focuses on biological processes like decomposition and bloating to make the case that humans may die, but their chemicals are always alive and finding new combinations.

This work is particularly important because it provides an explicit example of Calcagno's understandings of chemistry, biology, and his views on how fiction can contribute to the dissemination of scientific discoveries through ekphrasis and a poetics of display. He begins by meditating on the power of chemistry as a field study that makes clear how the elements can form assemblage so complex that they can create trees and animals. Science has made clear that plants and humans have much in common as congregations whose components are eternal: "Yo no puedo detenerme ante el cadáver de un árbol sin pensar en la serie de fenómenos que prepararon su actual estado, y sin recordar los cambios que sin descanso se sucedieron en ese

vasto laboratorio, la Naturaleza, de donde tomaba, como el hombre, sus elementos de vida."[216] Nature, the writer tells us, is a widespread site for carrying out experiments, revealing unknown things, and illustrating some truths. It is an extensive area of production that has appropriated its creations and combined them into new forms of existence.

Rather than being the scientist in control of its materials, humankind is just another sample awaiting new experimentation. Death in the form of a cadaver is not the beginning nor the end of anything, but just one more phase of the experiment. The author, as a human and fellow specimen, ushers his readers to stand in front of a dead tree and speculate on the transformations it has undergone. In other words, he employs pragmatographia, or the lively description of an action taking place. He invites them to meditate on the chemical reactions that created its wooden structure and where those elements will go after they abandon the dead tree, a process common to all living things. Calcagno's work therefore works within a vital materialist framework because it highlights the emergent properties that occur as bodies are done an undone and various assemblages separate and come together.

Another important feature is the author's kinesthetic sensibility as he asks readers to "stand over" or "get closer" to the object of study, a human cadaver. Almost each chapter begins with such manner, shepherding his observants towards a dead body and the chemical reactions it generates as it decomposes and its elements disperse in the air. For instance, he begins chapter three by soliciting a closer look at the corpse: "acerquémonos al cadáver; han pasado solo cuatro horas desde que el espíritu abandonó la materia: no mucho se han aumentado los caracteres mortales: está más lívido, más demacrado; pero los miasmas que exhala y exhaló desde el

[216] Francisco Calcagno, *Historia de un muerto: Meditación sobre las ruinas de un hombre*, second edition, (Barcelona: Casa Editorial Maucci, 1898), 10.

momento de la muerte, todavía no contagian y nos podemos aproximar sin grave riesgo de nuestra salud."[217] He gives the cadaver a verbal temporality, revealing its timespan and describing the residual facial reminiscences of a once-living man. A miasma is a noxious odor rising from rotten matter as it pollutes the atmosphere with its unpleasant and toxic nature. It is poisonous and harmful because it causes illness or death if a living organism inhales its putrescence. The dead body that Calcagno introduces in his pages is pale and emaciated, two adjectives often associated with both physical and moral decay and their necrotizing outcomes.

Calcagno requests that we draw nearer to that most concrete evidence of human finitude and that we compromise our personal safety for it. Getting closer to a corpse implies a compromise of one's intimate and secure space with something that generates just the opposite. The expected repulsion that such a loathsome and disparaging figure can instigate in readers prompts the author to clarify that the cadaver's purulent effects are not yet transmittable. Contagion implies a communication of disease and pestilence through the corruption of contact or another physical activity where at least two bodies are in close proximity. The care in which the author approaches us to the dead body is a form of synesthesia in which we process through our eyes the injurious smells and possible infections that may come from this artifact of death. It is an ekphrastic display that attempts to overcome the boundaries between word and image, and at the same time makes us aware of the power of language in recreating the physical implacability of a putrefying cadaver.

He spreads several pages elaborating the specific qualities of the corpse as he highlighted the persistence of chemical elements that united to form the formerly living thing and would scatter themselves across the environment in search for future connections. Yet, something that

[217] Calcagno, *Historia de un muerto*, 25.

remained in his mind and that he fervently wished to answer was the placement of the individual's intellect in this whole process of decomposition. If matter is eternal while it goes around the world making and unmaking living things, what happens to the uniqueness of a person's soul? Are humans one and the same as homogenous creatures made from the same minerals, or are souls the animating force that differentiate living creatures from one another?

At one point the author made the interesting comparison between souls as giving shape to matter like fossils:

> Aunque la sustancia se renueva, la manera de estar compuesta permanece, y cambiando molécula a molécula conservamos la forma, como ciertos fósiles en que el calcio, el cobre, el hierro, reemplazaron a la sustancia genuina, no quedando de esta más que la figura. Por eso recordamos, por eso lloramos hechos pasados, por eso somos responsables de nuestros actos de veinte y cuarenta años atrás, aunque ya no queda un solo átomo del individuo que realizó tales actos.[218]

Living bodies change their chemical substance constantly, but their shape somehow remains the same due to a spectral force that provides them with peculiar physical contours. Souls retain the figure of bodies to make them appear like fossils that refuse to be transformed into something else. For the author, the unique shape of individual bodies implied more than just physical appearance itself. It also included memory and responsibility for previous experiences, all of them etched into its petrification. Fossils, like souls, are evidence of past activities and an accountable recollection of what would otherwise be erased and forgotten in the earth's perpetual metamorphosis. The human cadaver featured in the text is similar to an ancient bone in that its delineations are traces of suffering, sadness, and agony. The author feels a compelling and

[218] Ibid., 20.

ethical need to make them visible in an ekphrastic exercise that reveals the painful experiences of a living thing that was also a unique human being.

Further building on this premise, Calcagno emphasizes the importance of calcium as a mineral that records the past and provides evidence of lives that no longer walk on this earth. An element ubiquitously distributed within us, calcium is a most valuable and ancient mineral that has been and will be here long after we disappear. After pondering the far-reaching and drastic geologic changes that have taken place, he invites readers to observe with him a prehistorical cetacean that has died and been washed ashore on a beach. He asks them to follow its tooth throughout geologic ages: "sigamos esa muela a través de los siglos, el mar la ha incrustado de una capa cuarcífera, o silícea, o arcillosa, como el objeto sumergido en aguas de Seltz; una capa caliza, sarcófago indestructible que la Naturaleza sola sabe prepara, se la va sobreponiendo."[219]

The tooth has an extensive history long after being detached from its Cretacean origin. It has been inserted in a solidifying sedimentation that has protected it from the ravages of time. Sedimentation is a sarcophagus, a stone coffin embellished with geologic remains and inscriptions that shelters a respected figure of the past and whose information is invaluable to the pages of natural and human history. When one member of the human race finally finds the fossil, Calcagno uses amplification and admiration as he exclaims: "uno de estos llega, cava, revuelve, escudriña, encuentra el fósil…¡un tesoro! ¡un dato más! Y por amor a la difusión de las luces y por amor a sus contemporáneos, y por amor a su patria, presenta el nuevo fósil a la Academia o Museo de su tiempo."[220] Discovery of ancient life starts with excavation, searching, and a carefully drawn methodology that is able to portray the fossil's origin. Labeling this type of rock

[219] Ibid., 147.

[220] Ibid., 148.

as a treasure undergirds its status as a valuable and esteemed item worthy of storage and accumulation like a precious metal, except that its wealth resides not in money but information. Its significance is a capacity for storing and communicating past occurrences and producing different responses in those who receive its information. Its richness is form of knowledge that can significantly alter, for better or worse, or sense of origin and expiration in this planet.

Finding and exhibiting this otherwise unrewarding tooth is therefore also an act of love as expressed in various dimensions, including intellectual establishments, fellow inhabitants, and even one own's nation. The act of finding and displaying a fossil spurs not only philosophical satisfaction but also deep affection and attachment to contemporary inhabitants who form part of the same institutions, starting with the nation. Showcasing prehistory is then ultimately an action marked by responsibility, pleasure, and sympathy for another's welfare.

In keeping with Calcagno's strong inclination for geological revelations and prehistorical life, he also saw two institutions without which a nation would never progress: the laboratory and the museum. The museum is the adornment of an illustrated society, but the laboratory is its pride. One showcases discoveries, and the other guides the curators in their displays. Whereas the former is an organized collection, the latter is an agglomeration of methods that are oftentimes more costly. "Un museo," he states, "mostrando tesoros de la naturaleza, hiere más la imaginación y prepara el espíritu a la investigación; un laboratorio, revelando los arcanos de la creación, obra sobre la razón y abre el alma al deseo de los descubrimientos."[221] As a public institution, the museum illuminates its visitors' imagination by causing an impression on their minds and prompting them to investigate the artifacts on display. The laboratory, on the other

[221] Ibid., 143.

hand, is a cloistered space where the scientist can inquire into the secret and occult mysteries of creation, which their exposure will generate even strong desire for knowledge.

Both are needed, the writer tells us, because one stamps craving in a citizen's mind while the other invites further study and enrichment of knowledge. These new discoveries, furthermore, prompts a rearrangement of exhibitions and a revised method for the spread of information that will impact future visitors. Citizens can also be laboratorians, and vice-versa. Both the laboratory and the museum are paramount bastions of civilization because wondrous effect on the senses is a prerequisite for the desire of learning, and the resulting breakthroughs invite us to modify how and why we exhibit certain artifacts over others. The laboratory, far from being an exclusively private space exclusive to the scientific circles, actually influences and is influenced by the manners in which the public at large acquires knowledge. The museum, on its part, is the main public generator of desire and the cause for the existence of laboratories. It is thus not surprising when Calcagno claims: "si me dieran a escoger, yo elegiría… uno y otro," precisely because one cannot really exist without the other.

The author's concept of science was thus an engagement with and questioning of the boundaries between collectivity and the individual, public and private, and fact and the imagination. He was particularly drawn to the still controversial topic of the missing link, which is precisely the central topic of *En busca del eslabón*. Calcagno's novel focuses on a former Civil War confederate, Dr. John Thunderbolt, and his desire to go around in the world in search for the missing link – also known in the novel as Miss Link – that could finally explain the connection between humans and other primates. In order to carry out his endeavor, Dr. Thunderbolt publishes an announcement in the *Weekly Report* for those interested in traveling with him.

Meanwhile, in Cuba Don Sinónino reads the ad and decides to join the expedition with his former slave Procopio.

Traveling aboard the ship *Antropoide*, Dr. Thunderbolt, his wife Lucy and daughter Virginia, Don Sinónimo, and Procopio embark on a mission to find the mysterious primate that could complete the history of human evolution. Their journey starts in Brazil and later extends to Africa, the Indian Ocean, and finally Oceania. After their long and unsuccessful journey, the explorers give up and return to the United States. The conclusion reached is that Miss Link is still missing, that Africans are humans after all, that humans are not the only species without paleontological forefathers, and that future researchers will find the missing link among the Africans and the other anthropoid apes. While Calcagno's fictional narrative seems to be a sardonic rendition of Darwinism's influence on scientific racism, it also complicates the portrayal of its only major black character, Procopio.

In the first pages, the narrator describes him through the rhetorical exercise of *prosopographia*: "Frente aplastada, quijadas deshonrosamente prognaces; había en él algo del simio, más del homo, y mucho de aquel Calibán en que Shakespeare parece adivinar el extinto preludio humano antes de Darwin, como el Dante la atracción antes de Newton."[222] Furthermore, the narrator associates Procopio with a case of atavism, or a past species that has by an act of nature resurfaced in the present: "era un caso atávico, un recuerdo de edades pasadas; pues bien se sabe que el atavismo no es más que un capricho de la naturaleza que a veces se complace de vaciar los seres de hoy en los moldes de ayer."[223] Procopio is a sort of walking fossil that survived extinction and resurfaced among the humans.

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[222] Francisco Calcagno, *En busca del eslabón* (La Habana: Editorial Letras Cubanas, 1983), 19.

[223] Ibid., 31.

From the start, Calcagno describes the Black character as an anthropoid being that is actually closer to humans' biological ancestors than to actual humans, an odd living thing walking within the plot and on the textual contours of the novel itself. Calcagno performs an ekphrastic rendition of his physical features drenched in moral undertones. To describe Procopio's protuberant jaws as "deshonrosas" signals that it causes in the characters and the narrator a sense of shame and indecency, and a painful emotion surfacing from a bone structure that threatens their own circumstances. The Black character violates their honor by destabilizing the boundaries between human and primate, or intelligence and animality. In looking at him, they are also gazing back at their own insecurities as white characters who must inevitably descend from that very same Caliban.

Published 15 years before the novel, Scottish-born Canadian archaeologist Sir Daniel Wilson published *Caliban: The Missing Link*, which discussed precisely the association of the Shakespearean character of Caliban with the missing link. Specifically, Wilson addressed the various forms that it had acquired since *The Tempest*, including its depiction as a supernatural monster and intermediary form between ape and human. For Wilson, Darwin and his followers were very much interested in finding the missing link or "Caliban of science," a figure that Shakespeare had conjured centuries before its scientific conceptualization. Prior to evidence in evolutionary theory, the missing link's materiality was already alive at a textual and literary level through ekphrasis. What particularly interested Wilson, however, was not so much the confirmed presence of a missing link in human evolutionary history, but the ontological and epistemological dilemmas that come with its existence. He deduced that the most difficult part of the missing link lay in the conceptualization of it as the iintermediary between human and nonhuman: what was the nature of being a missing link? How did it think?

For Wilson the problem lay in the conception of a thinking being other than human: "the difficulty is not to conceive of the transitional form, but of the transitional mind."[224] Further developing his point, the archeologist found that science needs to look beyond populations conventionally conceived as savages, such as Australian indigenous groups:

> We have to conceive, if we can, of a being superior to the very wisest of our simian fellow-creatures in every reasoning power short of rationality; but inferior to the most anthropoid ape in all those natural provisions for covering, defence, and subsistence, which are the substitutes for that reasoning foresight and inherited knowledge on which the naked defenceless [*sic*] savage relies.[225]

Wilson asserted that the missing link should be envisaged at the frontier between the human and the simian, if such conception was at all possible. This being needed to be mentally superior to a simian creature, but inferior to rationality. He concluded that what ultimately separates humans from other living things is intellect, and the missing link is no exception. This creature could not have been *too* anthropoid nor smart enough to equip itself with artifacts for cover and survival, making it an emblem of interspecies hybridity. As a creature at the crossroads of instinct and intellect, the missing link was a "semi-human progenitor" emancipated from instincts but short of the "glimmering reason" of humans.

The Caliban needed to possess a certain level sound judgment and discernment relatively higher than other primates, but it could not be capable of judging abstractions, nor have the ability to adopt the most convenient methods for grasping universal truths. It should be adroit and dexterous, but never as learned and prudent as a human. On this rendering, the missing link

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[224] Daniel Wilson, *Caliban: The Missing Link* (London: Macmillan and Co., 1873), 27.

[225] Ibid., 31.

is able to slip through language categorizations and remain missing, revealing just how difficult, but necessary, it was to capture this creature's material and intellectual condition.

Wilson's major point was that literature preceded science by imagining a creature in the form of Caliban long before the idea of evolution came into existence. Both fields worked in tandem to understand past, present, and future. Scientific exposition was also a poetics of display. Using the literary realm as a platform to conceive that which science has yet to conclusively demonstrate, Calcagno used the novel as a genre to do precisely this. In doing so, he intertwined the issue of the missing link with slavery and white supremacy by using Procopio, creating a line of correspondence between the two as his characters reflect on the origins of human races as well as those of the human as one race. During Calcagno's time, the association of Black people to a nonhuman forms of life closer to apes was contentiously debated.

Both the 1812 Aponte Rebellion and the 1844 Ladder Conspiracy were slave revolts that resulted into ruthless control measures towards the Black populations on the island. Decades later, Calcagno even published a novel on the former, titled *Aponte* (1901), which starts with the gruesome image of a severed head inside an iron cage and guarded by two officials. The head belongs to José Antonio Aponte, who was charged with an attempted Black revolt that was not unlike Toussaint L'Ouverture's in the Haitian Revolution (1791-1804). Consequently, fear of slave uprisings and the dreaded idea of a black republic in many ways helped shape nineteenth-century Cuban society, including authors such as Calcagno.[226]

In a similar vein, the idea of racial mixture was regarded by some as a possible solution to the gap that separated white and Black populations, or "anthropoid apes." An example was the

[226] Alexander Sotelo Eastman. "Breaches in the Public Sphere. Racialized Terms of Inclusion in a Text of Transition: Francisco Calcagno's *Aponte*," *Bulletin of Spanish Studies* XCIII, no. 9 (2016): 1592.

publication of Gustavo Enrique Mustelier's *La extinción del negro* (1912), in which the inferiority of Black people is taken to be a fact and interbreeding with whites encouraged to dilute blackness. For Mustelier, slavery was merely the product of an objective reality based on biology. Because laws could not modify biological and social phenomena, humans should only interpret and subscribe to them. For Mustelier, "los hombres de las razas blancas, aún en grupos étnicos más inferiores, distan de un abismo de estos seres [negros], que parecen más próximos de los monos antropoides que los blancos civilizados."[227] While not denying the racial hierachy within the white races, Mustelier argued that Black beings have much more in common with anthropoid monkeys than humans per se. His is a poetics of display in which pyramidal and spatial (or abysmal) distance separates white populations from black ones, signaling an approximation of the latter to a nonhuman chain of being.

It is also important to remember that Calcagno wrote his novel thirty-three years after Joseph Arthur, Comte de Gobineau published his highly influential *Essai sur l'inégalité des races humaines* (1853). Serving most of his life as a diplomat, including in Brazil, he considered himself to be a member of the nobility who frowned upon the overthrow of aristocracy during the French revolution. For Gobineau, the Aryan race of the Nordic population was superior to all others because it was a form of biological aristocracy, a perspective already inserted in European culture by the time he wrote his *Essai*. As Léon Poliakov affirms, "Gobineau merely systematized in a very personal way ideas which were already deeply rooted in his time. His own contribution consisted mainly in his pessimistic conclusions, which sounded like the death knell

[227] Gustavo Enrique Mustelier, *La extinción del negro: Apuntes políticos-sociales* (La Habana: Imprenta de Rambla, Bouza y Ca, 1912): 49-50.

of civilization."[228] The success of civilization, he argued, was contingent upon maintaining the purity of Aran blood, which meant that racial mixture was undesirable and a key recipe for disaster. He was a firm believer that the white races could maintain their primacy by eliminating miscegenation with the inferior Black and "yellow" races. While not explicitly a polygenist, he was convinced that races remained permanent and unchangeable once positioned in a hierarchy in human history.

Divided in four volumes, the *Essai* provides a variety of interpretations that support his notion of white supremacy, asserting that what causes the success of downfall of civilization is the corruption of morals due to decay of the races. For Gobineau, *degeneration* applies to human populations when racial mixture has taken over to the point of being a distinct species from that of their ancestors. "The word *degenerate*," he states, "when applied to a people, it means (as it ought to mean) that the people has no longer the same intrinsic values as it had before, because it no longer has the same blood in its vein, continual adulterations having gradually affected the quality of that blood." He then clarifies: "In other words, though the nation bears the name given by its founders, the name no longer connotes the same race; in fact, the man of a decadent time, the *degenerate* man properly so called, is a different being, from the racial point of view, from the heroes of the great ages."[229] Degeneration is a term presaging a declination from ancestral distinction, and an alteration of structure to a less developed form. Populations touched by other races, the author tells us, are made of different blood types and of lesser qualities from those past relatives distinguished in nobility, courage, and strength.

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[228] Léon Poliakov. *The Aryan Myth: A History of Racist and Nationalist Ideas in Europe* (London: Sussex University Press, 1971): 233.
[229] Arthur de Gobineau. *The Inequality of the Human Races*. Translated by Adrian Collins. (New York: G. P. Putnam's Sons, 1915): 25.

Calcagno's writings contested front and center these assertions as he attempts to provide a more complex view of the island. Using as example the characters of Romualdo and Hipólito in Calcagno's abolitionist text *Romualdo, uno de tantos*, William Luis has found that both resemble in some ways Mustelier's views, but with the clarification that miscegenation was already part of the island's past and present. "If Calcagno's portrayal of Hipólito does represent the type of individual Mustelier is describing," Luis explains, "then Calcagno's character is not of the future but he is a person present in the early part of the nineteenth century. Fusion and assimilation have been in progress for some time."[230]

In *Poetas de color*, Calcagno analyzed a number of Cuban poets who discussed race relations in Cuba in their writings. Two of such poets were Plácido (Gabriel de la Concepción Valdés) and Juan Francisco Manzano. Calcagno states that Plácido was a mulatto man whose life was difficult precisely because he was racially mixed, which prompted him to sometimes use poetry for monetary gain to survive in colonial Cuba. Calcagno paternally treated Plácido: "¿Pero qué se podría esperar del pobre mulato a quien nuestra mal organizada sociedad había negado educación y privado, por el anatema de su color, de la dignidad del hombre? ¿Qué se podía pedir al ser cuyo nacimiento era oprobio de su madre, y que pertenecía a esa desgraciada clase que, por exigencias de la época, conservamos aun en el oscurantismo y la ignominia?"[231]

Calcagno also openly criticized slavery when introducing Manzano. In particular, he underlined the difficulty that the poet and former slave faced at a time when Black people could not interact with whites as equals. He emphasized that "el hombre de color aun libre no podía

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[230] William Luis, *Literary Bondage: Slavery in Cuban Narrative* (Austin: The University of Texas Press, 1990), 134.

[231] Francisco Calcagno, *Poetas de color* (Imp. Militar de la V. De Soler y Compañía, 1879), 7.

hablar al blanco más humilde sino con el sombrero en la mano y con el tratamiento de *su merced*." Furthermore, he writes: "no existía esa luz que solo de hace poco ilumina nuestra conciencia en ese oscurísimo punto que hemos dado en llamar institución *social*."[232] Both of these descriptions confirm Calcagno's awareness of the particular social problems that marked the lives of two well-known writers in nineteenth-century Cuba.

Poey, on the other hand, also had his own thoughts on the history of race. In 1861, Poey wrote a treatise on "La Unidad de la Especie Humana," in which he fiercely defended the unity of humans as one race with variations. For Poey, a *species* was a collection of individuals of distinct sexes that were apt for reproduction and infinite propagation, offering in the process variations without losing fecundity. He further identified Asia as the cradle of the human species, since it contained a geographical landscape favorable to population dispersion. He then concluded his piece by affirming that "la patria del hombre es el orbe que habitamos. Nuestro padre único está en el cielo, nuestra patria es toda la tierra. Esa grande idea de la *humanidad* y de fraternidad universal, es la condición necesaria, para que el hombre alcance el grado de civilización y de felicidad que le es dado disfrutar en este suelo."[233] Unlike Mustelier, Poey saw each human being as a sibling under the same patriotic biosphere. The dispersal of humanity across the globe was also an expansion of humanity's homeland, an intimate and interlinked enmeshment reaching across all corners of the world.[234]

Poey's dispersion was also, on the other hand, a poetic exhibition that showcased the various phenotypical shades of humanity as one. Describing the history of humans in terms of an

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[232] Ibid., 7.
[233] Poey, *Obras*, 519.

[234] For a detailed examination of Darwinism and evolution in Cuba, see P.M. Pruna and Armando García González's *Darwinismo y sociedad en Cuba* (1989), and Thomas F. Glick, Miguel Ángel Puig-Samper, and Rosaura Ruiz's edited collection *The Reception of Darwinism in the Iberian World* (1999).

"orbe" implies that their specific geographies are actually more communal in that they share the same space in the form of a sphere. A geometrical figure with no fragmented sides, a sphere is unilateral and concentric in nature. It is a geological reflection of human cohesiveness as a species in past, present, and future. The rounded earth is the homeland that humans will ever know, the ancestral inheritance they had ever possessed, and the ground where they will be buried. Humanity, Poey tells us, is the single most important concept for uniting diverse human groups who share the same space for only a limited amount of time. It is only by finding this undercurrent desire for affectionate companionship across vast distances that our species will find good fortune, pleasurable satisfaction, and a promising civilization.

Contrary to Mustelier, however, Poey denied any implied connection between human and primate, revealing a philosophical side within his scientific endeavors against evolution. In fact, throughout most of his life Poey remained doubtful towards Darwin's theories on the origins of humankind.[235] One of the firm statements made in his treatise on the unity of the human race was that humans had no connection with primates. He believed the idea to be "extremely impious, fake, and abominable," writing: "no hay transición entre el hombre y el bruto, hay un abismo intelectual." Poey also recurred to the possession of language as a definitive skill that separated the human from the primate: "el mono no habla, bien tenga el órgano de la palabra; no *comprende el lenguaje convencional del hombre*."[236] Whereas Mustelier held that Black people were actually a primate closer to the anthropoid apes, Poey dismissed such claim on the grounds of language acquisition.

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[235] Rosa María González, "Felipe Poey y Aloy: El naturalista por excelencia," in *Felipe Poey y Aloy: Obras*, 20.

[236] Poey, *Obras*, 518, emphasis in original.

What both intellectuals shared in common, however, was a poetics of display that laid out the ideal human being under a particular light, visualizing it under a framework in consonance with and in opposition to the nonhuman other. The primate was for Poey a bottomless gulf from which no enlightening promise could be retrieved in its distorted darkness and obscured depth. To find a passage between human and primate comprises locating an intermediary species, which Poey could simply not envision because its presence would threaten his foundations as an intellectual scientist. The hybridity of the anthropoid ape embodied not only a monstrosity that white supremacist used to marginalize peoples of African descent, but also personified a lifeform whose very existence would threaten the boundaries between human and animal as well as the unified condition of humanity.

In this sense the Cuban zoologist had much in common with a British counterpart, who was also interested in discovering the missing link through a poetics of exhibition. In 1866, the *Transactions of the Zoological Society of London* published a talk delivered by Richard Owen in which he meticulously discussed the structures of a gorilla skeleton, comparing it to that of a human. Owen, who remained skeptical at the idea that apes could be the biological ancestors of humans, rejected the idea that Black people were closer to the gorilla in evolutionary history. He wrote that the difference in brain size between the gorilla and other four-hand monkeys was more similar than that of the gorilla and humans: "we discern the importance and significance of the much greater difference between the highest Ape and the lowest Man, than exists between any two genera of Quadrumana in this respect" (269). In the particular case of Black people, he affirmed: "the contrast between the brains of the Negro and Gorilla, in regards to size, is still greater in respect to the proportional size of the brain to the body – the weight of a full-grown

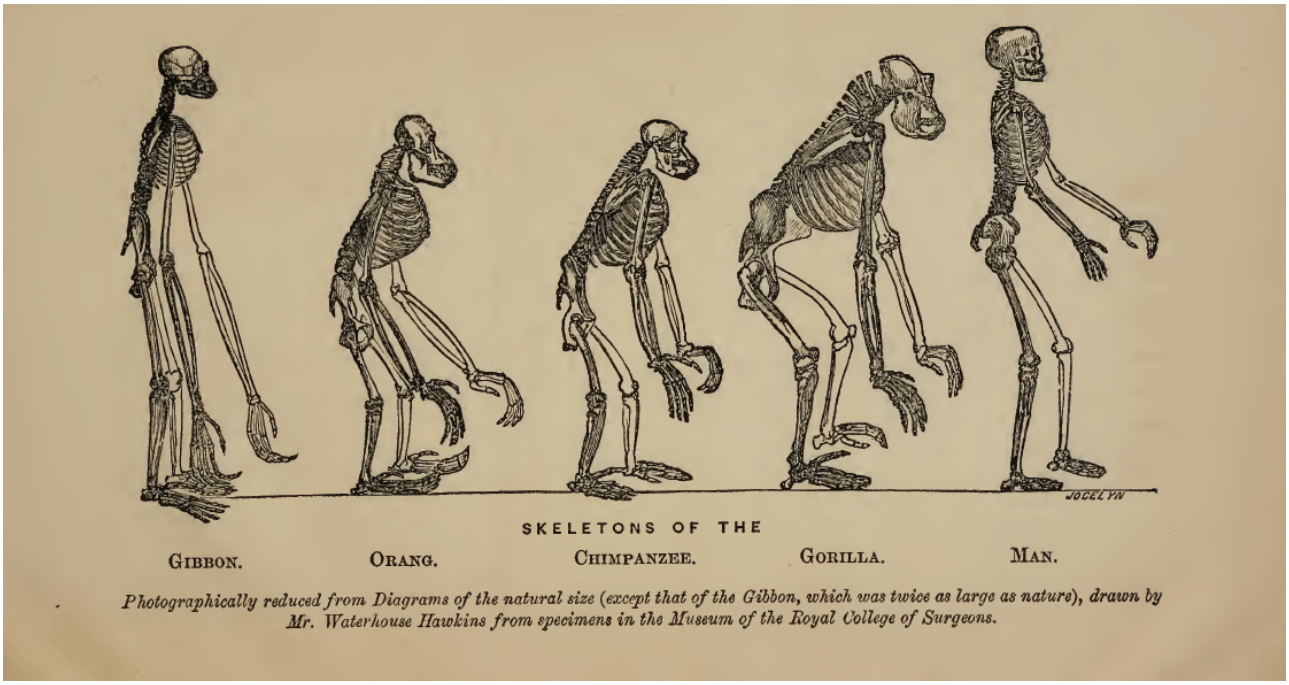

Figure 9 “Skeletons of the Gibbon, Orang, Chimpanzee, Gorilla, Man.” In *Evidence as to Man’s Place in Nature*, by Thomas Huxley.

male Gorilla being one-third more than that of an average-sized Negro."[237] For Owen, there was a hierarchy present within the human races in which non-white races occupied the lowest position, but even these were significantly distinct from the highest species of apes.

Proceeding in a different direction, Thomas Huxley and Darwin emphasized the similarities between humans and apes, attempting in the process to confirm conclusive evidence for the existence of a missing link. In 1863, Huxley published the path-breaking and controversial book *Evidence as to Man's Place in Nature*. Applying the Darwinian concept of evolution to human anatomy alongside illustrations and an acute sense of display, Huxley attempted to provide evidence of the prehistorical presence of a common ancestor among primates. Contrary to Owen, Huxley stated that the difference between the gorilla and humans was less than the difference between the gorilla and the rest of primates (Figure 9). He also asserted that the distinction between human races was actually greater than the disparity between humans and other primates. But, most notably, he wrote that positioning humankind as a separate species is unhelpful, given the fact that the rest of primates were also dramatically different from one another: "remember, if you will, that there is no existing link between Man and the Gorilla, but do not forget that there is a no less sharp line of demarcation, a no less complete absence of any transitional form, between the Gorilla and the Orang, or the Orang and the Gibbon."[238] Therefore, to place humankind in a separate taxon is to simply create an anthropocentric paradigm that forecloses future studies on human's relations with other forms of life.

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[237] Richard Owen, "Contributions to the Natural History of the Anthropoid Apes. No. VIII. On The External Characters of the Gorilla (*Troglodytes Gorilla*, Sav.)" *Transactions of the Zoological Society of London* 5 (1866): 269.

[238] Thomas Huxley. *Evidence as to Man's Place in Nature* (New York: D. Appleton and Company, 1863), 123-124.

As Huxley himself pointed out, human evolution decentralizes the human, creating a "profound mistrust of time-honoured theories and strongly-rooted prejudices regarding his own position of nature, and his relations to the under-world of life."[239] Up until now, he claimed, natural science was a prejudicial field by erroneously separating the human from other species and, by extension, the history of life itself. Darwinian evolution, he suggests, introduced in the history of science a profound suspicion in its very groundwork as it reexamined long assumed but inaccurate notions of human superiority over other species. For Huxley were beings who charted their own pyramidal historiography that finished with themselves at the pinnacle by employing not truthfulness, but preconceived antagonisms against the sublunary nature of other species.

Darwin himself also created a very similar viewpoint in his 1871 work *The Descent of Man*, in which he placed the human within a horizontal line of relation with apes. Following Huxley's argument, Darwin declared that Old World and New World primates descended from an ancient common ancestor that was also an ape. While eagerly accepting the fact that humans have undergone extraordinary amounts of modifications in brain size and erect position, the scientific explorer affirmed that all primates come from the same progenitor:

> But an ancient form which possessed many characters common to the Catarhine and Platyrhine [*sic*] monkeys, and others in an intermediate condition, and some perhaps distinct from those now present in either group, would undoubtedly have been ranked, if seen by a naturalist, as an ape or monkey. And as man under a genealogical point of view belongs to the Catarhine or Old World stock, we must

[239] Ibid., 73-74.

> conclude, however much the conclusion may revolt our pride, that our early progenitors would have been properly designated.[240]

The ancient form that Darwin mentioned united all primates – human, nonhuman, intermediate – into one figure from which they emanated as evolutionary relatives. To label this creature as ancient meant that it belonged to the early stages of the world's geologic history, the oldest testament of human's humble origins alongside other animals. This intermediate form was the archaic bridge of evolutionary history that contemporary humans assumed never existed. Darwin then decentered Western civilization by uprooting its anthropocentric foundations. By enlisting apes and humans under the same genealogical tree, Darwin created a biological assemblage zone that questioned the inherent segregation of organisms in favor of an enmeshment that cuts across species lines.

Wilson, Poey, Owen, Huxley, and Darwin recurred to anatomical and physiological descriptions of the human and the primate as they tried to showcase their own viewpoints on the origins of the human as one race. Whether focusing on language acquisition, level of intellect, or physical descriptions, these thinkers used the power of language, sometimes accompanied by an image, to create or dismiss the missing link. They sought to materialize their own versions of what a human looked like in similarity with or in contrast to the Catarhine and Platyrrhine monkeys. What if such process were to also take place in the realm of fiction?

The collection and exhibition of the missing link at a textual and fictional level is what particularly interests Calcagno. If Poey saw in the museum the ultimate platform from which to showcase natural history in a series of artifacts and specimens accompanied by texts, his son-in-

[240] Charles Darwin, *The Descent of Man, and Selection in Relation to Sex*, volume 1 (New York: D. Appleton and Company, 1871): 190-191.

law saw the novel itself as a public institution filled with organic and inorganic matter. The main Black character in his *En busca del eslabón* is a central figure who connects slavery, the human race, races within the human race, and evolutionary history with one another as he destabilizes each. While Huxley wrote that "resemblances and differences presented by animals [have], in fact, led naturalists to arrange them into groups, or assemblages" (83), Calcagno's novel disassembles and reassembles human and nonhuman groups through the missing link. Once the whole team of expeditioners is aboard the *Antropoide*, Procopio and the white characters embark on a journey that takes them to several temperate zones around the world, starting with Brazil in chapter two of the novel. That Calcagno decided to take his characters into areas characterized by heat and humidity is not coincidental if one takes into account the missing link's connection with climate.

In *Pre-Historic Times* (1865), John Lubbock wrote that traces of the human race should be sought in hot and tropical regions, not in Europe, concluding that "our nearest relatives in the animal kingdom are confined to hot, almost to tropical, climates, and it is in such countries that we must look for the earliest traces of the human race."[241] In a similar vein, Darwin wrote that the earliest types of humans inhabited hot regions as they underwent hair loss: "at the period and place, whenever and wherever it may have been, when man first lost his hairy covering, he probably inhabited a hot country; and this would have been favorable for a frugiferous diet, on which, judging from analogy, he subsisted."[242] The missing link's homeland, so these scientists implied, must then be far from Europe, in the lavish and wet parts of the world.

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[241] John Lubbock, *Pre-historic Times, as Illustrated by Ancient Remains, and the Manners and Customs of Modern Savages* (London: Williams and Norgate, 1865), 334.

[242] Darwin, *The Descent of Man*, 192.

Calcagno's platform of such a climate in the Americas is, unsurprisingly, the Amazon rainforest in Brazil, since his characters set sail on a river to find monkeys that resemble humans. The manner in which the narrator describes the Amazon forest is highly reminiscent of a Carboniferous-like environment:

> Árboles seculares que parecían tocar a las nubes, troncos cubiertos de musgos, contemporáneos de las primeras edades, parásitos más corpulentos que sus autósitos, de modo que el autósito parece no ser más que un pretexto para la existencia del parásito, cocoteros de vertiginosa altura, palmeras que duplican su redondo tallo para alcanzar la luz que le disputan sus copiosos adláteres.[243]

By creating a textual diorama during the character's trip to Brazil, the narrator ekphrastically sets the stage for a prehistoric encounter with New World monkeys. The author hyperbolizes the antiquity and height of trees, stresses the monstrous volume of parasites, highlights the whirling statute of coconut trees, and points to molds still alive from the first ages of the earth. This attention to environmental details permits readers to imaginatively travel with the crewmembers to places they would otherwise not have the means to travel. Calcagno becomes a curator who uses the power of language to make us see what we would probably not have previously detected.

Yet, this very same process also comes accompanied with the intention to centralize the Black character in the narrative. Calcagno, for instance, insists in associating Procopio with the missing link in this section of the narrative, especially when Don Sinónimo makes the comment that the local indigenous groups look like apes. After remarking that the "savages" look like

[243] Calcagno, *En busca del eslabón*, 49.

orangutans or gibbons who eat leather, Procopio quickly responds: "nosotros no comemos cuero," after which the white characters burst in laughter. The narrator then notes: "el negro estaba tan persuadido de que se le tenía por mono, que se personificó mono inconscientemente."[244] At a particular moment during their trip, moreover, Procopio becomes angry when his companions laugh as a heavy fruit falls on his head. Don Sinónimo then jests of the tree where the fruit came from: "este árbol, señores, es un rompetestas procoporium, de Linneo." This comment irritates Procopio, who stares at his former master, as if saying: "¡Ya me la pagarás!"[245] This particular moment in the narrative illustrates the racial tension that exists aboard the *Antropoide*. On the one hand, the narrator and the white characters seek to portray Procopio as a creature that is closer to apes than humans. On the other, however, Procopio responds with anger and frustration, signaling a counterdiscourse and a reassemblage of racial paradigms that surround the missing link.

Even the monkeys that the characters encounter in the Amazon rainforest respond aggressively. Towards the end of this chapter, a group of monkeys start throwing feces at the human characters, who bitterly complain at the whole scene. Don Sinónimo irascibly declares, "¡grandísimos puercos son nuestros abuelos!" Dr. Thunderbolt responds: "si hemos de descender de estos canallas, mejor quisiera venir de un asno."[246] More than being simply a moment of comic relief, this scene exemplifies the primates' rejection of the human as the pinnacle of evolution. By throwing their excrements, the monkeys also acquire an agential status as creatures and live artifacts who push back against intentionally racist as well as anthropocentric ways of

[244] Ibid., 48.

[245] Ibid., 53.
[246] Ibid., 72.

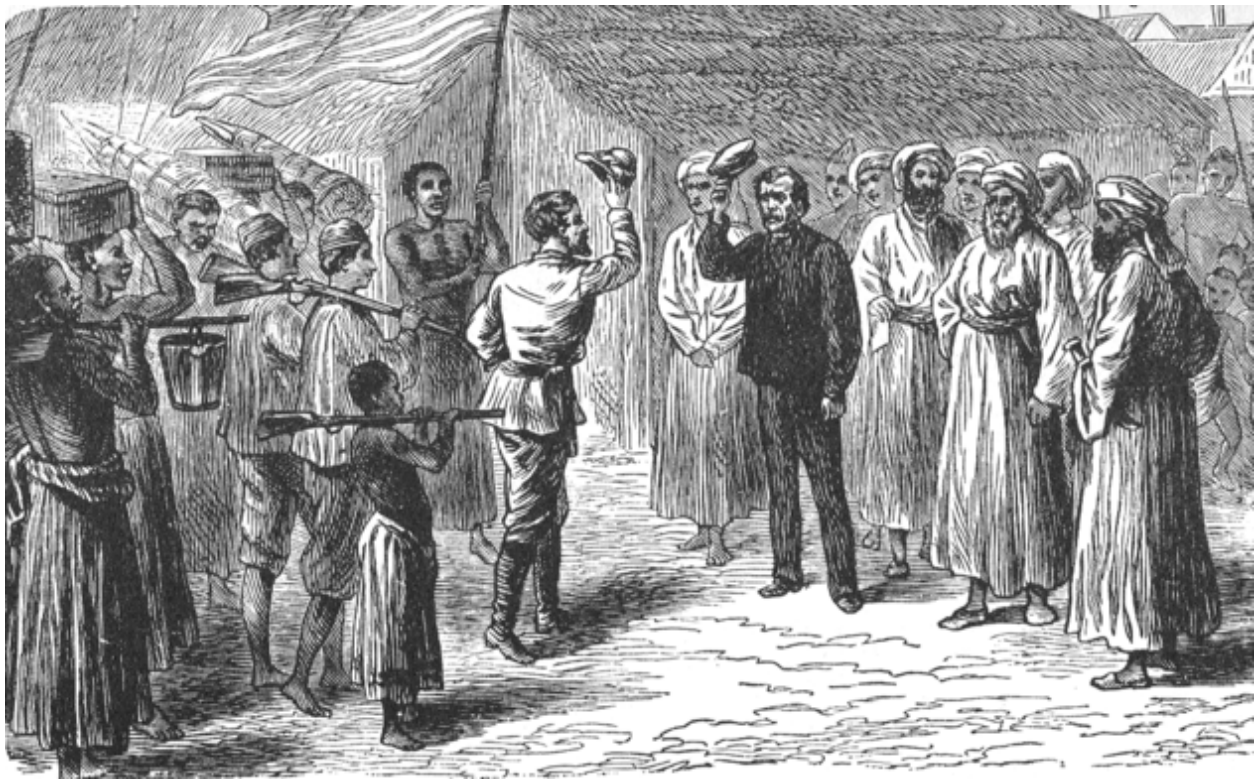

Figure 29: “Dr. Livingstone, I presume?” In *How I Found Livingstone: travels, adventures, and discoveries in Central Africa*, by Henry Morton Stanley.

finding and understanding the missing link. The specimens are "puercos" in that they refuse to subordinate to clear-cut and sterile mechanisms for organizing the evolutionary history of primates. The grandparents, far from being prehistoric statues of ancient grandeur, are sullied in their response as they contaminate the genealogy that the white crewmembers impose to justify their racial superiority.

Titled "Simiología," chapter three of *En busca del eslabón* takes its travelers to the equatorial zone of Africa to encounter what they could not find in South America: an Old World ape that could resemble as closely that transitional form no longer present. On the first pages of the chapter, the narrator remarks the density and danger of the African forest, but then affirms: "¡Pero adelante! Allí podía estar el eslabón, buscando en aquel hermoso país, aún no explotado por la Botánica ni por la Antropología."[247] It is in the African continent, then, where a violent encounter between human and nonhuman takes place as the main characters try to find the much-desire creature. After all, even Darwin admitted that Africa was where human ancestors would be found: "it is therefore probable that Africa was formerly inhabited by extinct apes closely allied to the gorilla and chimpanzee; and as these two species are now man's nearest allies, it is somewhat more probable that our early progenitors lived on the African Continent than elsewhere."[248] It was in Africa, so Darwin believed and the main characters attest, that the Caliban of Science would appear once again. But in the subsequent chapter, "The Gorilla," human evolution in the novel changes course with Procopio's act of rebellion against the white characters. Once deep inside the African outback, the characters find Henry Stanley, the famous Welsh explorer and journalist who was sent to Africa to find Scottish missionary David

[247] Ibid., 88.

[248] Darwin, *The Descent of Man*, 191.

Livingstone. Livingstone had traveled to the continent as part of his obsession to find the sources of the Nile River, but was presumed lost during his travels.

Born in Wales in 1841 under the name of John Rowlands, Stanley grew up poor and as an orphan in a workhouse. At the age of 18, he traveled to the United States and subsequently participated in the American Civil War, first for the Confederate army and later for the Union's. He became a correspondent for *The New York Herald* during his travels outside the US, most noticeably in 1871 when he traveled to Zanzibar to locate Livingstone later in that same year. When he found the British explorer near Lake Tanganyika, Stanley asked him the famous question that would remain the stamp of his exploration: "Dr. Livingstone, I presume?" (Figure 10). He subsequently published his highly popular travel book *How I Found Livingstone: Travels, Adventures, and Discoveries in Central Africa* in 1872. According to biographer Tim Jeal, Stanley represented a group of nineteenth-century explorers who were "inspired, fearless, obsessed, able to frighten, able to suffer, but also able to command love and obedience."[249] Rather than a man solely fueled by imperialism and an enabler of horrid crimes against Africans under King Leopold II of Belgium, Stanley was a man whose life was marked by extreme scenarios as he assumed an American identity, according to Jeal. It is important here to notice that, like Stanley, Mr. Thunderbolt also participated in the Civil War in the Confederate side. Whether or not Calcagno was aware of this detail, it points to a transnational and transoceanic preoccupation in regards to the relationship between exploration and racial relations.

Stanley appears in Calcagno's novel as a brave and charismatic man who is quite knowledgeable about the local population, and who also has his own perspective on the missing

[249] Tim Jeal. *Stanley: The Impossible Life of Africa's Greatest Explorer*. (New Haven: Yale University Press, 2008), 470.

link. In response to Don Sinónimo's claim that humankind proceeds from a slow, gradual, and extinguished branch of catarrhine primates, Stanley affirms: "Creo que es un absurdo suponer perdido el eslabón entre el mono y el hombre, puesto que existe el negro, el negro salvaje ese es el atropopiteco [*sic*] u hombre de ayer, ese es el verdadero intermediario. Si hay hiatus está entre él y el hombre no entre él y el mono."[250]

For the fictional Stanley, then, the missing link is not actually missing, but simply living on African soil as a half-human and half-beast entity reminiscent of the Shakespearean character. But if Stanley believes that the savage black man is the true link to primates, Procopio dismantles the racist undertones that seeps into this search for the human ancestor. He does so by dressing as a gorilla and outsmarting his companions, who find themselves fooled by that character whom they thought to be the least intelligent of the crewpersons. At first, they see what appears to be a gorilla resting against a banana tree, an ideal image for a museum display: "En efecto, allí estaba, o allí les pareció ver el famoso y ansiado gorila, derecho, inmóvil, con un largo bastón en el hombro, como si amenazara con él, con la boca medio abierta, enseñando unos formidables colmillos, de pie, medio recostado al tronco de un bananero."[251] What they see in front of their faces is what appears to be a gorilla, but they also describe an ekphrastic diorama of their own obsessions, anxieties, and curiosities about humanity's evolutionary past.

But what happens when the visual image rebels against its spectators? If there is a distance between the passive image and the active verbal interpreter, this is precisely what Procopio breaks in the novel. As Don Sinónimo prepares to shoot the gorilla in disguise, he trips and falls to the ground, allowing Procopio to simply walk up to his spectators and reveal his

[250] Calcagno, *En busca del eslabón*, 109.

[251] Ibid., 130.

human identity. The narrator writes: "¿Qué fue lo que vió? Al gorila, al mismísimo gorila que con malicia hiperdiabólica, desmorecido de risa, le decía imitando su magistral acento en el Brasil." Procopio then says, referring to the plant that tripped Don Sinónimo to the floor: "A esta planta la llamaremos *Rompenarizorum Sinonimorum*, de Linneo."[252] Rather than falling into a racist paradigm that classifies him as a walking fossil living at the intersection of human and ape, Procopio rebels against his curators. Indeed, the Black character acquires agential power in the novel through the very same model that was meant to place him as an inferior nonwhite, nonhuman other. By becoming a man turned gorilla, turned fossil, and turned master of disguise, Procopio becomes a vibrant matter that decentralizes white anthropocentrism, using a bodily assemblage of race, disguise, and the ever-elusive and hybrid missing link.

Continuing with their journey towards the end of the novel, the characters travel from Africa to Southeast Asia and Oceania in a last attempt to find the lost ancestor, the missing link. Whereas Procopio was expecting to head back to the Americas and escape the tortuous situation at the hands of scientific racism, the *Antropoide* and its passengers keep moving. At one moment in the narrative, they even thought to have discovered an island, which they named *Similandia* or Monkey Land. As for the former slave, Procopio, the narrator writes that he was enraged because his fellow white crewpersons used to say: "Allí estaban sus proximios, allí veía realizado lo que se buscaba, allí, en aquellos extraños monos que don Sinónimo se empeñaba en llamar *procopioides*."[253] From the start of the narrative, as I have shown, the white characters cannot but insists on placing Procopio as next of kin to monkeys. They fossilize him as an object of display

[252] Ibid., 140
[253] Ibid., 162.

that, albeit rebelling at certain points, still retains the same stigma assigned to him by his former master and his colleagues.

Yet, as the novel comes to a close, the *Antropoide* anchors in what appears to be a desolated island in the middle of the ocean, and then encounter an indigenous inhabitant. For the narrator and the white characters, this person is actually a monkey no more than five-feet tall. When offered a pastry as a treat, however, he thanks the crewpersons "in an English as pure as that of Lord Byron." After hearing such an unexpected response, they found themselves utterly surprised, enraged, and disappointed. This "monkey" eloquently informs the explorers that they are on the Fiji islands, long ago colonized by the British. In fact, when Don Sinónimo calls the "little monkey" a savage, he responds: "más civilizados que ustedes, ingleses ladrones, que no vienen aquí más que a robarse todo lo que encuentran; y bien pueden irse pronto, porque ya vienen mis compañeros a echarlos a palos."[254] Recalling a moment very similar to that of Procopio in Africa, the Fijian character outsmarts the supposedly civilized explorers. Like the Black character, the "little monkey" rebels against the museum exhibition orchestrated by the expeditioners and the novel itself.

After such a disappointing journey around the world in search for the elusive missing link that haunts their minds and crushes their hopes, the members aboard the ship return to the Americas. The narrator – and Calcagno – make clear that the missing link or anthropopithecus is the product of their realization, a myth yet to be confirmed by science, and whose ancient remains lie in some undiscovered area of the fossil record:

> En cuanto al respetable antropopiteco, cuyo nombre encabeza este capítulo, se sabe que no es una realidad, sino una moneda imaginaria, una conjetura que

[254] Ibid., 172.

> representa ese preludio humano, ese homo primigenies, ese mito en fin de forma transitoria, que se busca, y se hallará algún día, cuando la casualidad quiera darnos un hueso, una tibia, una muela, jeroglífico perdido en las edades, boca cerrada, por los siglos, que vendrá a dictarnos la página rota de ese gran libro de la humanidad pasada que con tan ímprobo afán a reconstruido la humanidad actual.[255]

For Calcagno and his narrator, the bones of the imaginarily real and mythologically scientific hominin are being sought and will one day be found on the assemblages of stratigraphy. To describe the anthropopithecus as respectable suggests that it is an animal worthy of notice and observation. The missing link is admirable for its capacity for unsettling paradigms that include art and science, human and animal, word and image, even if its remains are still missing. In effect, it is an imaginary currency with the force of destroying and creating various discourses about the unique history of humanity and its role in the history of life. It is both a myth and a scientific body of desire as it embodies the ultimate explanation on humankind's elusive origins, a pursual across generations that has corroded the minds of scientists and artists alike. The anthropopitecus is anthropomorphized here as a supernatural agent that holds the missing pages of humanity's past and who may only divulge them through the vibrancy of bones and hieroglyphics capable of dictating unknown lines from life's genesis.

Just as important, then, is the connection that the author creates between the bones of the missing link and writing. The anthropopithecus's fossils are teeth, tibia, molars, but also hieroglyphics, texts, and a voice that reads out loud the content of page ripped out of humanity's book. By mentioning the different ways that the fossil can manifest itself as it unveils the

[255] Ibid., 181.

undisclosed corners of human evolutionary history, the author orchestrates a gallery of mediums and artifacts. Calcagno creates a poetics of display in which characters, missing links, primates, an expedition ship, writing systems, artifacts, and geographic locations form part of an ekphrastic assemblage. Despite being part of a collection made by the literary curator, each has a relation of exteriority with other organic and inorganic forms, making them irreducible to one location or one contingent scenario. Rather than favoring language over image, Calcagno's recursion to ekphrasis yields a vision of science, history, and art in which objects can both contribute and outsmart the textual descriptions forced upon them.

Further building on the multivalency of the missing link, the narrator even asks his readers to create mentally-based visual reconstruction of human ancestry, highlighting in the process the power of language as it interact with the physical. The first of these reconstructions encourages readers to infer the missing link: "suponga el lector un hombre que aún no es hombre o un mono que ya no es mono, bípedo alalo [*sic*] antes que cuadrúpedo parlante." A few lines later, "Ya en él es cara lo que fue hocico, su cráneo es menos prognaz que el australiano, su ángulo facial de 65˚, con su orejas todavía informes y algo movibles, y parpadea con el tercer párpado que aún no es vestigio."[256] Still later, "ya inclina la cerviz al ver el sol como si buscara algún objeto de adoración: alza sus manos al cielo y parece preguntar: ¿Quién eres? ¿Qué soy? Las dos primeras preguntas que hizo la razón humana antes de la palabra."[257] Using these words, Calcagno invites his readers into a narrative temporality that visualizes the evolution of humankind from the missing link. The first being in human evolutionary history was bipedal but could not speak, a monkey that was not human, and a human that was no longer a monkey. The

[256] Ibid., 181.

[257] Ibid., 182.

second illustration asks readers to imagine a face instead of a snout, a 65 degree cranium, unformed and mobile ears, and nictitating membranes, whereas the third asks us to conceive a being in search for the meaning of his existence, just before acquiring the skill of verbal communication. Unveiling a poetics of display akin to a museum exhibition, Calcagno recurs to museum writing as he seeks to use words alongside corporeal materialities.

Using the novel as imaginative platform, Calcagno reflect on the literariness of science. In a way, it anticipates W. J. T Mitchell's tripartite definition of ekphrasis as hope, fear, and indifference – and their cycling presence in natural history museums. For Mitchell, hope is when "ekphrasis ceases to be a special or exceptional moment," fear when "the difference between verbal and visual becomes a moral, aesthetic imperative," and indifference when there is a "commonsense perception that ekphrasis is impossible."[258] The hopeful overcoming of otherness are these men's ultimate goal, to close the abyss of between civilization and barbarism inscribed in their genetic history. As a counterpart, there is the ekphrastic fear between conflating the visual and the verbal, or the supposedly mute savage and the eloquent explorer. The Caliban may be a human ancestor, but he must never be allowed to be human. Finally, the novel ends with indifference by concluding that finding the missing link is simply an ekphrastic impossibility, an impasse that needs more discoveries in the coming centuries.

As a fossil who is also a human being, Procopio becomes reactivated as he acquires an agency of his own while outwitting the scientific frame in which he was placed. Like ancient bones, novels can also outwit their creators by undermining the framework in which they were created. Much like the characters who exhaust themselves by the hunting the hidden and rebellious missing link, Calcagno also undergoes this same process. Being a writer prone to

[258] Mitchell, *Picture Theory*, 152, 153, 154.

encyclopedic endeavors and a science fiction fan, the author of *In Search of the Missing Link* also becomes a part of his own novel, and a specimen in his own exhibition. If Haile-Selassie connects with Lucy and MRD as individuals, then Calcagno also connects with the desires, fears, and anxieties of the Caliban of Science.

Finally, we should note the overlapping frameworks shared by Calcagno's novel with the cabinet of wonders, since both forms of exhibition recur to emotional responses to elicit intellectual curiosity. Ewalt indicates that a distinctive feature in Gumilla's textual cabinet of curiosities is that his rhetoric "first captures the imagination and then leads it along a route from wonder at (admiratio) to knowledge of (scientia) nature's marvelous secrets."[259] A similar process occurs in Calcagno's novel, in which the narrator captures our imagination by inviting us to travel in the *Anthropoide* and witnessing the natural wonders in different parts of the world. We also travel backward in time as we think about the missing link and the biological history of the human species, being wondered by it and learning from it as we dive into the pages of fiction. To do so, Calcagno employs in his novel a set of effective rhetorical devices that include not only ekphrasis, of course, but also other tropes and figures. One of them is hypotyposis, or the lively description of actions, events, animals, and peoples to create the illusion of reality. He uses this figure when describing the new places, animals, and human populations that they find in their expedition, all of which challenge their scientific premises about the origin of the human species and its races. Towards the end he also recurs to *peroration*, or concluding observations that remind readers of the novel's argument, casting polygenesis and racism in a negative light, and providing his own predictions about Africa's importance for future discoveries about human ancestry. All of these rhetorical devices place literature and science into a line of correspondence

[259] Margaret Ewalt, *Peripheral Wonders*, 32.

regarding the ethics and aesthetics of fossils and, more broadly, the textual and material dimensions of natural history museums.

Conclusion

The authors that I have studied followed distinct trajectories throughout in the long-nineteenth century. They resided in different places, lived different lives, and wrote in different literary genres. Whereas Gonçalves Dias became famous as a poet under the auspices of a monarchy, Sarmiento spent almost his entire career writing essays to defend what he believed to be the ideal projects for civilization in his country, a republic. Lastly, Calcagno produced novels and other literary works about the past, present, and future of his homeland and one of the last Spanish colonies in the world. Born in 1811 and dead at seventy-seven, Sarmiento was the oldest of three, followed by Gonçalves Dias's birth in 1823 and Calcagno's in 1827. It should be noted, however, that the Brazilian poet was the youngest one to start publishing major works, making known his first *Poemas americanos* at the age of twenty-three. He was also the youngest to die a violent death at forty three during a shipwreck. Of the three, the only one who made it past the nineteenth century was Calcagno, who died in 1903 at age of seventy-six. All of these intellectuals experienced vastly different circumstances as they professed their own interests and worries to specific populations in various locations throughout the Americas.

Yet, this project has argued that they had important things in common: their shared interest in the history of life, including humans. They were especially interested in how current racial relations were informed by prehistorical events that marked the dispersal of populations, both human and animal, throughout select parts of the world. It was only by inquiring into geologic history and deep time that they could search for a satisfying response to the anxious question: Where do all humans come from? Answering it would have allowed them to glimpse into how we got here as races, as nations, and as a species massively scattered across geographies. They realized the need for that most important piece of evidence that could attest to

the former existence lives which preceded but marked our own: fossils. Despite not being paleontologists, these authors felt a compelling reason to excavate these bones by using their literary arsenals and found a richer conceptualization on the origins of race in the Americas. Field studies focused on ancient populations in the disciplines of paleontology, archaeology, and anthropology were gaining visibility in the so-called "New World" which, as these fields showed, was far from new. The authors featured in this project were familiar with towering figures in Europe like the Louis Agassiz, Comte de Buffon, George Cuvier, Charles Darwin, Charles Lyell, Alcide d'Orbigny, Thomas Huxley, and Richard Owen. As intellectuals who were born and spent a considerable amount of their lifetime in the Americas, the authors featured in my project deemed it necessary to insert their own contributions into the increasing bibliographies in natural history and evolutionary theory. They were authors writing on behalf of their respective nations, of course, but they were also thinkers who were intimately engaged with transnational and transoceanic discussions on scientific discoveries.

The advancement of science, however, was not these authors' sole interest. They were also very much drawn to questions of public engagement and the challenging task of making science perceptible and attractive to the general population. One of Gonçalves Dias's main aspirations was to make poetry a matter of social interest towards ethnography. Sarmiento relied on his skills as a celebrated essayist and orator who published extensively on the contributions of scientific fields concerned with the history of life. Calcagno decided to experiment with his formation as a novelist inspired by scientific romances that opened for him the opportunity of investigating the power of fiction to highlight the cultural causes and consequences of science. Albeit pursuing divergent courses in literary production, all of them felt a strong connection to the public stature of not only literature itself, but also the natural history museum. As these

public institutions were being established in their respective homelands, these writers responded to them by energizing the effectivity of display through writing. If the colonial period saw the rise of cabinet of wonders that sent specimens from the American continent to the metropolis, the nineteenth century witnessed its public counterpart. The Museu Real in Rio de Janeiro was founded in 1818, the Museo Público in Buenos Aires in 1823, and the Museo de Historia Natural de La Real y Pontificia Universidad de La Habana in 1842. Gonçalves Dias, Sarmiento, and Calcagno were active members of scientific communities that were connected to their local museums. Furthermore, they knew that the specimens and artifacts exhibited in these buildings needed a verbal representation for them to be legible for the general public.

Ancient bones spurred alternate ways of envisaging an artistic mode for inquiring into themes of discussion otherwise exclusive to the natural sciences. They produced a script that I call museum writing. I have defined museum writing as the power of language to provide a poetics of display that, in addition of making specimens and artifacts critically appealing to authors and readers alike, revealing the major presence of this trope in natural history museums. I demonstrated that a primary element for this process to take place is ekphrasis, or the literary trope centered on the verbal representation of artistic works.

My dissertation brings this very term, usually reserved for art historians and literary scholars, into the natural sciences by examining sensuously perceptible objects of extreme value to scientists, specifically fossils. It defends the claim that paleontology is a deeply ekphrastic and, by extension literary, discipline precisely because it's centered on both visual and verbal representations of species that are no longer alive. Like literature, the scientific study of ancient lives is a field marked by both the attraction and the aversion of the natural sign, concerned with the aesthetic reproduction of life and death, and submerged in creative acts of commentary,

description, and revelation. Rather than detracting from scientific accuracy, the authors featured in the preceding chapters interpreted scientific accuracy and its ethical implications by revealing the ekphrastic foundations in paleontology and related fields like archaeology and anthropology. Museum writing was for them a valuable method for scrutinizing a notion of fossils as active agents that could reveal formerly unknown information about who they were and from whence they originated.

Gonçalves Dias, Sarmiento, and Calcagno were receptive and responded to paleontological research's assembling efforts in deciphering, merging, and recombining excavated bones in hopes of sensing their furtive vitalities. In this sense, they anticipated current discussions on vibrant materialities and assemblage theory within speculative realism and beyond. For Jane Bennett, matter is a pulsating being with the ability of self-organization as it cuts across human and nonhuman entities and in relation to each other, marshaling a recognition of nonanthropocentric forces with the power of personal as well as political influence. "If matter itself is lively," Bennett intimates, "then not only is the difference between subjects and objects minimized, but the status of the shared materiality of all things is elevated. All bodies become more than mere objects, as the thing-powers of resistance and protean energy are brought into sharper relief."[260] The three authors under discussion understood fossils as animated matter that undermine seamless boundaries separating subject from object, word from image, and human from animal. They performed an ekphrastic approach to the vibrancy of ancient bones as they sought to elucidate their own pasts in relation to biological and geologic history.

[260] Bennett, *Vibrant Matter*, 13.

Along these same lines, they knew that fossils needed to be assembled with one another and with larger scientific paradigms for us to comprehend their ontological significance. As the institution per excellence in charge of fossil assemblages, the natural history museum proved to be a valuable site where science and artistry met while enfolding themselves unto bones on display. What if literature, as these three authors implicitly indicated, could perform something similar and contribute to both museological and literary theories of assembling expositions and representations?

According to Deleuze and Guattari, assemblages are heterogenous zones made of contingent parts that generate multiplicity and events in a nonteleological manner. Assemblages are then machines in that they form external relations that invoke not unity, but diverging lines that disperse and recombine throughout the ages and by extrinsic associations. They are abstract machines in that they are peripherally imminent, concrete to this earth, and constantly reforming new wholes. They proclaim in *Anti-Oedipus*: "We believe only in totalities that are peripheral. And if we discover such a totality alongside various separate parts, it is a whole of these particular parts but does not totalize them; it is a unity of all these particular parts but does not unify them; rather it is added to them as a new part fabricated separately."[261]

DeLanda further builds on this principle by focusing on assemblages' emerging properties, or features that arise as a result of their constituent parts. He emphasizes that these constituent parts can disengage from one assemblage and engage with another, thereby altering their properties and producing new ones. Each assemblage is therefore a historically unique entity occupying the same ontological plane, and so they must treat them as individuals with a

[261] Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1983), 42.

date of birth, death, and duration of lifespan. Thus, as I have argued here, fossils, museums, extinct species, nations, human races, the human species, and even literary writings are individuated agents with ontological properties and historical vibrancy.

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