CHAPTER 1

Empires of Nature

MUSEUMS, SCIENCE, AND THE POLITICS OF BEING

> In the dream in which every epoch sees in images the epoch which is to succeed it, the latter appears coupled with elements of pre-history […] to give birth to the utopias which leave their traces in a thousand configurations of life from permanent buildings to ephemeral fashions.
>
> —Walter Benjamin, "On the Concept of History"

Configurations of Life

In 1877, the young Argentine amateur naturalist Estanislao S. Zeballos published an account of a visit he had just paid to the National Museum of Rio de Janeiro in the *Anales de la Sociedad Científica Argentina*, the journal he coedited with Francisco and José María Ramos Mejía. Among their South American sisters, Zeballos asserted, Buenos Aires and Rio were the cities best known for their splendid collections and scientific research:

[T]he Public Museum of Buenos Aires, as the most famous among the temples erected to Paleontology, the science of this century, and the Museum of Rio Janeiro, begin to attract the eyes of the scientific world, thanks to their treasures of natural history. When remembering Burmeister's work in the [Argentine] Republic, it is quite impossible to forget that of Lund in the [Brazilian] Empire, and considering that the spirit of science has taken hold of our youth, we see the same among the young Brazilian scholars, under the command of an eminent South American, Dr. Ladislao Souza de Mello e Netto. […] Here, then, we have a national body of sages, educated under the inspirations of eminent professors from the Empire and abroad. Congratulating the young Brazilian sages

for their progress, and Dr. Netto for the success of his efforts, we can only wish for the Brazilian scientific school to encounter noble rivals in the Argentine Republic.[1]

The most remarkable aspect of Zeballos's chronicle is certainly his claim to an emergent South American science that produces a new global configuration of knowledge. The "world of science," Zeballos notes with satisfaction, is already looking towards South America not merely as a repository of evidence but as a site of knowledge production in its own right: as a "scientific school" capable of contributing its own quota to the universal enterprise of the study of nature and of man. In discussing the Rio museum's reformed displays and publications, Zeballos's text testifies to the emergence, around 1870, of a new scientific idiom among the Argentine and Brazilian lettered elite. This new language took shape in a context of reorganization of the encyclopedic museum cabinets of the first half of the century into institutions dedicated to the study of life in its local manifestations in the space and time of the Argentine and Brazilian nation-state.

Both Rio's Museu Nacional and Buenos Aires's Museo Público had been founded almost immediately after national independence. Arguably, however, only in the final decades of the century would they come to occupy a key position within the wider debate on a "national being" (*ser nacional*) conceived as an emanation of the struggles and successions of forms in the natural world. At the same time, their exclusive authority to collect and display the material evidence of this local modulation of life's universal forces now began to be contested by new institutions. These new spaces of collecting and display were often associated with provincial elites challenging the hegemony of the capital and of federal government. The Museu Paraense of Belém, founded in 1867, the Museu Paranaense of Curitiba (1875), the Museu Botânico do Amazonas of Manaus (1882), and the Museu Paulista of São Paulo (1894), all in Brazil, as well as the Museo de La Plata in Argentina, founded in 1877 as the Anthropological and Archaeological Museum of the Province of Buenos Aires, all testify to a particular urge in late nineteenth-century Argentina and Brazil to collect, classify, display, and speculate on the material evidence of life's unfolding in a regional or national space, thus endowing this space with a new density of meaning.

Histories of science tend to present this process as the more or less belated updating of partial and tributary colonial knowledges to a modern and universal scientific consciousness. Examples of this process are the gradual replacement of mineralogy and botany by zoology, paleontology, and anthropology as core disciplines of the history of nature, and, in the final quarter of the century, a generalized acceptance of the principles of evolution guiding the reclassification and new spatial arrangement of collections. Strategies of display would now change

from a merely accumulative and tabular ordering to a monumental and dynamic material spectacle that took the visitor's movement through museum space as a way of inserting narrative and drama into the arrangement of exhibits. Yet in fact, these innovations in museum display were plainly contemporary with similar developments in the great metropolitan museums, several of which had been founded or reorganized around the same time as their South American peers: the new British Museum of Natural History at South Kensington, for instance, opened its doors in 1881, Austria's Naturhistorisches Hofmuseum in 1889, the Bohemian Museum of Prague in 1894, and the Royal Belgian Museum of Brussels in 1903. New York's American Museum of Natural History, established in 1869, had moved into new quarters and reorganized its collections in 1877, two years before the National Museum of Washington, part of the Smithsonian Institution, began construction of a new building to accommodate donations received in the aftermath of the Philadelphia Universal Exhibition of 1876. Perhaps, then, we ought to seek the difference between Argentine and Brazilian scientific museums and those in Europe and North America not in time (as a belated arrival at scientific truth) or space (as a dependent position in the geopolitics of knowledge) but in purpose. For, whereas in the European museum of natural science a universal act of knowing was performatively embodied in the scopic ritual of every single visit, in Argentina and Brazil the museum form, in turning the discontinuous temporality of life into a spatial assemblage, had to forge the reemergence of the local and particular in the figure of national being. Not universal life but national being, we could say, borrowing a concept from Timothy Mitchell, was the museum's "effect of structure." It was the "invisible" that mediated between the real and its representation: a form of truth located neither on the level of the museum object nor on that of the context to which it referred, but, rather, in that which made it possible to represent, in the relay between things and signs.[2]

The universal reorganization of museum displays in the late nineteenth century staged the passage of natural order through life into being that, according to Foucault, led to the emergence of the human sciences.[3] In Latin America, it prompted discourses on race and inheritance that reconceptualized the national question. In both Argentina and in Brazil new strands of social thought more or less directly inspired by Comtian and Spencerian positivism, social Darwinism, and the new physio-psychological disciplines emerging from the Salpêtrière, reinserted "the people" of Romanticism's historical temporality into the time of evolution. This was a new kind of suprahuman historicity uncovered by geology and paleontology, which were now providing the frame of the an-

thropological time of man. Theorists of national being such as Sílvio Romero, José Veríssimo, Araripe Júnior, and Capistrano de Abreu in Brazil; or José María Ramos Mejía, Carlos Octavio Bunge, José Ingenieros, and the Sarmiento of *Conflicto y armonías de las razas en América* (1883) in Argentina, exchanged ideas and polemics with museum scientists Ladislau Netto, João Baptista de Lacerda, Francisco P. Moreno, and Florentino Ameghino. The evolution of man and his natural environment, as well as the lessons to be derived from it for a politics of state intervention into the life of the people, were common concerns among naturalists and thinkers on the "national question." In this context, arguments in natural history immediately became biopolitical programs, in a particular kind of "double voicing." The identification of biogenetic engineering as the prime task of state politics in late nineteenth- and early twentieth-century discourses of *branqueamento* (whitening) and population control gave political expression to the passage from life to national being that was simultaneously being staged in the museums of natural history. The narrative of evolution, in other words, allowed natural history to become the temporality of state formation.

Visions of Sovereignty

On August 7, 1812, Bernardino Rivadavia, in the name of the provisional government of the Provinces of the River Plate, decreed the formation of a Museum of Natural History in the city of Buenos Aires, considering that "these investigations [...] will result in useful discoveries." With the support of all citizens of good taste, Rivadavia went on, such a museum would provide the means, "as we approach the moment of our Emancipation," to "ascend to the rank of the civilized nations [*los pueblos cultos*]." Inviting the members of the provisional government, as well as the citizenry at large, to put at the museum's disposition "all the products, proper and foreign to our territory, worth including in this deposit," he signaled a debt that the inhabitants of the newborn (but nonetheless ageless) fatherland had the duty of canceling: "The observation of nature on our continent—the mineral, vegetable and animal kingdom, and all its artifacts—is beyond doubt one of the most dignified occupations of the sages throughout the world [...] who, relishing in the knowledge and acquisition of the precious gifts offered to us by our Fatherland [*Madre Patria*], observe with estrangement that we should have neglected them until now."[4] Eleven years later, with little or no progress having been made in the interim, Rivadavia (now government secretary of Martín Rodríguez) asked the head of the public library, Friar Luis José Chorroarín, who already possessed a small collection of natural history and archaeological samples, to proceed with the creation of a national museum (Museo del País) dedicated "to all the branches of Natural History, Chemistry, Arts and

Industries." For the same purpose, the local Academy of Exact Sciences would form "a representative collection of the country's geology, and another one of its birds," in addition to which the garrison of Carmen de Patagones was instructed to assemble a collection of shells.[5] Carlos de Ferraris, assistant of the Italian pharmacist Pedro Carta, who had been hired by Rivadavia to be professor of experimental physics at the University of Buenos Aires, was put in charge of the taxidermic preparation and arrangement of exhibits. The new museum was officially inaugurated on January 1, 1827.

A similar initiative had been taken in Rio de Janeiro, the capital of the Portuguese Empire since the Royal Court's escape from Lisbon during the French invasion of 1807. Prince Regent João VI in 1818 ordered the transfer of the collections from the moribund Casa de História Natural (a depository for the preparation and storage of animal and plant specimens awaiting shipment to Lisbon and Coimbra, founded in 1784) to a new building on Rio's Campo de Sant'Anna (today's Praça da República). The founding decree echoes Rivadavia's obsession with order and representation as a precondition for the enjoyment and profitable exploitation of nature's gifts, albeit in a rhetoric of continuity rather than of rupture with the colonial past: "Wishing to spread the knowledge and study of the natural sciences in the kingdom of Brazil, which contains thousands of objects worthy of observation and examination, to be employed for the benefit of commerce, industry, and the arts, great sources of wealth which I much desire to develop, I order the establishment of a Royal Museum at this Court, where all existing instruments, machines and cabinets dispersed at other places shall be transferred as quickly as possible."[6] Despite the decree's characterization of the new institution as a museum of the natural sciences, the objects donated by D. João as the museum's original collection were of an exclusively cultural kind: eighty models of machinery, the foot of a Greek statue, a medieval lancet, a silver cup, two iron keys of Roman origin, and several oil paintings. The museum also received a collection of ancient medals donated by the jeweller André Godoy.[7]

A year later, a set of "Instructions for Travelers and Employees in the Colonies on the Means of Collecting, Preservation, and Display of Objects of Natural History," originally issued by the Muséum d'Histoire Naturelle of Paris, was translated and published by order of the Court, extended by numerous comments and annotations on the natural history of Brazil and its exhibition at the museum and botanical garden (annexed to the institution between 1819 and 1822). In these rules of collecting, which Maria Margaret Lopes suggests formulated an "ideal procedure" of natural history institutions, regional mandatories in Brazil as well as in the Portuguese mainland and overseas possessions in Africa and Asia were urged to assemble and send to Rio de Janeiro representative

collections of local specimens, which would be classified and catalogued at the Royal Museum.[8] Subsequently, a general catalogue of species (including, where possible, collections of duplicates) would be sent back to the colonies and provinces. The museum and botanical garden, in short, would be the instances of centralization, processing, display, and redistribution of data in a flow of objects and representations that simultaneously reaffirmed Portuguese imperial sovereignty across the globe.

In both cases, then, the establishment of national museums instituted, at least in theory, a two-way traffic that was fundamental to the reaffirmation of territorial sovereignty. On the one hand, it entailed a dislocation of material objects into the synthetic space of the collection; on the other, the visible order of the exhibition supplied the base for the translation of nature into the well-constructed language of Linnaean tabulation. The general nomination of species, in other words, traveled in a direction opposite to the objects it took as its samples, as a form of writing that expanded from the center to the margins. This act of knowing imposed a plane of equivalence on the level of representation that made it possible to introduce "nature" into the system of wealth, as its ingredients could now be exchanged against other objects equally endowed with proper names and, therefore, with calculable value. The museum, in short, is viewed here as what Bruno Latour calls a "centre of calculation": a space of assembly of spatiotemporally distant events, artifacts, and people seized and inscribed, as things, onto a single plane of representation. Collecting was a production of calculability, a "manufacture of equations" that reproduced and guaranteed the stability and combinability of the "immutable mobiles" forged in the passage from periphery to center.[9]

Collecting and exhibiting, as the way to establish a mutual transparency between the orders of nature, language, and wealth, were simultaneously acts of sovereignty, according to the legal tradition of the *res nullius* forged in the seventeenth century by enlightened theorists of colonialism. This theory of colonial sovereignty, contesting Spanish and Portuguese claims to the exclusive possession of the Americas, insisted on the radical exteriority of that which had not yet been named and thus fell to the one who first brought it to language, making it speak itself as a thing.[10] The inscription of the proper name, whose condition of possibility was the "re-cognition" of the place of things in the system of nature, was thus simultaneously an inscription of the law. The first institutions in charge of collecting and displaying objects of natural history in Spanish and Portuguese America—the Gabinete de Historia Natural of Havana, the Casa Botánica of Bogotá, the Casa de História Natural of Rio de Janeiro, and the Museo de Historia Natural of Mexico—had been founded towards the end

of the eighteenth century, in the course of the Bourbon and Pombaline reforms, precisely in order to foreclose European territorial claims based on the *res nullius* doctrine. Some of these would provide the initial base of the national museums founded almost immediately after (and sometimes before) the end of the independence wars. Apart from the museums at Buenos Aires and Rio de Janeiro, the new foundations included those of Santiago de Chile (1822), Bogotá (1823), Lima (1826), Guatemala (1831), and Montevideo (1837). Museums were among the first state institutions founded in Hispanic as well as Lusophone America because they were the fundamental expression of a sovereignty hinged on the power of naming.

This fundamental articulation between science, sovereignty, and a particular construction of perspective is often missed by histories of "colonial knowledge." In the spatial imaginary of nineteenth-century natural history, the site of knowledge increasingly ceased to be the anomic wilderness of "the field," where the lonesome *naturaliste-voyageur* wrested order from chaos, coming to reside instead in the places of convergence of objects from distant locations—museums and botanical and zoological gardens. The "centre of calculation" offered the theorist-researcher a synthetic overview that revealed not so much the true image of nature as the invisible structure made up by the empty spaces between one object and the next. Precisely on account of their physical and psychic distance from the multisensory immediacy of the field, sedentary naturalists such as Cuvier and Lamarck would claim an increased truth-value for their (abstract and detached) systematizations of nature over the experience- and context-bound accounts of traveling researchers. As Dorinda Outram proposes, "[i]t was not a big step from the establishment of distance as a cultural value [...] to the production of the idea of objectivity, meaning precisely the placing of 'distance' between the observer and the observed, between the knower and his own responses."[11]

It is precisely this construction of distance, as much an ideological and moral as a geographical dimension, that became a major difficulty for the new museums at Buenos Aires and Rio de Janeiro. At least in the eyes of the foreign naturalists who visited them on their way into the field, these museums were situated too close to their object to provide a clear vision of nature. François de Castelnau summed up his impressions of the Rio museum in 1843: "In a country where nature has so richly gifted the animal kingdom, it was difficult not to be surprised to see such a poor assemblage of its diverse products, a collection which hardly comprised a quarter of the animals of Brazil."[12] And even in 1865, Louis Agassiz, on a data-collecting mission to prove his theory of racial difference, would still dismiss the establishment as *une antiquaille*: "Anyone who knows what a lively and dynamic museum is about, will agree that the collec-

tions of this one have remained for years without improvements or additions; the mounted animals, mammals and birds are in decay, and the fish, except for some magnificent specimens from the Amazon, do not give an idea of the variety one finds in the waters of Brazil. You would form a better collection at the city market in a single morning."[13] One does not necessarily have to take these accounts at face value; previous descriptions by French travelers of the 1820s (Bougainville, Thévenet, Denis) written prior to the discursive transformation of museum space into a site of experimental research paint a much more positive picture. The interesting point about Castelnau's and Agassiz's accounts is that they deny the possibility of locating a site of observation within the very space this observation seeks to behold. Regardless of whether or not the museums of the northern hemisphere held more "complete" collections of Brazilian fauna and flora (thanks, in part, to donations of duplicates made by the Rio museum, which its European and North American peers never returned, as director Ladislau Netto complained in 1870),[14] in the view of many foreign visitors a museum located in the tropics was a contradiction in terms. Rather than bringing the stuffed specimens of birds and mammals abounding in the surrounding forest back to life, the decay and rot wrought on the exhibits by the tropical climate highlighted the lack of distance, the pull of a debilitating environment that the museum tried in vain to subordinate to its gaze.

The Royal Museum had been opened to the public—or rather, to "all persons, native or foreign, worthy by their knowledge or qualities," as a royal decree put it—in 1821, displaying a heterodox collection arranged over eight rooms on the first floor.[15] A further two rooms on the ground floor, containing "industrial machinery," had been opened in 1819. A report from 1830, when the institution's name was changed to Museu Imperial e Nacional, lists the following classes of objects in eight rooms: reptiles, serpents, lizards and turtles, woods, and monsters; shells, insects, and fish; monkeys and other mammals; mineralogy; artisanry; birds; indigenous artifacts from Pará and Matto Grosso; Egyptian mummies, numismatica, and paintings.[16] The inventory of what in only a decade had probably become the most important collection on the continent, bespeaks a notable and concerted effort of accumulation, thanks in part to the still active network of colonial exchange operated by the Portuguese Court. The collections of zoology (numbering near five thousand objects, according to the inventory of 1838) and of botany had largely been assembled by Friedrich Sellow and Ricardo Zani, foreign naturalists contracted by the museum in 1820 and 1828, respectively, for expeditions into the interior. Previously, the museum's warden and taxidermist, João de Deus e Mattos, who had already served at the Casa de História Natural, had been sent on hunting sprees into the mountains surrounding the

city, preparing animals on the spot. João de Deus, as the city's chronicler Manuel Moreira de Azevedo recalled in a suggestive passage in 1877, "went into the forest and began to hunt; and the bird or animal falling dead was immediately prepared; whatever he killed he preserved. Thus he depopulated the forest to enrich science, and returned laden with different mammals, birds, reptiles, and insects, precious remains of his lethal, yet useful and civilizing, expedition."[17]

Sellow had also helped secure an ornithological collection donated by the Royal Museum of Berlin in 1827, as a means of establishing regular exchanges of duplicates. In 1823, a botanical collection of 2,300 samples, comprising 266 different species, was received from the chief surgeon of the province of Matto Grosso. The mineralogical collection of Abraham Gottlob Werner, purchased in 1805 for the Natural History Museum at Lisbon, had been brought to Rio on the Royal Court's arrival, and was further enriched by subsequent donations from Denmark and Italy, as well as, in 1838, by the personal collection of José Bonifácio de Andrada e Silva, Brazil's first prime minister and a former professor of mining and mineralogy. In 1824, Emperor D. Pedro I had acquired several Egyptian mummies and sarcophagi from the Italian arts merchant Fiengo.[18] Ethnographic objects were also received from North America, the Aleutian and Sandwich Islands, and from Portuguese Africa, in addition to the collections of native ethnographica sent by provincial governors. The museum's first catalogue, published in 1838, grouped the collections into five sections—zoology, botany, mineralogy, fine arts, and customs—following the example of the Muséum de Paris. In 1842, the system was modified and the museum divided into subsections headed by their own directors, following the model of the British Museum's Natural Sciences Department. The new division comprised (1) comparative anatomy and zoology; (2) botany, agriculture and mechanical arts; (3) mineralogy and geology; and (4) numismatics, arts, and customs. The last of these, which included the ethnographic collections, would be directed by important members of the Brazilian Romantic movement, such as the poet Manoel Araújo Porto Alegre and the painter Pedro Américo de Figueiredo e Mello.

The beginnings of the museum of Buenos Aires, known as the Museo Público prior to the federalization of the capital city in 1880, are much more modest in comparison. The key document here is museum secretary Manuel Ricardo Trelles's "Memory on the State of the Museum," delivered in 1856 to the Association of Friends of the Natural History of the River Plate, created two years earlier in an attempt to rescue the museum from the decay into which it had supposedly fallen under Rosas's dictatorship (1829–52). Under Rosas, Trelles suggests, the museum had "reached the lowest rung of decadence and abandon," finding itself transformed into a deposit of trophies from the civil wars. The de-

feat of Rosas and subsequent foundation of the Association of Friends, resulting in a doubling of the museum's assets in a mere two years, is thus celebrated as the return of a natural order no longer perverted by politics: "We might say that nature has since gathered its possessions and set course for Buenos Aires, to deposit its gifts in the new temple erected to the cult of science."[19] Described as a *museo general* dedicated specifically but not exclusively to the study of nature, the museum (now installed over four rooms at the University on Calle Perú and Potosí, today Alsina) was arranged by Trelles into three sections corresponding to nature's "kingdoms," mirrored by another three comprising numismatics, fine arts, and "*varios ramos*" (miscellanea). The zoological collection, with a total of 2,052 objects, was considered by Trelles as the most important, including, curiously enough, within the subsection "mammals" an Egyptian and two indigenous mummies, as well as numerous human anatomical and teratological samples. The museum also possessed some 700 stuffed birds, 660 molluscs, several monkeys from Africa and Brazil, fish, insects, and reptiles including three specimens of *Boa constrictor* obtained from Brazil. Several recently acquired fossil fragments of *Megatherium*, *Mylodon*, *Mastodon,* and *Glyptodon* were awaiting classification by the French paleontologist Auguste Bravard, then in the service of the museum of the Confederate provinces at Paraná. The botanical section, inexistent at the time of the Association's foundation, had since increased to 68 samples, 37 of them already classified, informed Trelles; in mineralogy, the museum had progressed from a previous 736 classified samples to 1,013, with a total of 1,795 pieces thanks to donations representing the geology of Chile, Brazil, Bolivia, Peru, Paraguay, Uruguay, and the Gran Chaco. From the time of Rivadavia, a large numismatic collection comprising 2,641 pieces had survived, purchased from French antiquarians Dufresne and Pousset. The section of fine arts, numbering only 5 objects in 1854, had since grown to 35, most of which, Trelles conceded, were of historical rather than aesthetic importance. The section of miscellanea, finally, consisted of

> an Egyptian-style statue presented to the Museum in 1843 by Thomas Gowland, today a member of the Association; mosaic samples from various temples of Herculanaeum and Pompeii, donated by honorary member Dr. D. José María Uriarte; the collection of urns and other objects of the ancient Peruvians, by D. Antonio M. Alvarez; the relief maps, by Mr. von Guelich; the arms and tools of the savages of America, by various members and other gentlemen; and many other objects I will omit so as not to exhaust the attention of the honorable members of the Association.[20]

The list, then, breaks off on the margins of classification. Neither anthropology ("the savages") nor archaeology ("the ancients"), the two disciplines that

would occupy center stage towards the end of the century as articulations of nature and history, sufficiently commanded the attention of the "friends of natural history" to merit any mention beyond the status of the curiosity (the unclassifiable, archaic, exotic, monstrous). Yet the division between the "ancient" natives' objects (placed alongside the antiquities of European civilization) and those of the "savages" of the present, a key distinction in the collecting and exhibiting of indigenous life and material culture at the end of the century, is already prefigured here as a temporal divide expressed as space. The relief map is literally the barrier that cuts off the ancients' "prehistory" from the pure present of the "savages."

But then, "man" had to remain on the margins of the collection as long as collecting itself did not involve a totalizing notion of patrimony or heritage based on the nation-state as a spatiotemporal continuum. By midcentury, neither of the two museums, in spite of their relation with questions of sovereignty, was primed on a national territory conceived as a closed spatial envelope framing a particular local order of life. "National being" was not yet a figure of thought, an "invisible," that could organize the display of a collection of objects. But neither was there a notion of continuity in time, of an unbroken genealogical chain linking the forms of nature to the present social order. The museums at Rio de Janeiro and Buenos Aires were national not because they showcased the nation-state but rather because they represented its capacity to represent. They formulated a claim to sovereignty by forging images of order. The collections of coins and medals were as much an expression of this order as those of minerals or birds: an arrangement of dispersed material in a well-constructed language, an order that was both finite and open. In fact, the things that integrated the arrangement mattered less than the tabular space in which they found their place and which, once laid out, allowed in principle for *all* things to be included. If the museum was an expression of sovereignty, of the power to impose the law, it was as a demonstration of the capacity of naming. The sovereignty of the state expressed itself in the collection as the synthesis and articulation of individual donors' paternal claims to particular objects; illustrious citizens' names remained attached to the collection's components in the way sixteenth-century altar paintings used to include images of their patrons. If the museum display served as a synecdoche of the nation-state, it was as an image of social as well as a natural order.

A new relation between collecting, exhibiting, and the nation form would start to emerge after the appointments of the German zoologist Hermann Burmeister in 1862 as director of the Museo Público of Buenos Aires, and of Ladislau Netto, a French-trained botanist, as director of the Museu Nacional of Rio

de Janeiro in 1868. Netto had returned to Rio de Janeiro in 1866, following two years of botanical studies at the Jardin des Plantes and the Sorbonne, to occupy the post of subdirector of the museum's botanical section. Between 1868 and 1870 he served as interim director of the museum and in 1876 was appointed to the post of general director, which he held until 1893, a year before his death. Burmeister, who at the time had already published an influential account of scientific travel in Brazil, was appointed to the post of director of the Public Museum of Buenos Aires in 1862, on invitation of Juan María Gutiérrez, at the time rector of the University of Buenos Aires, and recommended by Juan B. Alberdi. The previous candidate, the French paleontologist Auguste Bravard (then in the service of the museum of the Argentine Confederation at Paraná) had died in the Mendoza earthquake of 1861. Burmeister held the directorship of the museum until his death in 1892, also coordinating, between 1870 and 1875, the establishment of a Faculty of Exact Sciences and the creation of a National Academy of Sciences at the University of Córdoba, staffed, on his indication, by fellow naturalists from Germany.

Museum chroniclers in both cities concur in describing Netto's and Burmeister's arrival as the moment of true foundation, as a new beginning that relegated all previous developments to the stage of prehistory. Burmeister, his successor Carlos Berg claimed, "created a scientific institution out of a curiosity cabinet,"[21] while Netto, in the words of Moreira de Azevedo, "gave life and animation to this house of science."[22] He initiated "the most fecund, active, and intense period in the history of the Natural Museum," as his colleague, rival, and eventual successor João Baptista de Lacerda conceded: "The collections were revised, replacing old decayed specimens by recently prepared ones; showcases were extended; dispersed bones were joined to compose skeletons, preserving the skins; the collections were given an aesthetic appearance; new labels were attached and the old generic names replaced by modern ones."[23]

Quite literally, the museums were now brought to life as the new governing principle of the collections' reorganization: a general reclassification that corresponded to a new arrangement of objects in space, and indeed of the spaces containing them, so as to allow for discontinuity to become visible in the distance between one exhibit and the next. What took place, then, was a reordering of nature, which dismissed the previous arrangement as pure chaos. In Burmeister's words,

> [s]ince assuming my post, I have almost completely reorganized the establishment, removing from the showrooms many objects too insignificant to figure in a public and scientific museum of any kind, and arranging others in a more natural order, in keeping

with their specific qualities. You no longer see minerals mingling with shells on one and the same shelf, trophies with mammals, nor birds in total confusion, which the first curator had arranged, apparently, by order of the size and color of the individual specimens. Today the objects of each branch are united on their own shelves, and the birds and mammals classified scientifically.[24]

This rearrangement of objects "in a more natural order" implied, at the same time, a new demarcation of the collection's limits. Burmeister insisted, throughout his tenure, on loaning or donating artistic and historical pieces to other institutions so as to make room for the display of a natural history cleansed of all traces of human intervention. Nature itself needed, in turn, to be restricted to an ideal domain of representativity: "Removed from our Museum, to be deposited in the new collection created at the Faculty of Medicine, were the phenomena and products of illness, which *de jure* belong to that establishment rather than to a public Museum dedicated [...] to the cult of the Muses, embellishing human life without hurting the gaze by exposing it to public displays of deformities and illnesses of the animal body."[25] Removed, then, were the aberrant and singular, the "monster" that, under the previous rationale, had defined the natural system from outside as a manifestation of pure difference that made specification possible inside the limits of the natural order. Now, on the contrary, the excess and disorder of monstrosity is deemed too dangerous for a public gaze in need of instruction. And it was through this shift from the singular to the exemplary, from variety to normativity, that museum space entered into a metonymic relation with a territory defined, from that point on, as an internally coherent space for a particular order of life: "once all the birds and mammals are prepared, I will dedicate myself to the arrangement of the national species [*especies del país*], in particular [those] of the River Plate and of the other rivers and lagoons of the interior."[26] This change of focus, in which the museum becomes the Ark of Life in its national variety, runs parallel to an infusion of temporality. Paleontology now moves to the fore of the museum's areas of collecting:

This is the richest part of the Museum of Buenos Aires, the territory of this Province being the most abundant deposit of this kind of object in the entire world. Therefore Buenos Aires is the best placed to form the most precious collection known in this part of the world. The most curious and complete skeletons of antediluvian animals on display at the museums of London, Paris, Madrid, Turin, etc., are all from the Province of Buenos Aires. However, today, thanks to the wisdom of the provincial government, disposed to prohibit the export of fossil bones, the Museum of Buenos Aires will see its collections grow day by day. It is a patriotic duty for the children of this country to

preserve these treasures on their own soil, and to deposit them in the Museum of their Fatherland.[27]

Undoubtedly Burmeister's invocation of "patriotic duty" strategically posited his own scientific interests as a matter of national emancipation. On his arrival at Buenos Aires, finding the Association of Friends of Natural History practically defunct, he immediately proceeded to create a Paleontological Society of Buenos Aires aimed principally at funding excavations and publishing paleontological research in the *Anales del Museo Público*, an almost entirely single-authored journal to be distributed among peer institutions in Europe and the Americas. Yet whether or not Burmeister's equation of paleontological progress with national emancipation was purely opportunistic is beside the point: its discursive effect, of major importance for the scientific imagination of the late nineteenth century, was the notion of a national territory containing, as in a reliquary, the past of nature, the space from which life on earth had originated, and which was therefore called upon to solve its enigmas. Burmeister never renounced his catastrophist theory of volcanic revolutions transforming life's spatial environment, and his interest in collecting the fossil past never included the search for the "origins of man" that would obsess the following generation of naturalists. His museum was not yet the unbroken continuity of a "narrative of objects" stretching from the remotest forms of life to the masterpieces of contemporary art, and his interest in anthropology and archaeology as linking the histories of nature and of man was, consequently, almost absent. Yet the mounted fossil skeletons, reconstructed through an analysis of the anatomical functions of dispersed fragments, made visible a history of life that had moved from the surface into the entrails of beings and from the domain of a universal taxonomic order into that of a discontinuous, organic structure.

A new relation, then, appeared between the visible and the invisible that imposed new challenges and difficulties on museum display. Although by 1889 the museum had extended its space over eleven rooms in the university building (including offices and library), Burmeister continued to complain about the lack of exhibition space to cope with the size and number of fossil exhibits, especially after the conquest of Patagonia and the southern Pampas had opened up new fossil deposits.[28] A collection of thirty-two huge boxes remitted from Chubut by traveling naturalist Enrique de Carles had not even been unpacked, Burmeister informed the Minister of Public Education in 1888, "as the Museum lacks sufficient space to either study or display these objects to the gaze of the public."[29] In the following year, he reported that "scarce progress has been made by the National Museum due to its ongoing state of lethargy, motivated by the lack of

space in the showrooms the establishment currently possesses."[30] Visiting the establishment in 1889, the taxidermist and international trader in natural history samples Henry A. Ward confirmed Burmeister's impression, after praising the elderly director for his descriptions and drawings, which "have made us as familiar with these monsters from other areas as if they were modern animals." However, he concluded, "it is sad that a museum of such importance, for its intrinsic value as well as for its tradition, should have to display its treasures in small and poorly lit rooms with low ceilings, accessible only through a large and tiresome wooden staircase and a narrow corridor; the locality destroys all the effect this invaluable collection would produce if conveniently displayed in an adequate building."[31]

If a building could now destroy a collection, the collection itself was no longer conceived merely as made up of material things. Rather, it had now become a *relation* of detached viewing that made the beholder see the inner workings of an object and the place it occupied in the series of "life." The object's place was no longer determined by its surface affinities with other objects but by the functional equivalences between anatomical details highlighted by the mise-en-scène of the fossil fragment in mounted skeletons. Objects were now "to be looked not at, but *into*," as Dorinda Outram puts it.[32] If Burmeister's museum, according to Ward's account, failed to visualize the invisible history of extinct forms, it was because it lacked the means to put its exhibits at a distance, to install between the object and its beholder an emptiness saturated with meaning.

The new history of life forged by the natural science museum of the late nineteenth century was a complex spatiotemporal arrangement that sent its visitor on an "organized walkway" towards her own future as she immersed herself in an immemorial past.[33] Life, as it addressed the museum visitor, was first and foremost an *event* in the present, a performative encounter with the remote past forged in a new articulation between architectural space and the space of the collection. While the glass and steel carcasses of the new metropolitan museums of Europe and the United States made possible the opening up of a space between viewers and objects for the tangible manifestation of evolutionary time, Latin America's national museums founded in the aftermath of independence remained literally caught in colonial inner-city buildings. Thus, once again they were being accused of an excessive proximity to their object (though now in a historical rather than territorial sense: a lack of modernity, and an excess of coloniality).

At Rio de Janeiro, Ladislau Netto had already identified the problem in 1870. His solution proposed to turn scarcity into virtue by opening museum

space towards the surrounding space of "nature," thus turning the porous border between the collection and tropical nature into a center of experimentation:

> Those who have had the opportunity to visit some of the natural history museums of the Old World cannot but consider inappropriate and insufficient the quarters occupied by our own Museum. [...] It is inappropriate for its location in the heart of the city, where it is impossible to obtain gardens in the vicinity. Therefore, this institution despite its ample scope and utility has had to renounce its most elevated and beneficent tasks, namely the physiological and anatomical study of the two organic kingdoms of Creation. How shall we establish, in the actual circumstances, at the immediate service of the museum, an experimental botanical-zoological school, in which biological phenomena [...] can be studied on a daily basis in all their phases and varieties?[34]

It was in this direction signaled by Netto that Brazilian museums of the turn of the century ventured, with varying degrees of success: a notion of "experimentation" that differed fundamentally from Burmeister's model of a closed space of specialist research. Despite Burmeister's demands for extended display space, the Buenos Aires museum remained a material reservoir sustaining the production of texts, such as the encyclopedias of native flora and fauna he submitted for display at international exhibitions.[35] As the foundation of new scientific museums at nearby La Plata or at São Paulo and Belém in the 1880s and 1890s showed, to update the spaces of science in turn-of-the-century Argentina and Brazil was not altogether impossible. If the Museo Público remained caught in a mode of display that was now deemed lethargic and lifeless, it was because it had chiefly remained an instrument of inscription, a generator of illustrations that sustained a (written) discourse of knowledge. Visuality, for Burmeister, remained in a subservient relation with language—a conception that would be radically inverted at the institution's new provincial rival, the Museum of La Plata.

Life's Disputes

The paleontological, botanical, and zoological findings made in Argentina and Brazil over the last third of the nineteenth century speak to a growing capacity of the state to appropriate and subordinate local situations. To "discover" past and present species and artifacts always involved the capture and translation of local beliefs and memories: in order to make a museum object from a bone fragment one relied on the expertise of native guides, local politicians and landowners, amateur collectors, and so forth. The centralization of local "evidence" by national museums, in short, was a manifestation of a form of power based on the capacity, validated by the universal idiom of science, to "objectively" represent

the local. To turn the local into an object of seeing in turn posited a nonlocational point of view occupied by a transcendental subject of observation. Yet this empowerment of a single sovereign gaze was in fact as much a conflictive and contested process as the properly political one of state consolidation. Towards the end of the century a series of new museums emerged as an expression of local elites' attempts to partake in, as well as to challenge, the "objective" representations of life's space and time forged in the national capitals. Although based on different rhetorics and forms of display, the new museums at La Plata, São Paulo, and Belém all participated in a politics of being that articulated the past of nature with the future of society.

At Rio de Janeiro, the National Museum had considerably extended its activities under Ladislau Netto's directorship. In 1875, a cycle of public lectures in botany, agriculture, geology, anthropology, mineralogy, and zoology was started, followed the next year by the publication of a trimestral journal, *Archivos do Museu Nacional*, containing original research undertaken by museum staff. A physiological laboratory—the first of its kind in Latin America, dedicated particularly to the study of tropical venoms and illnesses and the physiological characteristics of native plants—was annexed to the museum in 1880, a mere fifteen years after the foundation of Pasteur's and Bernard's laboratories in Paris. Following the museum's removal in 1892 to the Quinta de Boa Vista, the former Imperial palace at São Cristóvão (fig. 6), the institution also finally acquired its own

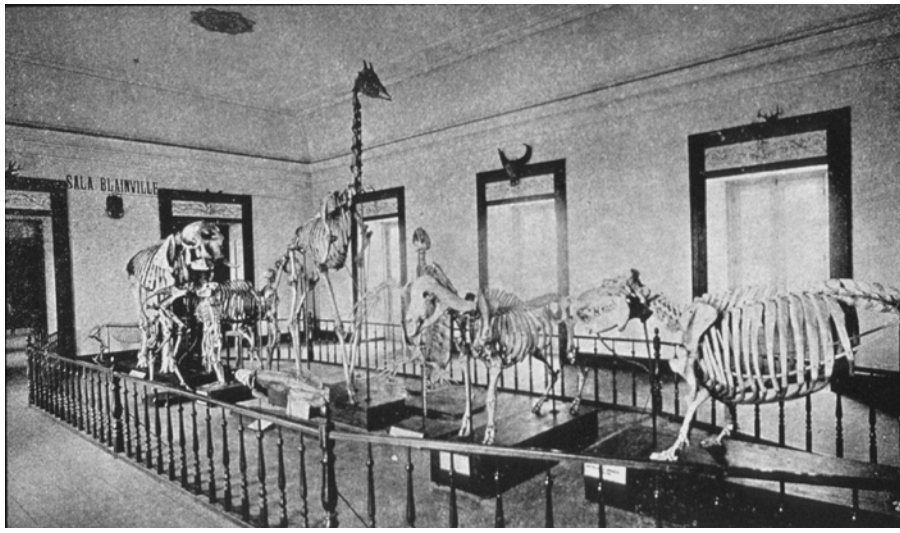

FIGURE 6. Anonymous (possibly Marc Ferrez), Museu Nacional, Sala Blainville. Illustration from João Baptista de Lacerda, *Fastos do Museu Nacional* (1906). Museu Nacional / UFRJ, Rio de Janeiro.

park and garden. Upon assuming the post of general director, Netto had reorganized the collection into three sections: anthropology, zoology, comparative anatomy, and animal paleontology; botany and plant paleontology; and physics, mineralogy, geology, and general paleontology. The collection of native ethnography and archaeology (superior to any other of its kind in the world, Netto claimed) needed to be relocated into a museum of its own, he suggested, but for the meantime it remained attached to the National Museum.[36] Upon the failure of his initiative, Netto reincorporated the collections of indigenous artifacts in 1888 to form a fourth section, together with the "anthropological" samples of human remains: a new science of man that had gained autonomy both from its zoological and historical neighbors to occupy an intermediate position between the history of nature and that of the nation.

Unlike at Buenos Aires, the reform of Rio's National Museum did not result in paleontology's promotion to become the master science of a national history of nature. The fossil record was an area where Brazilians, as Netto's successor Lacerda recognized in 1906, could not compete with their Argentine peers because "in Brazil, the conditions under which the ossuaries of extinct species were formed, are very different from those that have occurred in Argentina."[37] The focus came to be instead on the origins and future of "Brazilian man," a debate that must be read against the background of wider disputes over issues of race, miscegenation, and nationality surrounding the abolition of slavery in 1888.

In fact, the new anthropological section's intermediate position between the history of nature and history proper allowed for the recasting of the entire collection's meaning as a lesson in national development. The museum, rather than merely a means for displaying to visitors' eyes an extant "natural order," would now become a prescriptive indicator of future measures of biopolitical intervention. The display of human remains and of artifacts of indigenous culture alongside collections of rocks, plants, and animals imposed on the former a logic of classification that promised a positive knowledge of "racial development." It thus opened the possibility, as Louis Couty, head of the museum's Physiological Laboratory put it, of a "Brazilian science [*Ciência do Brasil*]" destined to solve the problems of life, "in particular, the life of the complex organisms that constitute a people," a science of miscegenation, then, which would nonetheless avoid the gloomy conclusions reached by contemporary European racial thought (Buckle, Gobineau, Haeckel, etc.).[38] The display only implicitly referred to Brazil's black population by exhibiting, alongside objects belonging to the "cannibals" and "barbarians" of New Zealand and the Aleutian Islands, "several vestiges of the uncultivated peoples of Africa [...], proof of the barbarism in which many of [them] still find themselves today," thus symbolically placing Africans at the

dawn of humanity.[39] Yet at the same time, in the physiological laboratory museum scientists carried out experimental research on their potential genetic contribution to a future "Brazilian type." The museum, then, was at once a means of salvage and a catalyst of transformation of racial others. In Lacerda's words:

> Civilization is entering the *sertões* of Brazil: in less than a century the indigenous tribes will have disappeared, and it will be difficult to find in their descendants a trace of the primitive race. Cross-breeding between Indian and white is rare among us compared to that of white and black. [...] As a worker, the Indian is unquestionably inferior to the black; he is more agile than the latter but his physical resistance and muscular strength are sensibly less. We have measured with a dynamometer the muscular strength of adult individuals belonging to the Bororó, Botocudo, and Xerente tribes, and the instrument showed a force below that observed in white and black individuals.[40]

Whereas the attempts to reform the National Museum paralleled those of reforming the Imperial state, the new regional museums of Belém and São Paulo were founded immediately after the overthrow of the monarchy in 1889 and the turbulent years of Deodoro da Fonseca and Floriano Peixoto's military governments. Controversy over the meaning and content of modernity in Brazil enveloped the new institutions both from the outside—their very foundation implying a claim to self-representation on behalf of regional elites—and from the inside of the natural sciences, as a debate on museums' objects and modes of classification and display.[41] In 1894, the foreign zoologists Emil August Goeldi, at the Museu Paraense, and Hermann von Ihering, at the Museu Paulista, both of whom had recently renounced their positions as correspondent researchers at the National Museum, assumed the directorship of heterodox collections assembled by local amateurs. The museum at Belém, founded under the auspices of the local Sociedade Filomática, had been in existence since 1867, run largely by the writer and aficionado archaeologist Domingos Ferreira Penna. The Museu Paulista's collections originated in the donation, in 1890, of the private museum of Colonel Joaquim Sertório, a wealthy collector of *naturalia* and *exotica*, to the state of São Paulo. A year after Ihering's appointment, the collection was transferred to the still vacant Ipiranga monument, a neoclassical palace designed by Italian architect Tommaso Gaudenzio Bezzi at the site of Emperor Pedro I's proclamation of independence in 1822 (fig. 7). Ironically or not, the monument commemorating the role of the thriving immigrant state of São Paulo in the foundation of the nation-state was to contain not history but nature. Or rather, the foundation of the state—captured in Pedro Américo's monumental painting *The Cry of Ypiranga*, displayed on the premises—was articulated not with a material narrative of the formation of the Brazilian people but one of the evolution of

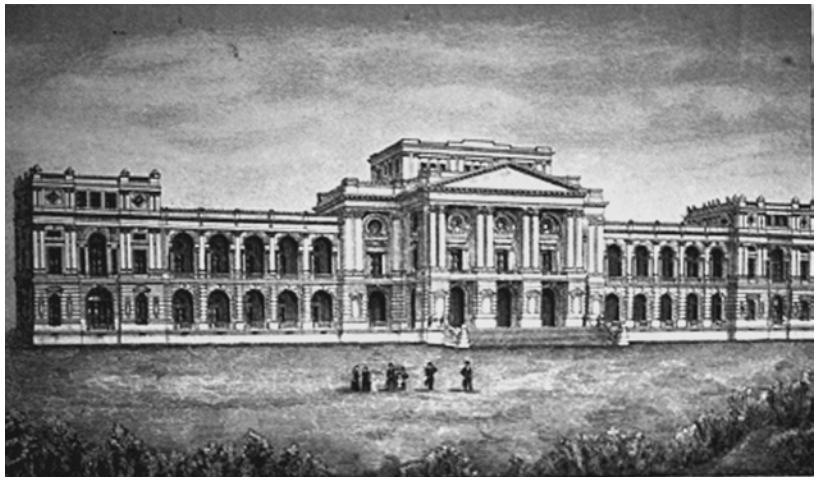

FIGURE 7. W. A. Meyn, *Museu Paulista.* Lithograph, cover page of *Revista do Museu Paulista* 1 (1895). Museu Paulista, São Paulo.

natural species. The space of the social was indicated by an absence, a void that only a properly instructed future citizenry would eventually come to fill.

Similarly, Goeldi, in his first annual report to the governor of Pará state, insisted on the need to withdraw those objects now considered "incompatible with the character and spirit of the Museum": coins and medals, weaponry, newspapers and other historical documents, portraits of the imperial family, and so on. At the same time, he transferred the institution into new quarters on the city's outskirts to make room for a botanical and zoological garden. In 1900, the latter had grown to house more than five hundred animals, and Goeldi had to reassure local authorities that his collecting mania would not continue indefinitely but only until a representative overview of the local fauna and flora had been assembled.

Both Goeldi and Ihering took pains to advertise their arrival as a general watershed between the "savage collecting" of the local amateurs they succeeded and a new era of "serious" science that was dawning, not just at Belém and São Paulo, but in Brazil at large, "a kind of borderline separating the past from the future of the Museum," as Goeldi put it, "a visible borderline drawn once and for all."[42] Ihering, in the same year, further raised the stakes by proclaiming in the first issue of the Museu Paulista's journal that, in all of Brazil, only the two new museums satisfied the requirements "of museums organized on scientific foundations and with competent staff," alongside those of Buenos Aires, La Plata, and Santiago de Chile.[43] Unlike the National Museum, Ihering claimed, his and Goeldi's institutions were not involved in the vain emulation of an en-

cyclopedic and metropolitan model which disciplinary specialization had long left behind. Rather, "the purpose of these collections is to give a good, instructive idea of the rich and interesting nature of South America, particularly Brazil, and of South American man and his history. Therefore, we have a good representation of Brazil from the different groups of the animal kingdom, accepting only a few characteristic samples from other regions of the globe."[44] Eventually, Ihering would further radicalize this idea of augmenting the scientific value of the museum by reducing its scope. He even went so far as to propose turning the Museu Paulista into an institution exclusively dedicated to the study of molluscs. Goeldi, meanwhile, toyed with the idea of breaking up his museum's spatial integrity by distributing small research pavilions in the museum's gardens: "If each of the sections of which the Museum is currently comprised obtained its own pavilion, such that a 'Botanical Institute' would appear here, there a 'Mineralogical-Geological Institute,' and still further on an 'Ethnographic Institute,' I would gladly sacrifice the idea of a single monumental building."[45] In both cases, we perceive the same crisis of museum space as an arena of totalizing visuality—a crisis that nonetheless opened an opportunity for local and particular insights into the multilayered evolution of nature, while questioning the possibility of a unifying vision such as that offered by the museum of the federal capital.

Both Goeldi and Ihering adopted the new "principle of sparseness" first formulated in 1878 by Agassiz at Harvard's Museum of Comparative Zoology and in 1884 by William Henry Flower at London's new Museum of Natural History at South Kensington. According to this new museology, the public exhibition had to be kept separate from collections destined exclusively for research purposes. This system "currently adopted by the majority of modern museums," Ihering explained, "consists in selecting only the most important and well-prepared pieces, such that, in the modern system, less is exhibited, and only the best examples. It is obvious that in this system the collections become more valuable, useful, and satisfactory as a means of instruction."[46] As Tony Bennett has pointed out, this new principle of sparseness signified a definite break with the principle of curiosity proper to eighteenth-century displays of natural history, which until the 1870s had still allowed the measuring of a collection's value on the base of its singularity.[47] Under the new rationale, by contrast, objects in the public collection would be selected for their commonality, their lack of individual features, which meant, at the same time, that the label would take precedence over the object. If meaning now came to rest exclusively on the exemplarity of exhibits, it was because the objects merely pointed to the scientific narrative that framed them. The object became a signifier, the label a referent.

The new distinction between the museum's tasks of scientific research and

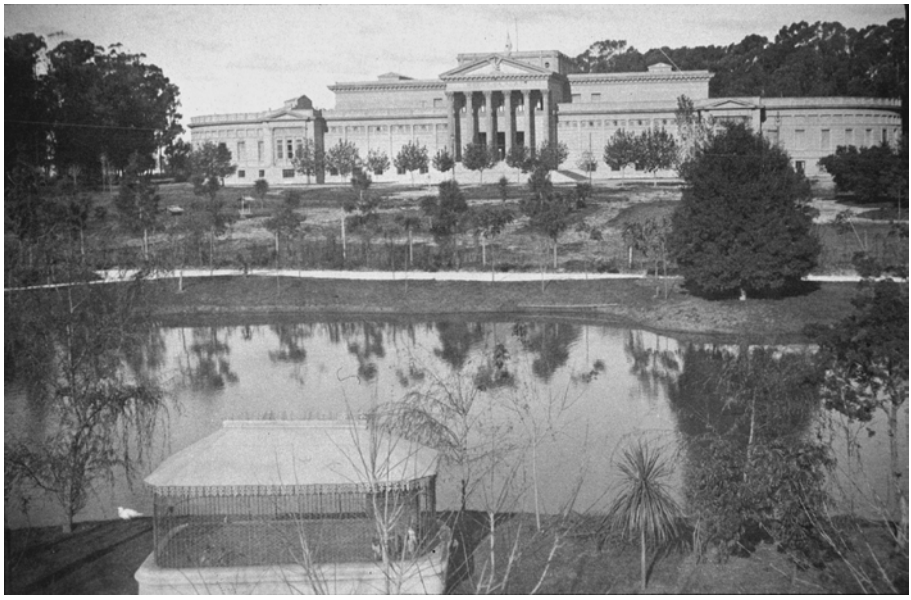

FIGURE 8. Anonymous, Museo de La Plata, botanical garden with birdcages and front façade of the museum. Silver gelatin print from original glass negative (ca. 1910). Archivo General de la Nación, Buenos Aires.

public instruction as a spatial separation between different ways of seeing also invented a new interiority of science: a few spectacularly arranged items in the space accessible to the general public; plenty of material kept in drawers, boxes, and shelves for the attention of specialists. The empty spaces separating the public collection's exemplary displays referred to something that was visible elsewhere, albeit exclusively to an expert gaze capable of deciphering it. It is no mere coincidence, I think, that this new economy of the visible in the space of "knowledge" coincided with the consolidation of a liberal ideology of representation in the political sphere. Liberalism, in the Argentine Order of 1880 as much as in the Brazilian Old Republic, simultaneously invoked "the people" as the collective subject of sovereignty and excluded the majority of the population from any form of political participation. This does not mean that the space of science was merely the ideological reflection of the state form, or vice versa. Rather, both participated in a mode of representation, the transparency of which contained its own opacity. Its very legibility was sustained by a hieroglyphics only accessible to those endowed with a power to speak. If, in short, Linnaean natural history's "empire of nature" had been sustained by a conception of order that the Brazilian constitutional monarchy had expressed on a different plane,

the new "economy of nature" (a concept dear to Darwin) was likewise involved, in a relation of mutual validation, with bourgeois liberal conceptions of the social and its representation, staged and performed in the museums' rituals of showing and of spectatorship.

Passages of National Being

Accompanied by the noise of construction work, roads being paved and neoclassical buildings raised from the flat soil of the pampas, the visitor approached the imposing temple of science designed by architects Friedrich Heynemann and Henrik Aberg, "standing in a park, amid splendid avenues and groves of tall eucalyptus and other trees, which, in the course of a few years, will form a veritable forest." Richard Lydekker, a British paleontologist invited to La Plata in 1893 by museum director Francisco Pascasio Moreno to help classify a series of fossils, described the building:

> [H]aving passed the well-proportioned Grecian portico, the visitor […] finds himself in a rotunda, with a gallery and roof supported by two tiers of iron columns, and lighted above by a large skylight; its walls being decorated with frescos representing the scenery, native life, and some of the wonderful extinct mammals of Argentina. From this rotunda, which occupies the center of the front of the building, there diverge, on the ground floor, two galleries on opposite sides, which, after running a straight course for some distance, curve round so as to form a pair of apses at the two extremities, which are again connected by a straight gallery running parallel to the one in front, both back and front galleries being connected by cross-galleries and chambers, so that the whole edifice forms a continuous block of building. […] On the ground floor the central chambers are, in the main, devoted to anthropology and ethnology; while the galleries on the right of the entrance contain the geological and paleontological exhibits and those on the opposite side the animals of the present epoch.[48]

The first purpose-built natural history museum on the continent, the Museo de La Plata, constructed between 1884 and 1888, offered its visitors a synthetic and monumental experience of "organized walking through evolutionary time" and across national space (fig. 9).[49] Dedicated exclusively to the material belongings of "the great Argentine Republic," the museum "expresse[d] and illustrate[d] from the most remote times until today" the natural and human histories of the nation, as another foreign visitor put it.[50] Rather than in the state appropriation of amateur collections, as practiced by its Brazilian peers, the museum had its origin in a concerted effort of a new generation of Argentine naturalists. Foremost among these were Moreno himself, the paleontologist

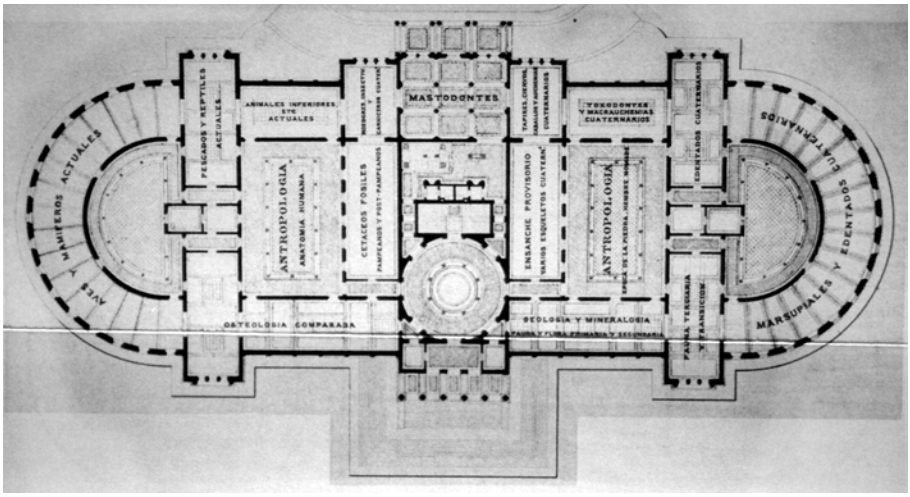

FIGURE 9. Friedrich Heynemann and Henrik Aberg, Plan of the ground floor of the La Plata Museum. Illustration from *Revista del Museo de La Plata* 1, no. 1 (1890–91). Museo de La Plata, La Plata, Argentina.

Florentino Ameghino and his brother Carlos, and Estanislao Zeballos, who in 1889 donated his collection of "some hundred indigenous skulls, ancient and modern, among them several renowned chiefs" to the La Plata museum.[51] The arrangement of rocks, fossils, animal and human skeletons, native crafts, paintings, sculptures, and photographs composed a monumental allegory of the state of 1880 that had become consolidated after the conquest of the former frontiers of Tierra Adentro. Visitors were to observe the gradual coming together of this totalizing image in an itinerary that advanced, in Moreno's words, "in an unbroken continuity from the most simple and primitive organism to the book that describes it."[52] Visitors advanced through museum space in an ascending spiral imitating the movement of evolutionary time. The narrative laid out by the museum, in fact, juxtaposed the theory of the evolution of species with the history of state formation and the biographies of the museum's own founders. It offered a new, ambitious, and unprecedented articulation of life, national being, and state power that addressed its visitors in the moral language of an initiation rite. Sarmiento, in his speech of 1885 on the occasion of the opening of the first galleries to the public, fully understood this ritual dimension of the display of prehistoric life:

I imagine one of these rural folk of old, born and raised not far from here where, not so long ago, his herds had been grazing, taken from his *estancia* like an Asian patriarch, invited by his sons [...] to attend [this] celebration. What a surprise if

they showed him, with an air of satisfaction, […] a city entirely of their own creation, whilst he was busy raising his cattle, and crowned by a treasure of riches like the Museum we inaugurate today. Nonetheless, this same surprise is on the face of everyone present, given our Spanish American, colonial, Argentine mode of being, since everything we see here is foreign to our habits and customs […] so vast that it has visibly been constructed not for the present, but for a coming generation.[53]

The museum, he concluded, in salvaging the vestiges of the archaic past of the Pampas, was at the same time a monumental commemoration of those who had only recently "raised her from her pristine state of barbarism." Safeguarding the relics of the past was a way of opening towards the future a space that had until recently dwelled outside time, in the monotonous present of "prehistory."

Let us follow Lydekker somewhat further on his "first walk through the seemingly endless galleries," during which, he confessed, "I was absolutely lost in astonishment and admiration."[54] The Corinthian columns of the portico, crowned by a bas-relief allegory of science in the form of an angel of knowledge, the work of Venetian sculptor Víctor del Pol, were joined on either side by rows of busts invoking an intellectual ancestry from Aristotle and Lucretius to Lamarck, Cuvier, Darwin, and Burmeister. On entering the building, the circular vestibule decorated with alfresco paintings of scenes from "the prehistoric life in the pampas" offered a synthetic visual prologue to the principal themes of the exhibition (fig. 10). On the first floor, the series continued with landscape vignettes of the cardinal points of the Republic, in a kind of incipient Argentine muralism that reiterated the centrality of Buenos Aires as the vantage point, the non-landscape from whose point of view nature became a visual object. Of the commissioned artists, several were fast acquiring a reputation as members of the so-called Generation of 1880, gaining recognition through the exhibitions of the Sociedad Auxiliadora de Bellas Artes, which eventually led to the foundation of a National Museum of Fine Arts in 1896. The visual idiom of their frescos looks forward, in its sombre, crepuscular tones, to the Pampean eulogies painted by Angel Della Valle or Eduardo Sívori in the following decade. If pictures such as *El rancho índio* (*The Indian Hut*) by Reynaldo Giúdice, *La caza del guanaco* (*The Guanaco Hunt*) by Emilio Speroni, and *La vuelta del malón* (*Return of the Raiding Party*) by José Bouchet—anticipating Della Valle's homologous work from 1896—depicted scenes of contemporary native culture, their display alongside Emilio Coutaret's *Smylodon* and E. Matzel's *Mastodon and Glyptodons* posited them within a prehistoric temporality, as survivors of an extinct age. The point was brought home by Giúdice's *Una caza prehistórica* (*A Prehistoric Hunt*) and Luis

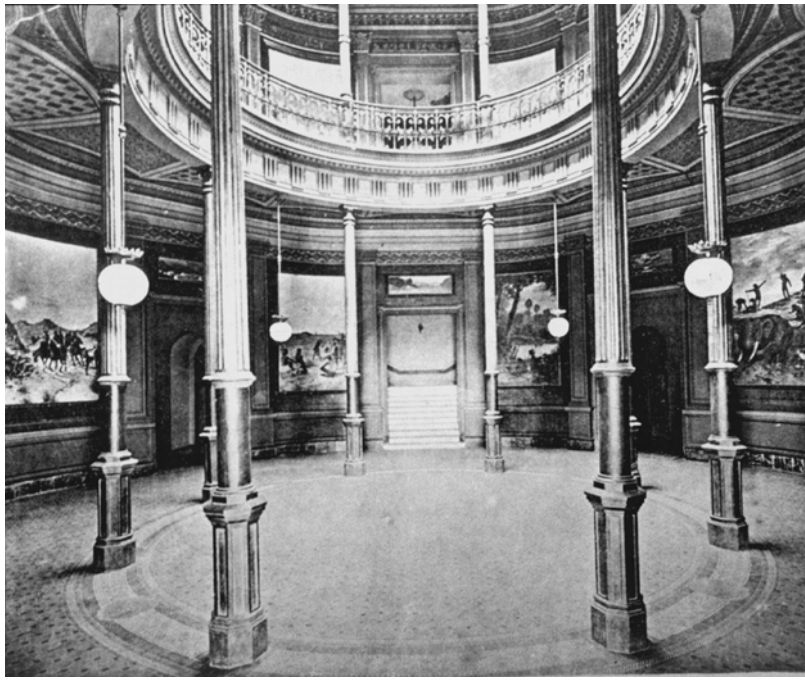

FIGURE 10. Anonymous, Museo de La Plata, entrance hall. Illustration (Lámina 3) from *Revista del Museo de La Plata* 1, no. 1 (1890–91). Museo de La Plata, La Plata, Argentina.

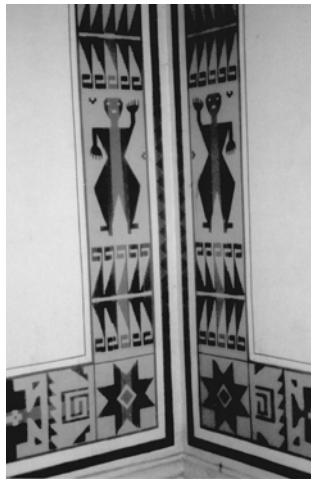

FIGURE 11. Decorative wall ornaments on the ground floor of the La Plata Museum. Photograph by the author.

de Servi's *Descuartizando un gliptodonte* (*Dismembering a Glyptodon*), visual anticipations of the museum's central hypothesis on the aboriginal origins of American man in the era of the great fossil mammals.

The walls and ceilings, meanwhile, were painted in decorative patterns that continued those of the front façade's lower frontispiece, running over into the rooms in the form of decorative bands that imitated glyphs and other Aztecan, Mayan, and Incaic visual motifs found at the temples of Palenque and Tihuanaco (fig. 11). The museum's decoration, then, suggested yet another layer of "evolutionary continuity," this time from the "origins of American man" in the Argentine South to the Amerindian civilizations of Peru and Mexico.[55] "I have

tried," Moreno explained in his guide to the exhibition, "to give the decoration an ancient American character, which would nonetheless match [the building's] Greek lines."[56] Together, then, the languages of decoration, architecture, and the visual arts manufactured a spatial envelope that inscribed the material objects in a cycle whose beginning and end was national being. Civilization, the exhibition suggested, had finally reconquered its own cradle.

"The building," Moreno had explained in 1886 in a letter to the Minister of Public Works,

> is of a new kind; in order to quickly understand the majestic harmony of life, it allows a grasp, in an uninterrupted continuity of perception, of everything from the first beings emerging from imponderable seeds to the human organism; the visitor will see there his entire genealogical tree. The ring of a physical perspective represented by the longitudinal galleries [...] is completed by the transversal galleries, destined to preserve the vestiges of South American moral evolution across the ages.[57]

The evolutionary sequence of the outer "biological ring," then, provided visitors with the key to read the "moral history of man," the chapters of which, from the skulls and skeletons of indigenous "ancestors" through native material culture to the collection of fine arts and the library, situated on the first floor, formed the inner patios. Nature's and man's evolution interrelated in museum space in a series of entries and exits, the one serving as a material and visual commentary on the other. The galleries of palaeontology and comparative anatomy featured huge numbers of mounted skeletons, especially large fossil and contemporary mammals such as glyptodons and whales, in a conscious attempt to impress visitors by the sheer scale and number of exhibits (figs. 12–13). This strategy of the spectacle was harshly criticized by overseas museologists such as Lydekker, for whom the museum's accumulation of vernacular species prevented it from acquiring an adequate variety of exhibits through exchanges with peer institutions abroad. Ameghino, the museum's principal collector of paleontological material, had resigned from his post as vice-director in 1887, disgusted by the "vulgar impostor" Moreno's policy of "mounting in costly assemblages enormous pieces that are not even worth throwing into the rubbish," a mercenary exploitation of science, he claimed, for sheer visual effect.[58] But if Moreno had readily sacrificed the principle of sparseness of late nineteenth-century museology for an aesthetic of the gigantic, seeking to overwhelm visitors without the mediation of labels and other pedagogical devices, this was because a museum, for him, was an instrument of wonder rather than of resonance, to quote Stephen Greenblatt's distinction between forms of display based on singularity or on contextualization.[59] The silent, frozen dance of skeletons aligned in the direction of

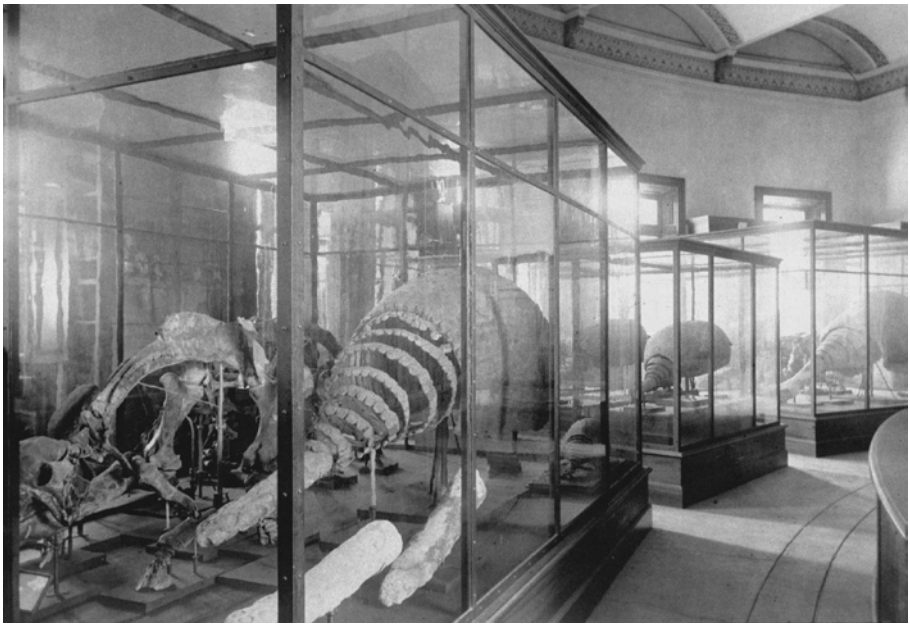

FIGURE 12. Anonymous, Museo de La Plata, glyptodons, room 3. Albumin print (1891). Archivo General de la Nación, Buenos Aires.

FIGURE 13. Anonymous, Museo de La Plata, section of comparative anatomy, room 15. Illustration (Lámina 6) from *Revista del Museo de La Plata* 1, no. 1 (1890–91). Museo de La Plata, La Plata, Argentina.

the visitor's itinerary—the spectral revival of dead bodies moving into a future that only held for them a fate of extinction—commanded a gaze of reverence and awe that would eventually turn into curiosity and, finally, knowledge.

The spatial arrangement of the museum—the unbroken evolutionary chain from the beginnings of life to the triumph of science—thus also provided a model of moral instruction: an evolution of consciousness that would gradually take shape in the process of walking through the exhibition and letting the initial bewilderment settle into a new form of certainty. Moreno always opposed the academicism of the Buenos Aires museum, and he resigned from his post as director when, in 1906, his own institution was incorporated into the new University of La Plata. For him, the museum form was a means to communicate with the illiterate, popular mind, producing consciousness in a passage through illusion. "The impression the common, little-instructed visitor begets from these objects," he explained in the first volume of the museum's journal,

> at least from those his understanding can process, is subsequently transmitted to his friends, encouraging them to see for themselves; then they interpret and comment on them, and from one commentary to the next the first impressions shed the false ideas in which they had been steeped before, and a conscious interest for the museum is born. [...] I have observed that many visitors to this establishment return frequently, some of them visiting it every Sunday to spend hours in the rooms already open to the public which, even so, are not the most interesting ones. To the uneducated folk the museum has become a pleasant meeting place; respectfully they observe its contents, enthuse over a hen with chicks, a wildcat catching a partridge, etc., and forget the tavern, which might lead them into crime. [...] Thus, slowly, the spirit of the people becomes cultivated by what they learn with their eyes.[60]

The museum's role as a moral antidote to lower-class vice (in particular, the vice of socialism) was a common trope in the writings of late nineteenth-century museum educators, with whom Moreno had become acquainted during his sojourn at Paris and London in 1880–81. However, his museum of Argentine evolution extended the exercise of public self-fashioning, a key element of the European museum's role as a mass educator, into a dramatic, ritual restaging of the founding scenes of the nation-state. The museum offered a way of experiencing once again the foundational experience of nationality: the emergence, in the "wilderness" on the borders of national territory, of a new, modern form of subjectivity associated with knowledge. Thus the Conquest of the Desert as the founding myth of the late nineteenth-century Argentine state was reimagined here not as the effect of military might but of the emergence, in the face of "wild," "prehistoric" nature, of modern, progressive reason. The viewers' gradual advance from bewilderment to

knowledge was therefore at the same time a formation of national consciousness, emulating at the level of the individual subject the spiritual foundation of the state form itself. The violence of conquest that had allowed the formation of the museum's collection was thus simultaneously disavowed and restaged in the encounter with a "dead" nature.

An assiduous contributor to newspapers and journals, Moreno never tired of presenting the museum's foundation and his own evolution from juvenile collector to museum scientist as a moral narrative of initiation that every single visitor to the Museo de La Plata could reenact in the dreamtime of his passage through the ages of Argentine evolution.[61] "Evolution," he wrote in his museum guide of 1890,

> is found in all forms of thought, and everything is linked with one another. [...] The origin of this Museum of La Plata was, among other objects of equal importance, an earthenware imitation of a mock-Chinese idol, a few little stones of sparkling colors, some "petrified seeds," actually the internal molds of Tertiary molluscs, and a conglomerate of shells I had classified, back then, as a "petrified tiger paw." These pieces, a quarter of a century later, are interpreted in their true value and occupy their place in our galleries, stripped of their primitive meaning, which nonetheless had given them their merit. Probably, without this unconscious imitation of the Tradescants by a fourteen-year-old, the Museum of La Plata would not exist, and when I think of its origins, I smile on hearing it being treated as a simple "bazaar."[62]

From the boy's fantasies of possessing the curious and exotic to the adult's establishment of the proper scale of values, then, collecting is for Moreno a form of moral education of a progressive subject, an experience of knowledge-gathering through material accumulation that can and must be repeated by museumgoers of the popular classes in their gradual passage from wonder to understanding. The museum visit as an experience of initiation is thus the equivalent of the naturalist's journey that had provided the space-time of passage between the child's curiosity cabinet and the adult's scientific museum. This liminal realm between the age of fantasy and the time of the real, Moreno suggests, can now be ritually revisited in the well-ordered space of the exhibition, its primal wilderness having been tamed into an order of classification. The museum visit as a performative ritual of spectatorship restages the state's foundational myth of the imposition of sovereignty through knowledge. As it had supposedly come to the state, this knowledge comes to the spectators in a way that is completely devoid of violence: the objects themselves speak to them their proper names. Yet if Moreno ironically acknowledges the origin of the museum in the narcissistic fantasy objects of preadolescence, one wonders to what extent the "pieces

interpreted in their true value" are not still inscribed—and in even more powerful ways—in the same logic of aggressive retention. In fact, if collecting, as I have argued in the introduction to this section, offers a fetishistic alternative to genital sexuality, it is striking that Moreno should advertise it as a model for individual and collective maturity. Perhaps the continuous references to the infant collector are, rather, a way of preserving the innocence of natural history, disavowing its complicity with conquering violence and capitalist accumulation, a move that is characteristic of the attitude Mary Louise Pratt has aptly called "anti-conquest."[63]

The beginnings of the La Plata Museum hark back to the "Museo Moreno" young Francisco had begun to assemble in 1871, when he was sent to stay with relatives in the south of Buenos Aires province during the yellow fever epidemic. Installed in a small garden pavilion on his father's estate, the museum featured samples of fossils and indigenous human skulls, a description of which Moreno, with Burmeister's encouragement, sent to Paul Broca in 1874. Broca, a leading figure in the physical anthropology of the time, published the piece in his prestigious *Révue d' Anthropologie*, highlighting the importance of Moreno's craniological findings for the periodization of human life on the American continent. Moreno's collection of Amerindian skulls attracted the attention of Europe's leading osteologists (Broca, Quatrefages, and Virchow, among others), as they seemed to disprove the position of the North American school, captained by George Samuel Morton, of multiple human types in prehistoric America, which led the Americans to cast doubt on the unity of the human species. Moreno's skulls, by contrast, showed marked similarities with the fossil findings at Neanderthal, discovered in 1857 but not definitely recognized as a distinctive human type until the late 1860s, and at Cro-Magnon (1868). Thus, they considerably strengthened the evidence in favor of a single "prehistoric man" in general and in America in particular, where human life had been assumed to be of a much more recent date.[64]

Following several journeys to Patagonia between 1873 and 1877, during which Moreno succeeded, for the first time, in reaching Lake Nahuel Huapí and the sources of the Santa Cruz River from the Atlantic, he offered his collection to the province of Buenos Aires in return for a lifelong appointment as director of the Anthropological and Archaeological Museum to be founded by the province. His proposal having been accepted, the museum opened in August 1878 in provisional quarters on the fourth floor of Buenos Aires's Teatro Colón with a public lecture by Moreno on "The Study of South American Man." Following the federalization of the capital city in 1880, controversy ensued over the separation of provincial from state institutions. A group of young naturalists,

including Moreno's cousin Eduardo Holmberg, future director of Buenos Aires's zoological garden, and Florentino Ameghino, on return from Paris where he had exhibited his own collection of Pampean fossils at the Exhibition of 1878 and published his book *La antigüedad del hombre en El Plata*, pushed for the nationalization of Moreno's museum, to the detriment of the old Museo Público, which would pass to the province. Despite receiving support from congress and senate in 1881, Moreno's project was shelved by the federal government, and he eventually approached the governor of Buenos Aires province, Carlos D'Amico, who in 1884 decreed the construction of a new museum at La Plata, the recently founded provincial capital.

In addition to its enthusiastic embrace of an evolutionary model of nature and a material pedagogy directed at the popular sectors, the Museo de La Plata also diverged from Burmeister's museum in the national capital in its emphasis on human life within the wider frame of natural history, and on the recently conquered "deserts" of the south as its principal reservoir of collectibles. Sarmiento, in a piece written on the occasion of the museum's first inauguration at the Teatro Colón (at a time when he himself was busy working on *Conflict and Harmonies of the Races in America*) praised Moreno as a youthful Virgil guiding the elderly polymath through the inferno of Argentina's barbarian prehistory. Moreno, Sarmiento asserted, had crafted a new kind of poetry through the alignment of skulls on the museum's shelves: "What a history do these skulls tell us! Every group represents a human age. The form of the skull is a chapter in a narrative, counted not in centuries but in millennia! […] And Patagonia turns out to be the Ultima Thule sung by the poets, which geographers have so long failed to locate […], since every finding had always pointed to another one still further in the past."[65]

Moreno's frantic accumulation of human skulls and skeletons articulated the violent imposition of a state biopolitics over the formerly autonomous frontier regions with a scientific mind-set in which the outer margins of the imperial order were supposed to hold the key to unlock the mysterious origins of Man and indeed of the Earth. Darwin, during the voyage of the *Beagle*, had already called attention to Patagonia as "a privileged reservoir for the advancement of science" where "living fossils" could still be found among its native inhabitants, human and nonhuman. Accompanying the advance of "civilization," the museum was called upon to perform an act of salvage, of preservation of the body parts left behind by the massacres attributed by scientific knowledge to the fatal course of the struggle for life. "American man," Moreno explained, "is rapidly becoming extinct, and soon we will only be able with great difficulty to decipher the secrets our predecessors, on vanishing, took along with them." Hence, he concluded,

"we need to study the tribes still living in a state of savagery, so that, comparing them with the vestiges [of prehistoric man], we will encounter infinite analogies that will permit us to reconstruct the history of our fossil grandfathers. [...] [A]n immense museum exists in the surface layers of the national soil: let us bring it to light."[66]

Precisely the violent elimination of coevalness, produces the evidence that allows the construction of a mythical genealogy, inscribing the "extinction" of the native inhabitants that is the Argentine state's genocidal condition of sovereignty within evolution's serialization of discontinuities: that is, at the core of national being. In the time of evolution, continuity of descent is set equivalent with the violent erasure of the previous echelon by the subsequent one: discontinuity becomes the only true continuity. Particularly eloquent in this regard is the story of Inacayal, a Tehuelche chief "rescued" by Moreno in 1884, along with several members of his clan, from the prison camp in the Tigre delta where they had been deported after General Roca's Desert Campaign. Lodged at the museum, where staff unsuccessfully encouraged them to help prepare exhibits and produce "ethnographic materials," the natives were submitted to anthropometric measurements and photographic sessions, so as to collect the anatomical evidence of their evolutionary proximity to "prehistoric man." On entering the museum, Inacayal, whose dwellings Moreno had visited only a few years earlier (describing in his travel narrative the negotiations he had maintained with him over peace treaties and food rations) had become a specimen, a living sample of the *hombre fósil* (fossil man). Upon his death in 1888, his skeleton, brain, scalp, and death mask were preserved and put on display alongside the other exhibits of "indigenous anatomy" whose assembly he had witnessed in his final years.[67] It is precisely this hijacking of the other's life into the space of the museum—the transformation of his slow suicide, this ultimate act of resistance, into a case study of extinction—that allows the completion of the evolutionary series through the verification of discontinuity. The vanishing of the last representative of an archaic phase of man's evolution in turn posited the emergent Argentine nation as its legitimate successor, to the extent that it became conscious of this "prehistoric" ancestry, thanks to science's labor of salvage and preservation. Both physically and symbolically, the gallery of anthropological anatomy constituted the core of the museum: at once mausoleum and mass grave, containing "almost a thousand skulls and eighty skeletons [...] from the witnesses of the ice age until the recently defeated Indian," this crypt of science was the site of the emergence of national being from a space of death.[68]

The arrangement of exhibits, as shown in the first issue of the museum's journal (fig. 14), is centered on the large two-story showcase of mounted skel-

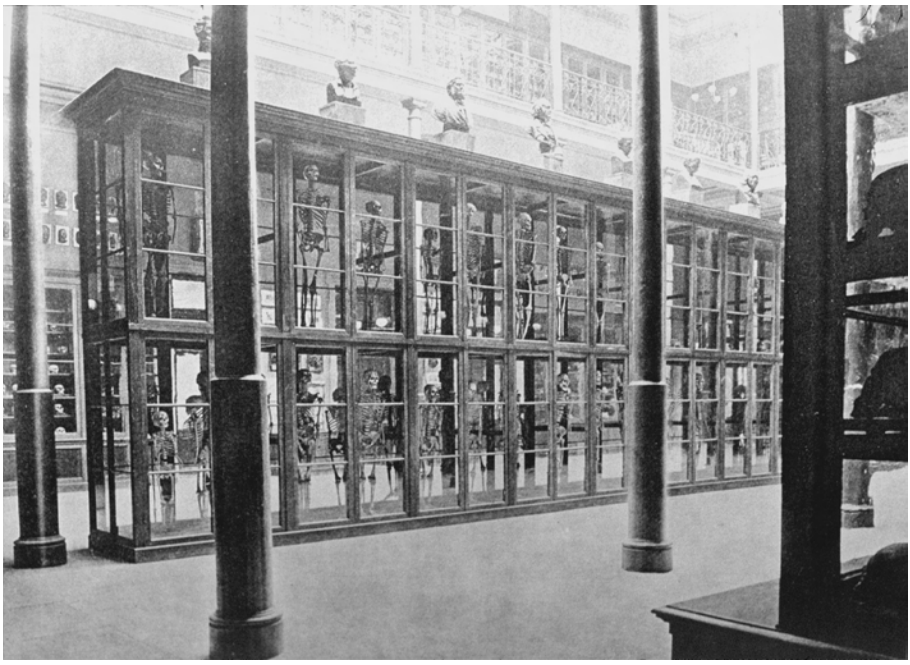

FIGURE 14. Anonymous, Museo de La Plata, anthropological section. Illustration (Lámina 7) from *Revista del Museo de La Plata* 1, no. 1 (1890–91). Museo de La Plata, La Plata, Argentina.

etons, literally resuscitated from their graves to enter the purgatory of a spectral afterlife. They are surrounded, on the ground floor, by the collection of skulls on top of which, hung on the wall like hunting trophies, are exhibited the death masks of the natives who died in captivity at the museum. On the upper gallery, indigenous material culture, including a large number of funerary objects, completes the display with the "vestiges of another age." Some of these had, in fact, been produced in parallel to the museum's own construction by the native detainees: a "prehistoric" production that could be observed, as in a time machine, in the glass box of museum space. Yet the true symbolic center of the room, at once the source and site of confluence of meaning, are the busts of the pioneers of anthropology—Blumenbach, Broca, Virchow—placed on top of the showcase, literally dominating the scene. In contrast to the indigenous death masks facing them from the walls, they bear no indexical trace of a vanished body; rather, they stand for the self-transcending eternity of "spirit." Cast in stone, they incarnate history's triumph over prehistory's space of death, transformed into visual order by the supreme force of thought rather than murderous violence. In fact, though, this space of death at the core of the museum display is at once a condensation of the violence of collecting and the point from which it explodes into the

entire space of the exhibition. As it disavows violence, the museum also works violence on the gaze itself, making it complicit with what it beholds and reminding us that spectatorship and objectness are questions of life and death. It not only plays on the violence of the radical otherness (and objectness) that it places before its visitors' eyes, but also on the violence of exhibiting itself: the superior violence of the museum apparatus that has contained the excess of otherness in its image of order. However, as an external frame of the performance of seeing (of seeing things as objects), this apparatus also addresses its visitors as submitted to its gaze and thus as potentially in the position of absolute exposure, of "bare life," in which they contemplate the collection of corpses. This is the silent threat implied in the museum's visual pedagogy, the fact that, as one is turned into an eye that beholds the object world from a position of scopic authority, one nonetheless never ceases to be a body that might itself become the object of an immaterial, disembodied gaze. It is this threat implied in the way the museum of nature addresses the gaze that I shall explore further in the following chapter, the way the power and authority of the museum are continuously based on the possibility that it might be a trap.