

This is a repository copy of A Tale of Two Anteaters: Madrid 1776 and London 1853.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/192891/

Version: Published Version

Article:

Cowie, Helen Louise orcid.org/0000-0003-1485-8350 (2022) A Tale of Two Anteaters: Madrid 1776 and London 1853. Centarus. pp. 591-614. ISSN 1600-0498

https://doi.org/10.1484/J.CNT.5.132101

Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



HELEN COWIE

A Tale of Two Anteaters

Madrid 1776 and London 1853

- ▼ **SPECIAL ISSUE ARTICLE** in Science at the Zoo: Producing Knowledge about Exotic Animals*, ed. by Miquel Carandell & Oliver Hochadel
- ▼ ABSTRACT In 1776, the first living giant anteater to reach Europe arrived in Madrid from Buenos Aires. It survived 6 months in the Real Sitio del Buen Retiro before being transferred to the newly founded Real Gabinete de Historia Natural. In 1853, 77 years later, a second anteater was brought to London by two German showmen and exhibited at a shop in Bloomsbury, where it was visited by the novelist Charles Dickens. The animal was subsequently purchased by the Zoological Society of London, which classed it as one of the most important additions to the menagerie since its formation in 1828. Drawing on recent work in animal biography, this article assesses the reception of the two anteaters and considers their cultural and scientific significance. I examine the logistics of the exotic animal trade and trace the transatlantic networks that permitted anteaters—and knowledge about them-to move between continents. I also study the modes of representation, from painting to taxidermy, that enabled the anteaters to reach new audiences. By focusing in detail on the lives of two exceptional anteaters, the article illuminates understandings of the species more broadly and shows how different spaces and places shaped the creation and dissemination of zoological knowledge. I emphasise, in particular, the tensions that emerged between imperial and colonial science and the competing knowledge regimes of the natural history museum, the menagerie, and the field.

Helen Cowie (5) • University of York, correspondence: Department of History, University of York, Heslington, York, YO10 5DD, UK. helen.cowie@york.ac.uk

Cite this article: Helen Cowie, 'A Tale of Two Anteaters', Centaurus, 64.3 (2022), 591-614 https://dx.doi.org/10.1484/J.CNT.5.132101

DOI: 10.1484/J.CNT.5.132101

This is an open access article made available under a CC BY 4.0 International License. © 2022, The Author(s). Published by Brepols Publishers.



^{*} This Special Issue was selected by a dedicated ESHS committee after a public call for special issues.

▼ KEYWORDS 18th–19th Century Science, Anteater, Circulation of Knowledge, History of Science, Zoological Garden, Menagerie, Museum, Spain, Britain
▼ ISSUE Volume 64 (2022), issue 3

In July 1776, the first living anteater to reach Europe was delivered to the Buen Retiro menagerie in Madrid. The animal, which originated from the Río de la Plata region of South America, had been sent as a present to the Spanish king, Charles III. It was one of the most unusual creatures to grace the Spanish court, and was soon immortalised in a painting by an apprentice working for the artist Rafael Mengs. Following its death in January 1777, the anteater was stuffed and installed in the Real Gabinete de Historia Natural, making the posthumous transition from living beast to scientific specimen.

In 1853, 77 years later, a second anteater arrived in London, where it was visited—among others—by the novelist Charles Dickens. Believed to be around 5 months old, the animal had been imported from Brazil by German showmen. It was exhibited inside a small shop, "divided by a little wooden barrier into a small space for spectators and a small space for the proprietors and for the animal itself," and subsisted on a daily diet of 50 eggs, "a little milk, and meat chopped finely or in a soup." Dickens, who paid to view the young anteater in person, described how it "scratches and pulls its hair about with its hard foreclaws precisely as it would if they were horny fingers." He stated that he had become "pretty sociable" with the animal, even stroking "his long nose and shaggy coat" with his hand.¹

The arrival of two animals of the same species into two very different societies offers an interesting window onto changing perceptions and understandings of exotic animals. The Madrid anteater, a royal gift, formed part of a long tradition of diplomatic animal exchange, but became—at least in death—part of Spain's burgeoning culture of natural knowledge. The London anteater, purchased as a commercial speculation, was classed by the Zoological Society of London as "by far the most important addition, in a scientific point of view, which has been made to the collection since its commencement." In an age of higher literacy, mass print culture, and increasing consumerism, it was also commodified as an animal celebrity and described, debated, and satirised in the popular press. Both specimens functioned as living ambassadors for a species little known in Europe. Both also became entangled within wider debates about the character, representation, and even survival of South American fauna, serving as focal points for contemporary theories of taxonomy, evolution, and extinction.

Drawing on recent work in the genre of animal biography, this article assesses the reception of two of the first living anteaters to arrive in Europe and considers

¹ Dickens (1853).

^{2 &}quot;Zoological Society of London" (1853).

their broader cultural and scientific significance.³ I examine the logistics of the exotic animal trade and trace the transatlantic networks that permitted anteaters—and knowledge about them—to move between continents. I also study the modes of representation that enabled the animals to reach new audiences (some of them posthumous). While a number of elephants, hippopotami, and other classic megafauna have recently generated detailed studies as both individuals and species, anteaters have rarely received such attention—a fact that likely reflects both the challenges of keeping them alive in captivity and, perhaps, certain aspects of their behaviour that rendered them less amenable to anthropomorphism.⁴ By focusing in detail on the lives of two exceptional anteaters, the article seeks to illuminate understandings of the species more broadly and to show how different spaces and places—and the movement between them—shaped the creation and dissemination of zoological knowledge.⁵ I emphasise, in particular, the tensions that emerged between imperial and colonial science and the competing knowledge regimes of the natural history museum, the menagerie, the zoological garden, and the field. Who was a more reliable authority on American fauna: the keeper who cared for an anteater in a menagerie, the comparative anatomist who studied stuffed anteaters in the metropolitan museum, or the travelling naturalist who observed living specimens in Paraguay or Brazil? To what extent did the study of anteaters in captivity counter or propagate misconceptions of this little-understood species?

From Buenos Aires to the Buen Retiro

The first anteater to reach Europe alive arrived in Madrid in July 1776. Caught in the vicinity of Buenos Aires, it was sent to Charles III by the administrator of post in the city, Don Manuel de Basavilbaso.⁶ On its arrival in the Spanish capital, the anteater was presented to the king, who inspected it in a chamber of the Palacio Real. It was then transferred to the Casa de Fieras (menagerie, literally "house of beasts") in the Real Sitio del Buen Retiro, where a special apartment was created for it. A letter to Don Matías Martínez López dated July 4, 1776 recorded that the anteater, a female, was accompanied by a keeper, who had formulated a special diet plan for the animal (in the wild, giant anteaters subsist on ants and termites, but it was not possible to provide these in sufficient numbers aboard ship or in the menagerie).⁷ According to Spanish naturalist Félix de Azara, this consisted of "little pieces of bread, minced meat and flour dissolved in water."

³ Alberti (2011); Krebber & Roscher (2018).

⁴ See, for example, Ringmar (2006); Pimentel (2017); Nance (2015); Simon (2019).

⁵ Livingstone (2003); Raj (2007); Sivasundaram (2005).

⁶ Iriarte to Don Pedro Franco Dávila [Letter] (1777), legajo 373, Sección A—Real Gabinete de Historia Natural, Fondo Museo, Museo Nacional de Ciencias Naturales, Madrid, Spain (hereafter MNCN).

⁷ Mazo Pérez (2006, p. 289).

⁸ Azara (1802, Vol. 1, p. 16).

The anteater's improvised diet sustained it for 6 months. On January 31, 1777, however, Martínez López wrote to the king's minister the Marqués of Grimaldi to inform him that the animal had been "found dead" in its enclosure. On learning of the anteater's death, Grimaldi arranged for its body to be sent to the recently established cabinet of natural history, or Real Gabinete de Historia Natural, in Madrid's Calle de Alcalá, where it was stuffed by the dissector Juan Bautista Bru and put on display in the Hall of Mammals. A series of entries in an account book for the Real Gabinete document the various stages in the anteater's metamorphosis from corpse to natural history specimen: on January 31, "an expenditure of [several] reales" was made "to bring an anteater [oso hormiguero] that died in the Retiro [to the museum]"; on February 13, "a porter was paid 2 reales for taking the flesh of the anteater to the countryside [after it had been removed by Bru]"; on June 25, there was a payment "of [several] reales for some hangers needed to mount the [stuffed] anteater on its plinth." In the space of half a year, therefore, the anteater went from royal pet to exotic museum exhibit.

A closer look at where and how the anteater was exhibited can tell us something about its perception in contemporary society. Who was able to see it? How did they respond to it? How did they represent it?

The anteater's first home, the Parque del Buen Retiro, was one of several royal menageries in 18th-century Spain.11 Located on the outskirts of Madrid, the menagerie served chiefly as a site for entertainment and imperial ostentation, showcasing the various rare beasts presented to the Spanish monarch. In conjunction with other Reales Sitios at San Ildefonso, Aranjuez, and the Casa de Campo, it housed a diverse assortment of species, including a pair of Brazilian tapirs donated by the king of Portugal, a "very rare" African buffalo, and a seal caught by fishermen off the coast of Alicante and exhibited in "a box filled with water." 12 It also accommodated an Indonesian elephant gifted to Charles III by the governor of the Philippines, Don Simón de Anda y Salazar, in 1773.13 Though created principally for the king's pleasure, archival records suggest that the Buen Retiro menagerie was accessible to the citizens of Madrid, who were permitted to see, and even interact with, its inmates. The buffalo, for instance, was kept in a special enclosure with an iron grating "so that the curious people of Madrid and other towns can see [it]," while the seal entertained madrileños by emerging from its tank to receive offerings of fish.14 The elephant reportedly promenaded "freely through the streets of Madrid," drinking daily from

⁹ Mazo Pérez (2006, p. 293).

^{10 &}quot;Libro de cuentas de los gastos del Real Gabinete de Historia Natural desde el 14 de marzo 1776 hasta el mes de enero de 1809" (1776–1809), legajo 280, Sección A—Real Gabinete, Fondo Museo, MNCN.

¹¹ Gómez-Centurión Jiménez (2011).

¹² Bru (1786, Vol. 2, p. 4); Clavijo to Duque de la Alcudia [Letter] (1795), legajo 259, Sección A—Real Gabinete, Fondo Museo, MNCN; "Noticia de la Loba Marina que hay en el Buen Retiro" (1805).

¹³ Descripción del Elefante (1773, p. 31).

¹⁴ Clavijo to Duque de la Alcudia [Letter] (1795), legajo 259, Sección A—Real Gabinete, Fondo Museo, MNCN; "Noticia de la Loba Marina que hay en el Buen Retiro" (1805).

"the Cibeles fountain in the Prado" and scoffing treats at a nearby sweetshop. 15 The anteater may, therefore, have reached an audience beyond the monarch and his court.

The anteater's posthumous residence, the Real Gabinete, offered a different environment for viewing the now-deceased South American mammal. Founded in 1771 by Pedro Franco Dávila and opened to the public in 1776, the Real Gabinete was accessible to visitors every Monday and could be seen free of charge.¹⁶ The German traveller Christian Fischer, who toured Spain in the years 1797-1798, stated that the Real Gabinete was "open two times every week, including for the common people dressed in ordinary clothes."17 The British traveller Joseph Townsend corroborated this claim, remarking that "any person who is decent in appearance is admitted to walk round the rooms." ¹⁸ Conceived as part of a wider programme of support for the natural sciences, the Real Gabinete operated simultaneously as a site for research and a microcosm of Spain's imperial prowess, gathering natural and man-made treasures from across the globe. 19 A network of colonial bureaucrats, soldiers, and parish priests dispatched natural history specimens to the museum from their respective territories in response to a set of instructions circulated by Dávila, while animal cadavers also arrived from the Buen Retiro and other royal menageries.20 The anteater, one of the first creatures to be immortalised in this way, was among the most prized objects in the fledgling museum and elicited comment from several visitors, among them the Briton John Talbot Dillon, who admired its 16-inch-long tongue.²¹ It was subsequently joined in the cabinet by a second (briefly living) anteater presented to Charles III by the governor of the Council of the Indies in 1788, by the skeletons of a male and female anteater in 1789, and by "a recently born anteater" sent to the museum by the bishop of Trujillo, Jaime Baltasar Martínez Compañón. Trujillo also sent the stuffed torso of an adult anteater, its tongue carefully "wrapped in paper" to prevent damage during transit.22

In addition to appearing in a royal menagerie and a royal natural history cabinet, the Madrid anteater inspired two important visual representations that outlived its physical body. The first of these, a portrait of the living animal, was commissioned by the King in September 1776 and painted in the studio of court painter Rafael Mengs (Figure 1). It now hangs in the Museo Nacional de Ciencias Naturales in Madrid, the successor to the Real Gabinete. Measuring 1.05 m high by 2.09 m wide, Meng's portrait situates the anteater within a hilly, pastoral landscape and accurately captures the beast's billowing black tail, long tongue, and impressive claws. A second,

¹⁵ Mieg (1818, p. 477).

^{16 &}quot;Real Gabinete de Historia Natural" (1784, p. 20).

¹⁷ Fischer (1801, p. 41).

¹⁸ Townsend (1792, p. 285).

¹⁹ Aragón Albillos (2014, pp. 43-79).

²⁰ Figueroa (2013); Constantino (2015); Podgorny (2018).

²¹ Dillon (1780, pp. 76-77).

²² Gómez-Centurión Jiménez (2011, p. 94); El Conde de Florida Blanca to José Clavijo [Letter] (1789), legajo 96, Sección A—Real Gabinete, Fondo Museo, MNCN; Clavijo (1788), "Razón de los Animales del Obispado de Trujillo del Perú que su actual Obispo dirige a Su Magestad," legajo 73, Sección A—Real Gabinete, Fondo Museo, MNCN. For a detailed appraisal of the bishop's work, see Berquist Soule (2014).



Figure 1: "Oso hormiguero" (1776), by Studio of Rafael Mengs, Museo Nacional de Ciencias Naturales.

smaller anteater appears curled into a ball on the right-hand side of the painting, its long snout buried beneath its shaggy tail. According to an inscription above the latter animal, the portrait was "taken from life in the Casa de Fieras in 1776" when the anteater was 30 months old and still not fully grown. We do not know which of Meng's apprentices sketched the edentate, though recent research suggests it may have been a young Francisco de Goya.²³

The second illustration (Figure 2) of the Madrid anteater was made by the Real Gabinete's painter and dissector, Juan Bautista Bru and published in the second volume of his book, Colección de Láminas, que Representan los Animales y Monstruos del Real Gabinete de Historia Natural (1786). Painted from the mounted rather than the living specimen, this plate depicts the beast standing rigidly on a nondescript piece of grass, with one foreleg raised to highlight its powerful digging claws. A scale at the top of the page indicates the animal's true size, while a brief paragraph on the adjacent page furnishes a textual account of the "Osa Palmera," describing its "very long snout," toothless mouth, "small eyes," "long cylindrical tongue," and "curved claws." The text also references the anteater's behaviour and cultural significance, stating (incorrectly) that "it climbs with great nimbleness in the trees" (probably a confusion with its arboreal cousin the tamandua) and that its flesh, though foul-smelling, is eaten "with relish" by the "savages" of Brazil.24 Taken from an inanimate model, Bru's anteater has a rather stiff and contrived posture, highlighting the difficulties of painting zoological illustrations from stuffed specimens—and the limitations of Bru as an artist and taxidermist.25 Often poorly assembled, improperly posed, or missing vital body parts damaged during capture or in transportation, museum mounts were

²³ Mazo Pérez (2006, pp. 286-288); Urríes de la Colina (2011, pp. 242-253).

²⁴ Bru (1786, pp. 35-36).

²⁵ Aragón Albillos (2014, pp. 52–63).

imperfect models for artists, and could inspire flawed and unnatural representations; the skin of a manatee in the Real Gabinete, for instance, arrived "quite badly maltreated and lacking the head of the amphibian," while several ostriches from the Real Sitio del Buen Retiro were reportedly "missing their principal plumes" (likely pocketed by the keepers for financial gain). ²⁶ Bru's anteater thus illustrates the unreliability of taxidermy as a source of accurate zoological information, and the challenges of preserving specimens post-mortem.

This brings us neatly onto the wider debates surrounding the anteater, and its significance within contemporary science. For as well as functioning as an exotic novelty, the anteater became an unwitting participant in two related debates concerning the nature of American fauna and the value of observations made in the museum and in the field. The first of these debates, characterised by Antonello Gerbi as "The Dispute of the New World," centred on the relative merits of New and Old World plants, animals, and people.²⁷ Inaugurated by the French naturalist Buffon, who claimed that the New World was colder and more humid than the Old World, and its fauna correspondingly smaller and weaker, the debate really gained traction in the 1770s, when Prussian philosopher Cornelius de Pauw wrote a polemical book depicting America as a degenerate continent filled with noxious insects and "pusillanimous" lions (pumas).²⁸ This aroused the indignation of colonial subjects across the Americas, who questioned the legitimacy of such claims and challenged the assumptions that lay behind them.

The anteater enjoyed a prominent role in this transatlantic quarrel, appearing in the writings of both America's detractors and its defenders. De Pauw, for instance, enumerating the shortcomings of New World mammals, singled out the species as deformed on account of its strange physique—specifically the fact that it had different numbers of toes on its fore and hind feet (in fact, anteaters have five toes on each foot, but two of the toes on the front feet are smaller than the others).²⁹ On the other side of the debate, the Chilean Jesuit Juan Ignacio Molina rallied to the anteater's defence, contending that its negative reputation was a consequence of erroneous and misleading naming conventions. As he explained:

A very respectable modern author [De Pauw] who believes the degeneration of the animals of America to be evident, cites as proof of his opinion the American *myrmecophaga*, vulgarly called *ant-bear*, denigrating it as a degenerate branch of the bear species. But since all naturalists agree that this small quadruped differs from the bear not only in genus, but also in order, there is no reason to regard it as a bastard variety of a species with which it has never had the slightest affinity.³⁰

²⁶ Dávila, P. F. (1779), "Piel de Mantatí," Indiferente 1549, Archivo General de Indias, Seville, Spain; Clavijo to Duque de la Alcudia [Letter] (1795), legajo 259, Sección A—Real Gabinete, Fondo Museo, MNCN.

²⁷ Gerbi (1973).

²⁸ De Pauw (1770, Vol. 1, pp. 7-13).

²⁹ De Pauw (1770, Vol. 1, p. 12).

³⁰ Molina (1788, p. 304).

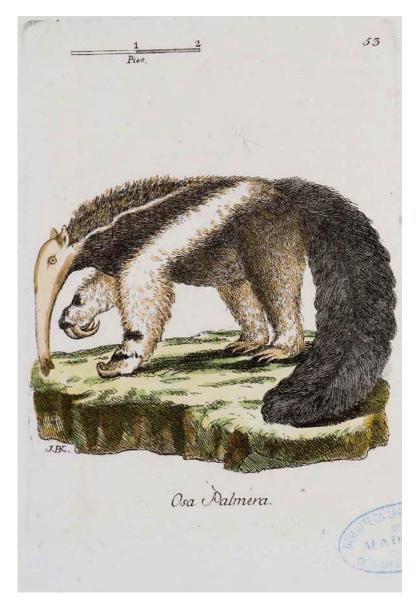


Figure 2: "Oso Palmera." From Colección de Láminas que Representan los Animales y Monstruos del Real Gabinete de Historia Natural (Vol. 2, Plate 53), by J. B. Bru, 1786, Madrid, Spain: Andrés de Sotos.

The anteater thus arrived in Spain at a moment when its species was under close academic scrutiny and became the focus of both critics and champions of American fauna.

The "Dispute of the New World" segued into a more profound discussion of the credibility of different naturalists and the epistemological value of evidence collected in different places. Should one place more faith in the museum-based scholar, who could examine dead animals at close range, or the travelling naturalist who could observe his subjects in their natural environment, but might only do so fleetingly and



Figure 3: "Le Tamanoir." From *L'Histoire Naturelle* (Vol. 11, Plate XXIX), by G. L. L. de Buffon, 1764, Paris, France: Imprimerie Royale.

at a distance?³¹ Again the anteater presented a powerful example of these contrasting approaches, earning different appraisals from sedentary and field-based scholars. The Frenchman Buffon, who had only studied stuffed anteaters in museums, claimed that their hind legs were thicker than their forelegs, that they used their long claws to climb trees, and that they "look at a distance like a great fox."³² The soldier and amateur naturalist Azara, however, who observed living anteaters during a 20-year stay in Paraguay, protested that all of these claims were wrong.³³ Drawing on personal experience and local knowledge, Azara described how anteaters "walk very deliberately, almost kissing the ground," how they gave birth to a single pup each year, which "rides on the back of the mother," and how their fat was used "to good effect" in Paraguay to "cure sores on 'horses' [backs]." He criticised Buffon's illustration of an anteater in his *Histoire Naturelle* (Figure 3), which "narrows, stretches and disfigures the head so much that it no longer resembles that of the beast," and he dismissed the widespread popular belief that anteaters were all female and mated with their long snouts—a mistake stemming from the fact that the males lacked a scrotum.³⁴

³¹ Outram (1995).

³² Buffon (1791, pp. 194–195).

³³ On Azara, see Beddall (1983); Figueroa (2011); Cowie (2011).

³⁴ Azara (1802, Vol. 1, pp. 61, 62, 67, 73, and 65). This belief still persists in parts of Brazil. See Bertassoni (2012).

Azara's comments reflected the conflicting perspectives of metropolitan and colonial scholars, who had different resources at their disposal. A long-term resident of Paraguay, the Spaniard knew how anteaters moved and foraged in the forest or *Cerrado* and how local people exploited them, but he did not know how to classify them in accordance with the latest European systems (he in fact listed the giant anteater under its Guaraní name—"yurumí," or "small mouth"—which he considered an apt description of the beast).³⁵ Buffon, conversely, working in Paris, had all the latest scholarship at his fingertips, but based his illustration on an imperfect museum specimen and his description on travellers' reports. These differing approaches underscored a deeper tension between European and American naturalists, who prioritised different forms of knowledge and brandished different types of authority.³⁶

From Brazil to Bloomsbury

While the first living anteater came to Europe as a coveted royal gift, the first to reach Britain arrived in more humble conditions, at least initially. Originating this time from Brazil rather than Argentina, the anteater was acquired around 400 miles from Rio de Janeiro by an unnamed German couple and was the only survivor of the three infant anteaters they transported back to Europe. The young animal began its life in London in a dilapidated shopfront in Bloomsbury, but was purchased by London Zoo in autumn 1853.³⁷ It died almost a year later, on July 6, 1854.³⁸ Parachuted into a society that viewed exotic animals both as scientific specimens for study and commodities for exhibition and profit, the anteater piqued the curiosity of comparative anatomists, aroused the curiosity of amateur naturalists, and stimulated the imagination of satirists. A closer look at its treatment in the British capital reveals the multiple audiences for nature in 19th-century Britain and the differing roles of keepers, naturalists, artists, and journalists in creating knowledge about zoological novelties.

Anteater number two's first exhibition site was "a poor house at number seventeen, Broad Street, Bloomsbury." According to the novelist and animal-lover Charles Dickens, who visited the creature in its Bloomsbury residence, the anteater was housed in a "small space" on the ground floor of the property.³⁹ A large advertising bill on the window announced the presence inside of an "Antita." On entering, visitors passed through a curtain into a small viewing area, separated from the animal by a wooden barrier, and could observe the beast in "a deal box" filled with straw bedding. Dickens stated that the anteater was "very thin" when he saw it, and reportedly around 5 months old. While he was present, the slumbering animal rose from its bed and emerged from the box to consume "an egg, which it had heard cracked against the

³⁵ Azara (1802, Vol. 1, p. 66).

³⁶ Lafuente (2000); Cowie (2011).

³⁷ Dickens (1853).

³⁸ Owen (1854, p. 154).

³⁹ On Dickens's interest in and representation of animals, see McDonell (2018).

wall," "licking the yolk" out of the shell "with its long tongue." Despite the wooden barrier, Dickens also touched the anteater to "feel his [sic] long nose and his [sic] shaggy coat" and recalled how the animal returned the favour, making an "inspection of [his] trousers" with its snout.⁴⁰

Dickens's experience of visiting the anteater was typical of a visit to a travelling menagerie, where spectators frequently enjoyed intimate encounters with exotic beasts in cramped cages. Comparatively cheap to access (the fee for seeing the anteater was 6 pence; 3 pence for children), menageries were places where Victorians of all ages and social classes could see beasts from distant lands.⁴¹ While the most famous menageries were large, containing up to 500 different animals, many smaller shows existed with only one or a handful of creatures, exhibited in hired shopfronts like the anteater. In 1836, for instance, the proprietors of the Surrey Zoological Gardens exhibited several giraffes in "a warm and spacious apartment" at 560 Regent Street in order "to give the many thousands who are engaged during the day ... an opportunity of inspecting these surprising animals, one of them, La Belle Giraffe, standing 15 feet high."42 In 1859, showmen exhibited an 800-pound seal from West Africa in a "room" at "191 Piccadilly," where it performed for visitors in "a tub half full of water."43 Dickens's visit to the anteater thus closely resembled other public interactions with exotic species and emphasised the close, multisensory nature of such encounters. It also resembled Victorian encounters with exotic people, who, like animals, were often exhibited in Victorian Britain as freaks or curiosities. Reminiscing over his visit, indeed, Dickens remarked that he had touched the anteater with "the same hand that had been called upon to feel the small heads of the Aztecs"—a reference to two microcephalic Mexican children, Máximo and Bártola, who were brought to Britain in 1853 and exhibited around the country as descendants of the Aztecs.⁴⁴ The anteater was therefore following in the footsteps of two human inhabitants of the Americas and fulfilled the same function as an exotic curiosity.

If the anteater began life in London as the subject of an obscure show, its subsequent removal to London Zoo elevated it to a new level of fame and scientific importance. Purchased by the Zoological Society of London (ZSL) for a reported sum of £200, the anteater was transferred to the Society's Gardens in the summer of 1853 and made its debut to the public on September 1.45 According to contemporary reports, the animal was housed in a "room" between some pythons and a chimpanzee.46 It was highly prized by the ZSL as a scientific specimen and also acted as a major draw to the visiting public, succeeding the famous hippopotamus Obaysch as the Zoo's latest zoological star. Dickens, already a fan, predicted that "should it live and get

⁴⁰ Dickens (1853). The anteater was, in fact, a female; Dickens misgendered her as male.

⁴¹ Cowie (2014, pp. 52-76).

^{42 &}quot;Evening Exhibition of the Giraffes" (1836).

^{43 &}quot;The Talking Fish" (1859).

⁴⁴ See Aguirre (2005, pp. 103-134); Durbach (2010, pp. 115-146); Qureshi (2011, pp. 190-193); Podgorny (2013).

^{45 &}quot;The Week at the Zoo: Great Anteater Dead" (1935); "A New Animal at the Zoological Gardens" (1853).

⁴⁶ Report of the Council of the Zoological Society of London (1854, p. 6); "The Fashionable Zoological Star" (1853).

its rights, we shall have ant-bear quadrilles, ant-bear butter dishes, ant-bear paper weights, ant-bear pictures of all sorts, and perhaps a dash of ant-bear in the Christmas pantomime."⁴⁷

As the newest resident of London Zoo, the anteater was, of course, entering one of the world's oldest and most esteemed zoological institutions. Founded in 1828 and opened to the public the following year, the Gardens of the Zoological Society offered a much more genteel setting for viewing exotic beasts than the commercial menagerie, and expressly styled themselves as a centre for rational recreation. Unlike the Buen Retiro menagerie, which was the preserve of the Spanish king, London Zoo was an explicitly national institution, funded by the subscriptions of fellows and the fees charged to visitors. Until 1847 it had been somewhat exclusive, opening its doors only to fellows and their acquaintances, but new management and financial difficulties led to a relaxation in admissions policies, converting the Zoo into a popular leisure venue for a broader range of classes.⁴⁸ As a serious scientific institution, London Zoo prided itself on its contribution to knowledge and was quick to cast an analytical eye over the anteater, securing "accurate drawings of its various peculiar attitudes and actions ... for the society's portfolio."49 As the hub of a global network of exotic animal trading, it was also keen to flaunt its latest acquisition as a symbol of imperial strength, the product of distant connections, and—critical in this case—new technology in the form of the steamship. The anteater thus embodied the Zoo's scientific mission to collect and classify animals from across the globe and was proudly marketed as "the GREAT SOUTH AMERICAN ANTEATER, the most remarkable edentate animal existing in that hemisphere."50

The menagerie and the zoo provided venues for direct encounters with the anteater. They also acted as sites for the production of different forms of knowledge about the species—some practical, some more theoretical—contributing to the (relatively sparse) information available about South American edentates. This knowledge was disseminated via a range of scholarly and more popular publications, and fed into broader understandings of American mammals.

First, on a practical level, the arrival of the anteater posed a challenge from an animal husbandry perspective. How should the unfamiliar beast be cared for? What protection would it require from the elements? What should it be fed? The last of these problems—the anteater's diet—presented the most immediate problem to keepers and elicited a number of solutions from its carers. The German showmen, as reported by Dickens, fed the young anteater with raw eggs, which it licked from the shell with its long tongue. Keepers at London Zoo, meanwhile, attempted to find "artificial substitutes for the termite," but, such experiments having failed, resorted to "The [dietary] treatment which Azara mentions as having been practiced with the animals formerly sent to Madrid"—namely "boiled eggs mashed up in milk"

⁴⁷ Dickens (1853).

⁴⁸ Ritvo (1987, pp. 205-242); Ito (2014, pp. 81-106).

^{49 &}quot;Zoological Society of London" (1853).

^{50 &}quot;Zoological Gardens, Regent's Park" (1853).



Figure 4: Anteater, London Zoo, Magic Lantern Slide, ca. 1900. Author's collection.

and chopped meat.⁵¹ Though by no means natural, this diet sustained the anteater for several months and would become standard fare for zoo anteaters for the next century (Figure 4); in 1871, the first tamandua at London Zoo subsisted on "milk, in which sweet biscuits ha[d] been pulped down, and a portion of meat minced in a sausage-machine."⁵² The zoo was therefore a place where keepers experimented with nutrition and tried to find ways to approximate the natural diets of their inmates—a process that was largely accomplished through trial and error in the 19th century, but that would become a distinct area of research in the late 20th, when zoo-bred anteaters began to be fed on a blend of "ground up cat and primate kibble."⁵³ Also significant in the case of the anteater—and again common practice today—is the importance of knowledge transmission between zoological institutions about the best practice in animal care, achieved indirectly in this case via the English translation of Azara's text.⁵⁴

While keepers worried about keeping the anteater alive, naturalists seized the opportunity to learn more about its anatomy. The anatomist George Gulliver undertook a study of the anteater's red blood cells and determined that it "had larger blood corpuscles than any yet examined in the other and smaller Edentata," which were, indeed, "about the same size as in the Elephant." The ZSL's chief illustrator Joseph Wolf, meanwhile, painted the insectivorous mammal from life, capturing the beast in

^{51 &}quot;Zoological Society of London" (1854); A.B.R. (1854).

^{52 &}quot;The Tamandua Ant-Eater" (1871).

⁵³ Brody (2002). On changing animal husbandry within the context of the zoo, see Pouillard (2019, pp. 74-133).

⁵⁴ Azara (1838).

⁵⁵ Gulliver (1854).



Figure 5: "The Great Anteater" (1853), by Joseph Wolf. From "Original Water-Colour Drawings by Joseph Wolf," Vol. 4, Plate 67 (82), Zoological Society of London.

two characteristic postures: one walking majestically on its knuckles, its long tongue protruding from its mouth; the other curled up into a ball, one foreleg cupping its snout and its bushy tail cloaking its body (Figure 5). Following the anteater's death, its body was subjected to a more intensive internal examination at the hands of the famous comparative anatomist Richard Owen, who dissected the edentate shortly after its demise and measured, weighed, and sketched the animal's organs. Owen recorded that the anteater, a "full-grown female," "weighed 62 lbs," that its "vulva and vent opened by a common cloacal aperture," and that "the intestinal canal is supported by one broad fold of peritoneum, as in reptiles." He devoted particular attention to the anteater's mouth and digestive system, inspecting the "adhesive saliva with which the long, slender and moveable tongue is bedewed," describing the muscles within the beast's jaw, and speculating that "termites may be crushed by the action or pressure of the tongue against the callous ridges [in the mouth] which seem to occupy the place of teeth."56 These more detailed observations, of course, could only be carried out post-mortem, underlining the secondary role of the zoo as a source of freshly dead specimens for dissection and a place for studying animal pathology.57

⁵⁶ Owen (1854).

⁵⁷ Cassidy, Mason Dentinger, Schoefert, & Woods (2017, pp. 15–19).

Third, though Gulliver, Wolf, and Owen focused primarily on anteater anatomy, the arrival of the unusual mammal in London also offered opportunities for observations on the animal's behaviour as it scoffed its food and roamed about within its small den. One contemporary commentator, a journalist for the satirical magazine *Punch*, stated that the anteater

leads a very fashionable life, being up generally all night and sleeping all day. There his accomplishments seem to begin and end; for he does not sing, nor bray, nor bark, nor low, nor whistle, nor make any noise whatever, except the one with his toenails, which must be particularly disagreeable during the night to the poor Chimpanzee who lives in the cage next to him.⁵⁸

A second journalist, in this case for the *North Wales Chronicle*, remarked that "All who have seen it in its native haunts speak of its slow movements and its stupidity of character; and this report the appearance of this specimen in the gardens would confirm." He claimed that the anteater in the Zoo "seems on the whole an inactive creature," that its gait was "a kind of shuffle," and that "it has displayed in England no taste for insects." Such descriptions, of course, painted a negative picture of the anteater's character, and read like a reprise of the 18th-century "Dispute of the New World." They were, however, strongly rebutted by the anteater's defenders, who insisted that it was impossible to judge the true character of an animal from its behaviour in captivity. The German explorer Richard Schomburgk, who travelled extensively in British Guiana, asserted that "the anteater runs with a peculiar trot, and, when chased, will keep a horse at a canter, while it does not tire readily." Dickens, meanwhile—the creature's most ardent champion—claimed that

The Ant-bear that crawled lazily out of its box under the shadow of St Giles' steeple would at this time have been fishing and leaping with fierce vigour if left to the shelter of the forests of Brazil. At home, when rendered fierce by hunger, it will make a bound of ten feet to spring on the back of a horse, tear open the horse's shoulders with its huge claws, and then suck the blood out of the wound.⁶¹

While Dickens's horse-felling anteater was clearly the product of an overactive imagination, the underlying assumption was important—how far could zoo animals truly represent their wild counterparts, and what errors might flow from observing a wild beast within the confines of a cage?

This brings us once again to the wider issues at stake in the appraisal of a living (or recently dead) anteater, and the larger question of scientific credibility. What could, and could not, be learned about the anteater (or any other species) in the zoological gardens or in the museum? How accurate were texts or images based on

^{58 &}quot;The Fashionable Zoological Star" (1853).

^{59 &}quot;Zoological Gardens, Regent's Park: The Great American Ant-Eater" (1853).

⁶⁰ Cassell's Popular Natural History (1860, Vol. 1, p. 345).

⁶¹ Dickens (1853).

zoo or museum specimens? What prejudices, preconceptions, and prior knowledge may have shaped responses to Europe's second living anteater?

If we turn first to the question of the zoo as a site for scientific research, the case of the anteater provides a good illustration of its benefits and limitations. On the positive side, the zoological gardens offered a useful space for observing exotic beasts up close and studying their anatomy, means of locomotion, and, in some cases, their level of cognition and emotional repertoire. Naturalist Frank Buckland, for instance, observed a young male walrus named Jemmy at London Zoo in 1867 and surmised, from seeing the animal "snuffing the grass," that the "walrus uses his whiskers like brushes, to draw to his mouth what he likes and to push away what he dislikes, and probably when at home he searches with them for mollusks [sic] in the sand." Keepers at Central Park Zoo in New York, meanwhile, discovered—presumably through trial and error—that the tapir

dislikes to be stroked on the back, and will immediately run away when this is attempted; but begin to stroke it under the throat and it will immediately stretch its neck out to its furthest limits and will then roll over on its back and whistle with joy.⁶⁴

On the negative side, of course, the zoo environment was less than ideal for evaluating more complex aspects of animal behaviour, and things such as interspecies interactions, natural foraging behaviours, or hunting techniques went largely unobserved—or were distorted by unnatural surroundings, atypical social groupings, and abnormal diets (which, in the case of the anteater, often produced lethargy and diarrhoea).65 Zoo-goers could see the anteater's long tongue, powerful forelegs, and hairy coat, but could not tell from viewing the captive specimen that anteaters forage over a large area, that they have a strong sense of smell, or that they are excellent swimmers.66 The fact that anteaters are nocturnal, moreover, exacerbated the problem, for their more complex behaviours could only be seen after dark; an article in the Morning Post warned prospective visitors that the two anteaters on view in London Zoo "retain much of the nocturnal habit of the species, and are consequently more often seen to advantage towards the close of the afternoon than at any other period of the day."⁶⁷ Observing species within the confines of the zoo thus gave only a partial and sometimes distorted—picture of their true nature and capacities, and could lead to inaccurate conclusions, in this instance about the anteater's "slow movements" and "stupidity of character."68

If the menagerie had limitations as a place for zoological research, then so, too, did the natural history museum. True, the standard of taxidermy had improved somewhat

⁶² Hochadel (2011).

^{63 &}quot;Food of the Walrus at the Zoological" (1867).

^{64 &}quot;The Tapir of Central Park" (1893).

⁶⁵ Hosey, Melfi, & Pankhurst (2013, pp. 90-122); Brody (2002).

⁶⁶ Shaw, Machado Neto, & Carter (1987, pp. 255–259); Radford (1994, p. 4).

^{67 &}quot;Zoological Society of London" (1854).

^{68 &}quot;Zoological Gardens, Regent's Park: The Great American Ant-Eater" (1853).

since the 18th century, and the use of arsenical soap as a preservative had significantly increased the longevity of stuffed specimens.⁶⁹ Many stuffed creatures, however, left much to be desired from an anatomical perspective, giving a misleading picture of how a beast might have looked in real life. Writing of recent attempts to preserve the hippopotamus after death, the naturalist J. G. Wood complained that "Stuffed figures give a very poor and insignificant idea of the appearance of the living hippopotamus, and especially do they fail in two very important points—the contour of the body and the colour of the skin."70 Another naturalist, Frederick Aflalo, criticised stuffed representations of the platypus, remarking that "little of the true character of this beautiful, glossy creature is to be learned from the miserable effigies, rigid as mummies, with the shrunken feet and brittle bill, presented for instruction in museums."71 While we do not know exactly how the London anteater was presented post-mortem, several surviving 19th-century anteater specimens exhibit physical defects, from strangely curved snouts to incorrectly positioned claws (some are shown walking on the soles of their feet rather than their knuckles). One of the dead anteaters brought to Britain by the German showmen along with the living one was, according to Dickens, badly disfigured, misrepresenting the animal's true form.

[T]hat wonderful long head which we call nose, which is made to dive into the innermost recesses of the ant's nest ... shrivels and wrinkles and grows limp under the stuffer's hand, conveys no notion of the original clear and even elegant outline of the Ant-bear's head, and of the firmness of its bone and bristle In the stuffed specimen the claws are spread out carefully as they are never to been seen in nature ... [and] the marvellous tail is turned in the wrong direction.⁷²

Questionable museum specimens could thus misrepresent the anteater to viewers and give a false impression of its size and anatomy.

Finally, as in the 18th century, responses to the London anteater did not emerge in a vacuum, but were shaped by pre-existing perceptions of South American mammals. Often little understood, the latter were widely viewed as primitive and atavistic, their habits strange and their forms remnants from an earlier zoological epoch. Writing in 1901, for instance, a journalist in *The Times* characterised the tapir, the largest South American herbivore, as "a singular and bizarre instance of arrested development." Eight years earlier, the author of *Cassell's Natural History* was similarly critical of the sloth, a close relative of the anteater, which he classed as "an instance of retrograde development ... the peculiar formation of the skull, neck, wrists and ankles [being] the result of the laws of disuse and adaptation operating on ancestral animals, which once had their anatomy more consistent with a perfect mammalian type." Press coverage of the London anteater reinforced many of these stereotypes, connecting

⁶⁹ Poliquin (2012, pp. 59–66).

⁷⁰ Wood (1855, p. 153).

^{71 &}quot;Australian Fauna" (1897).

⁷² Dickens (1853).

^{73 &}quot;The Okapi" (1901).

⁷⁴ Martin Duncan (1893, Vol. 2, p. 161).

the newly arrived creature to various extinct mammals from the Pleistocene era and presenting it as a strange, ungainly, and in some way defective zoological relic. The Morning Post, for example, dwelt upon the anteater's ancestry, classifying it among "the almost extinct order of Edentata, or toothless animals, which in Paleozoic times were the dominant and characteristic feature in the zoology of the tropical American forests."75 An article in the North Wales Chronicle, meanwhile, remarked that the anteater was a descendant of a family of animals "peculiar to South America," which "numbered amongst them" some of "the largest and most powerful animals on the face of the earth"—"the Megatherium, the Megalonyx, the Mylodon and the Glyptodon."⁷⁶ While there was no explicit reprisal of "The Dispute of the New World" in the 19th century, the longstanding prejudices expressed in the 18th century were superseded by a newer, more subtle, and more sophisticated scientific discourse that continued to present South American fauna—and particularly the Xenarthra—as peculiar, backward creatures, notable for their slowness, extraordinary anatomies, or eccentric habits. Inherent in the comments of several 19th-century writers, moreover, was an implication that the days of these species were numbered; their isolation in remote wildernesses was the only thing that had kept them in existence, but the opening-up of unexplored regions would soon bring about their extinction—an outcome that could be blamed on their own inability to adapt to the demands of "modern" life, rather than on human agency. There were, of course, parallels here with perceptions of indigenous peoples—like the "Aztecs" Máximo and Bártola who were viewed, likewise, as relics of an earlier age, doomed to decline and disappear when they came into contact with "civilised" man. 77

Conclusion

The reception of two different anteaters nearly a century apart illuminates both continuity and change in the exhibition and appraisal of exotic animals. The Madrid anteater was a royal gift, supplied to animal-lover Charles III through an extensive colonial bureaucracy, and displayed in a royal park and, posthumously, in a royal museum. The London anteater was, initially, a commercial speculation, but became a scientific specimen and a celebrity at London Zoo. Both animals functioned in different ways as symbols of South America, the exotic and imperial power, attracting attention on account of their novelty and rarity.

The tale of the two anteaters illuminates the complex networks of exchange that connected Europe with South America in the 18th and 19th centuries. Colonial governors, travelling naturalists, and German showmen all played a part in conveying anteaters across the Atlantic. Artists, taxidermists, comparative anatomists, and novelists helped to capture their image, publicise their arrival, and stuff their lifeless

^{75 &}quot;A New Animal at the Zoological Gardens" (1853).

^{76 &}quot;Zoological Gardens, Regent's Park: The Great American Ant-Eater" (1853).

⁷⁷ Bethencourt (2013, pp. 300-306).

corpses, while keepers, sailors, and porters—usually unnamed—also tended the animals in life and death. All formulated different forms of knowledge about anteaters, acquired through watching the beasts in the wild, caring for them in the menagerie, or dissecting them after they died.

As we have seen, the fate of the anteaters also shows how practical and scientific information passed (or did not pass) between societies distant in place and time, and thereby illustrates the complex process of knowledge transmission. Azara's secondhand reporting of the Madrid anteater's diet had the most influence upon later edentate carers, because it was published, translated, and read. Bru's description, available only in Spanish, appears to have had little impact in Victorian Britain, while the letters written by Iriarte remained in the private domain. A version of Mengs's/Goya's portrait of the anteater did appear in an English text—John Talbot Dillon's Travels Through Spain (a mirror image of the original)—suggesting, perhaps, that images travelled better than words.⁷⁸ Power dynamics, of course, shaped the dissemination and perceived credibility of zoological knowledge, with metropolitan naturalists and comparative anatomists (like Buffon and Owen) exerting greater sway within the scientific community than indigenous people, colonial subjects, or anonymous keepers, whose expertise, even when drawn upon, was not always acknowledged.⁷⁹ Thanks, in part, to better communications and, in part, to the higher prestige of British science, the London anteater also left a deeper and more global legacy on zoological science than its Spanish counterpart, influencing the treatment of captive anteaters (and other insectivorous mammals, such as pangolins and aardvarks) for decades to come. In 1892, the giant anteater in the Calcutta Zoological gardens was fed, like its London predecessor, on "Finely minced raw meat and egg with milk"; in 1869, a "Cape Ant-Bear ... purchased at Port Elizabeth, Algoa Bay," subsisted on "raw meat pounded small, in the same manner as the American Ant-eaters."80

In considering the two anteaters as celebrity animals, it should be noted that their fame was fleeting and focused largely on their peculiarity. Though much fêted when they first arrived in Europe, both anteaters quickly slipped from the public view following their deaths, and neither, as far as we know, was ever named. This stands in stark contrast to other celebrity animals such as elephants, gorillas, and pandas, which were almost always given names, and which, in some cases, retained their popularity over several years or even decades. In the case of the hippopotamus Obaysch, the naturalist Frank Buckland claimed as late as 1877 that "no animal attracts more visitors at the Gardens than 'Hippo' when he is inclined to be lively," and "We have seen persons fight even for the best places opposite his parade ground and bath." Subsequent anteaters exhibited in European and North American zoos, moreover, received comparatively little interest in the press, or even within the scientific community, attracting attention only if they constituted a zoological first

⁷⁸ Dillon (1780, p. 86).

⁷⁹ On the operation of such power dynamics in the specific context of zoological gardens, see Hochadel (2022).

⁸⁰ Sanyal (1892, p. 167); Report of the Council of the Zoological Society of London (1870, p. 23).

⁸¹ Buckland (1877, p. 69).

or did something exceptional. A female anteater at Stuttgart Zoological Gardens, for instance, made brief headlines after she gave birth to the first anteater in captivity in 1896 (and later to seven more young, only one of which survived into adulthood), while a great anteater in the National Zoo, Washington DC, achieved short-lived fame in 1897 after Head Keeper Manley deployed it to combat an infestation of "hairy yellow caterpillars" on the institution's linden trees.⁸² In general, however, captive anteaters were accorded a relatively low profile within zoos, attracting only cursory glances from the majority of visitors. Writing in 1902, one journalist reported that the great anteater then on display at London Zoo was exhibited away from "the beaten track, which it is the fashion to follow," and consequently largely ignored by most zoo-goers.⁸³

Despite their limited time in the spotlight, however, both the Madrid and London anteaters served an important function because they played a crucial mediating role within broader debates about human understandings of the natural world. In the 18th century, European scholars like Buffon and de Pauw launched a searing critique of New World nature, raising questions about the strength and vivacity of American animals, the anteater included. Though less overtly stated, some of these negative perceptions persisted into the 19th and early 20th centuries, presenting South American fauna as bizarre, pathetic, and most likely doomed to extinction. Theodore Roosevelt, who shot an anteater in the Pantanal in 1914, characterised the species as "strange, out-of-date creatures," unlikely to survive in the modern world. 84 As Robert Paddle has shown in relation to the Tasmanian tiger, such perceptions mattered because they propagated the view that non-European animals—marsupials in Australia, edentates in South America—were behind their Old World counterparts in evolutionary terms, and therefore headed for extinction on account of their own backwardness, a view which neatly absolved humans of blame for their disappearance.⁸⁵ The physical presence of live anteaters in Madrid and London served to focus these debates, though the sickly, short-lived animals exhibited in menageries and zoos did not necessarily present the species in its most dynamic form.

Acknowledgements

I would like to thank the editors Oliver Hochadel and Miquel Carandell-Baruzzi as well as the other contributors to this special issue for their comments and suggestions on the manuscript.

⁸² Scherren (1907); "A Useful Ant-Eater" (1897).

^{83 &}quot;The Great Anteater" (1902).

⁸⁴ Roosevelt (1914, p. 73).

⁸⁵ Paddle (2000, pp. 7–8) refers to this as "placental chauvinism" in the case of the Tasmanian tiger, which, like all marsupials, suckled live young in a special pouch.

References

- A.B.R. (1854, June 10). The Regent's Park Zoological Gardens. *The Illustrated London News*, p. 554.
- Aguirre, R. (2005). *Informal empire: Mexico and Central America in Victorian culture.* Minneapolis, MN: University of Minnesota Press.
- Alberti, S. J. M. (Ed.). (2011). *The afterlives of animals: A museum menagerie*. Charlottesville, VA: University of Virginia Press.
- Aragón Albillos, S. (2014). En la piel de un animal: El Museo National de Ciencias Naturales y sus Colecciones de Taxidermia. Madrid, Spain: Consejo Superior de Investigaciones Científicas.
- Australian fauna. (1897, January 20). Pall Mall Gazette, p. 10.
- Azara, F. (1802). Apuntamientos para la historia natural de los quadrúpedos del Paraguay. Madrid, Spain: Imprenta de la Viuda de Ibarra.
- Azara, F. (1838). The natural history of the quadrupeds of Paraguay and the river La Plata (W. P. Hunter, Trans.). Edinburgh, UK: A. and C. Black.
- Beddall, B. (1983). The isolated Spanish genius: Myth or reality? Félix de Azara and the birds of Paraguay. *Journal of the History of Biology*, 16(2), 225–258.
- Berquist Soule, E. (2014). *The bishop's utopia*. Philadelphia, PA: Penn State University Press.
- Bertassoni, A. (2012). Perception and popular reports about giant anteaters (*Myrmecophaga tridactyla* Linnaeus, 1758) by two Brazilian traditional communities. *Edentata*, 13(1), 10–17. https://doi.org/10.5537/020.013.0113
- Bethencourt, F. (2013). Racisms: From the crusades to the twentieth century. Princeton, NJ: Princeton University Press.
- Brody, J. E. (2002, June 18). Cat food for aardvarks, and other zoo diets. *New York Times*, pp. 1–2.
- Bru, J. B. (1786). Colección de Láminas, que representan los animales y monstruos del Real Gabinete de Historia Natural. Madrid, Spain: Andrés de Sotos.
- Buckland, F. (1877, May). Visits to the Zoological Gardens. The Animal World, p. 69.
- Buffon, G. L. L. de (1791). Buffon's natural history, abridged. London, UK: C. and G. Kearsley.
- Cassell's Popular Natural History. (1860). London, UK: Cassell, Petter and Galpin.
- Cassidy, A., Mason Dentinger, R., Schoefert, K., & Woods, A. (2017). Animal roles and traces in the history of medicine, c. 1880–1980. *BJHS Themes*, 2, 11–33. https://doi.org/10.1017/bjt.2017.3
- Constantino, M. E. (2015). Naturaleza y grafía: Corpus documental de las colecciones animales en el Real Gabinete de Madrid. *Asclepio*, 67, 1–18. https://doi.org/10.3989/asclepio.2015.28
- Cowie, H. (2011). A Creole in Paris and a Spaniard in Paraguay: Geographies of natural history in the Hispanic world (1750–1808). *Journal of Latin American Geography*, 10(1), 175–197. https://doi.org/10.1353/lag.2011.0011
- Cowie, H. (2014). Exhibiting animals in nineteenth-century Britain: Empathy, education, entertainment. Basingstoke, UK: Palgrave Macmillan.
- De Pauw, C. (1770). Récherches philosophiques sur les Américains. Paris, France: A. Berlin.
- Descripción del elefante, de su alimento, costumbres, enemigos e instinto. (1773). Madrid, Spain: Imprenta de Andrés Ramírez.

- Dickens, C. (1853, October 15). A Brazilian in Bloomsbury. *Household Words*, pp. 162–165.
- Dillon, J. T. (1780). Travels through Spain, with a view to illustrate the natural history and physical geography of that kingdom. London, UK: G. Robinson.
- Durbach, N. (2010). *Spectacle of deformity: Freak shows and modern British culture*. Berkeley, CA: University of California Press.
- Evening exhibition of the giraffes. (1836, November 7). The Times, p. 1.
- The fashionable zoological star. (1853, December 24). Punch, p. 257.
- Figueroa, M. (2011). En los márgenes del Imperio Español y de la historia natural: Félix de Azara colector (1787–1789). *Prohistoria*, 15, 1–5.
- Figueroa, M. (2013). Manuel Basavilbaso y el oso hormiguero. Sobre la formación de las colecciones de historia natural. *Revista Electrónica de Fuentes y Archivos*, 4, 47–58.
- Fischer, C. A. (1801). Voyage en Espagne aux années 1797 et 1798. Paris, France: Cramer.
- Food of the walrus at the Zoological. (1867, November 11). The Times, p. 8.
- Gerbi, A. (1973). The dispute of the New World. Pittsburgh, PA: University of Pittsburgh Press.
- Gómez-Centurión Jiménez, C. (2011). Alhajas para soberanos: Los animales reales en el siglo XVIII: De las leoneras a las mascotas de cámara. Madrid, Spain: Junta de Castilla y León.
- Gulliver, G. (1854). On the size of the red corpuscles of the blood of the great anteater (Myrmecophaga jubata). Proceedings of the Zoological Society of London, 22, 24.
- Hochadel, O. (2011). Watching exotic animals next door: "Scientific" observations at the zoo (ca. 1870–1910). Science in Context, 24, 183–214. https://doi.org/10.1017/S0269889711000068
- Hochadel, O. (2022). A global player from the South. The Jardín Zoológico de Buenos Aires and the transnational network of zoos in the early twentieth century. *História, Ciências, Saúde-Manguinhos*, 29.
- Hosey, G., Melfi, V., & Pankhurst, S. (2013). *Zoo animals: Behaviour, management and welfare*. Oxford, UK: Oxford University Press.
- Ito, T. (2014). London Zoo and the Victorians, 1828–1859. London, UK: Boydell and Brewer.
- Lafuente, A. (2000). Enlightenment in an imperial context: Local science in the late-eighteenth-century Hispanic world. *Osiris*, 15, 155–173.
- Krebber, A., & Roscher, M. (Eds.). (2018). *Animal biography: Re-framing animal lives.* London, UK: Palgrave Macmillan.
- Livingstone, D. (2003). *Putting science in its place: Geographies of scientific knowledge*. Chicago, IL: Chicago University Press.
- Martin Duncan, P. (1893). Cassell's natural history. London, UK: Cassell and Company.
- Mazo Pérez, A. (2006). El oso hormiguero de su majestad. Asclepio, 58, 281–294.
- McDonell, J. (2018). Dickens and animal studies. In J. Jordan, R. Patten, & C. Waters (Eds.), *The Oxford handbook of Charles Dickens* (pp. 550–565). Oxford, UK: Oxford University Press.
- Mieg, J. (1818). *Paseo por el Gabinete de Historia Natural de Madrid*. Madrid, Spain: Imprenta de D. M. de Burgos.
- Molina, J. I. (1788). Compendio de la historia geográfica, natural y civil del Reyno de Chile. Madrid, Spain: Sancha.
- Nance, S. (2015). *Animal modernity: Jumbo the elephant and the human dilemma*. New York, NY: Palgrave Macmillan.

- A new animal at the Zoological Gardens. (1853, October 1). The Morning Post, p. 5.
- Noticia de la loba marina que hay en el Buen Retiro. (1805). *Variedades de Ciencias, Literatura y Artes, 12*, pp. 330–335.
- The okapi. (1901, October 19). The Times, p. 12.
- Outram, D. (1995). New spaces in natural history. In N. Jardine, J. Secord, & E. Spary (Eds.), *Cultures of natural history* (pp. 249–265). Cambridge, UK: Cambridge University Press.
- Owen, R. (1854). On the anatomy of the great anteater (*Myrmecophaga jubata*). *Proceedings of the Zoological Society of London*, 22, 154–157.
- Paddle, R. (2000). *The last Tasmanian tiger: The history and extinction of the thylacine*. Cambridge, UK: Cambridge University Press.
- A pangolin from West Africa. (1913, June 23). The Times, p. 3.
- Pimentel, J. (2017). *The rhinoceros and the megatherium: An essay in natural history*. Cambridge, MA: Harvard University Press.
- Podgorny, I. (2013). Falsehood on the move: The Aztec children and science in the second half of the nineteenth century. *Medicina nei Secoli: Arte e Scienza*, 25(1), 223–244.
- Podgorny, I. (2018). Las instrucciones y las cosas. Revista Hispánica Moderna, 71(1), 23-38.
- Poliquin, R. (2012). *The breathless zoo: Taxidermy and the cultures of longing.* University Park, PA: Penn State University Press.
- Pouillard, V. (2019). *Histoire des zoos par les animaux: Imperialisme, contrôle, conservation.* Ceyzérieu, France: Champ Vallon.
- Qureshi, S. (2011). Peoples on parade: Exhibitions, empire, and anthropology in nineteenth-century Britain. Chicago, IL: University of Chicago Press.
- Radford. K. (1994). The edentates of the Cerrado. Edentata, 1, 4–10.
- Raj, K. (2007). Relocating modern science: Circulation and the construction of knowledge in South Asia and Europe, 1650–1900. Basingstoke, UK: Palgrave Macmillan.
- Real Gabinete de Historia Natural. (1784, February). *Memorial Literario, Instructivo y Curioso de la Corte de Madrid*, pp. 19–21.
- Report of the Council of the Zoological Society of London. (1854). London, UK: Taylor and Francis
- Report of the Council of the Zoological Society of London. (1870). London, UK: Taylor and Francis.
- Ringmar, E. (2006). Audience for a giraffe: European expansionism and the quest for the exotic. *Journal of World History*, 17(4), 375–397.
- Ritvo, H. (1987). The animal estate: The English and other creatures in the Victorian age. Cambridge, MA: Harvard University Press.
- Roosevelt, T. (1914). Through the Brazilian wilderness. New York, NY: Charles Scribner's Sons.
- Sanyal, R. B. (1892). A handbook of the management of animals in captivity in Lower Bengal. Calcutta, India: Bengal Secretariat Press.
- Scherren, D. (1907, June 8). Great anteaters bred in Germany. The Field, p. 7.
- Shaw, J., Machado Neto, J., & Carter, T. (1987). Behaviour of free-living giant anteaters (*Myremecophaga tridactyla*). *Biotropica*, 19, 255–259.
- Simon, J. (2019). *Obaysch: A hippopotamus in Victorian London*. Sydney, Australia: Sydney University Press.

Sivasundaram, S. (2005). Trading knowledge: The East India Company's elephants in India and Britain. *The Historical Journal*, 48, 27–63.

The talking fish. (1859, May 8). The Era, p. 11.

The Tamandua ant-eater. (1871, July 8). The Field, p. 34.

The tapir of Central Park. (1893, April 30). New York Tribune, p. 16.

Townsend, J. (1792). A journey through Spain in the years 1786 and 1787. London, UK: C. Dilly.

Urríes de la Colina, J. J. (2011). Un goya exótico, "La osa hormiguera de su majestad." *Goya: Revista de Arte, 336,* 242–253.

A useful ant-eater. (1897, July 11). The Field, p. 8.

The week at the zoo: Great anteater dead. (1935, February 10). The Observer, p. 9.

Wood, J. G. (1855). Sketches and anecdotes of animal life. London, UK: G. Routledge.

Zoological Gardens, Regent's Park. (1853, October 15). The Morning Chronicle, p. 1.

Zoological Gardens, Regent's Park: The great American ant-eater. (1853, October 29). *North Wales Chronicle*, p. 10.

Zoological Society of London. (1853, October 7). The Times, p. 9.

Zoological Society of London. (1854, March 28). The Morning Post, p. 3.