New Creatures Made Known

(Re)discovering the Extinct King Island Emu

Stephanie Pfennigwerth

BA (Communications) (Hons) University of Technology, Sydney

B Antarctic Studies (Hons) University of Tasmania

Submitted in fulfilment of the requirements for the Degree of Master of Arts

University of Tasmania

April 2010

Statement of Originality

This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgment is made in the text of thesis, nor does the thesis contain any material that infringes copyright.

Stephanie Pfennigwerth 12 April 2010

Stephanie Pfennigwerth Date

Authority of Access

This thesis may be made available for loan. Copying of any part of this thesis is prohibited for two years from the date this statement was signed; after that time limited copying is permitted in accordance with the *Copyright Act 1968*.

Stephanie Pfennigwerth 12 April 2010

Stephanie Pfennigwerth Date

Abstract

Nicolas Baudin's 1801-1804 voyage of discovery to the southern lands was the only scientific expedition to collect specimens of the dwarf emu *Dromaius ater*, endemic to King Island, Bass Strait, Australia. The expedition's naturalist, François Péron, documented the only detailed description of the life history of the birds (translated here in full for the first time), and the artist Charles-Alexandre Lesueur made the only visual record of a living bird. But the King Island emu's textual, taxonomic and even taxidermic representations were confused with other species and some of their remains, scattered across Europe, are elusive. A bird collected as part of one of the most ambitious ordering enterprises in early nineteenth-century science has been more or less forgotten.

This thesis recovers the natural and unnatural history of the King Island emu, a species extinct in the wild since 1805. Placing the birds at the centre of the narrative, it traces their first encounters with Europeans to their last (and lasting) confinement in the menagerie and Muséum. This innovative approach is in keeping with Animal Studies, an interdisciplinary field committed to examining the relationships between human and non-human species. In recounting the birds' story, the thesis discusses the general pattern of contemporaneous scientific collecting and some of the paradoxes of the nature and history of natural history: the link between discovery and demise. Analysing a wide variety of textual records, it demonstrates how competing principles of organisation in Republican natural science, and scientific expeditions, influenced attitudes toward and understandings of the King Island emu, with material consequences for their conservation. The thesis also reveals how visual representations further contributed, albeit unwittingly, to the species' epistemological and literal extinction.

While such evidence does much to expose human attitudes to animals, it also shows the ways in which animal "specimens," far from being inert objects of subsidiary influence, actually played a major role in human endeavours. Proof of the emus' life experiences, written on and in their physical remains, likewise provides insight into animal realities only hinted at in the human documents. The thesis thus uncovers a

rich seam of alternative experience and interpretation of human and animal heritage while suggesting a rethinking of our taken-for-granted place in the hierarchy of nature.

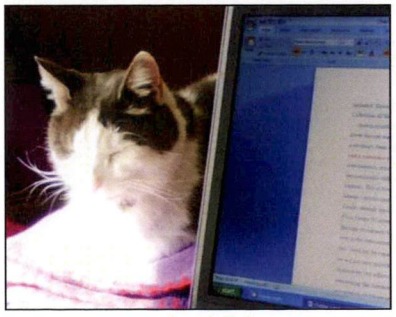
Acknowledgments

"We see distinctly only what we know thoroughly," wrote the great natural history artist Joseph Wolf. This thesis thrived thanks to the insight of my ever-encouraging and enthusiastic supervisors, Dr Elizabeth Leane, Prof Helen Tiffin and Prof Ralph Crane. Their confidence gave me the best gift a researcher could ever have: the freedom to pursue my project wherever it took me.

I am also grateful for the generosity of A/Profs Jean Fornasiero and John West-Sooby from the University of Adelaide, who commented on sections of the draft and provided unpublished documents that I would have otherwise been unable to access.

This work was similarly bolstered by the interest of numerous museum professionals. Kathryn Medlock (Tasmanian Museum and Art Gallery) and Tammy Gordon (Queen Victoria Museum and Art Gallery) deserve special thanks. Jacques Cuisin (Muséum national d'Histoire naturelle) and Dr Robert Prŷs-Jones, Douglas Russell, Mark Adams, Katrina Cook and Alison Harding (Natural History Museum at Tring) treated me to two of the most fascinating days of my life, while Alice Cibois (Muséum d'Histoire naturelle, Genève) was patient with my questions, and my French.

Back in Australia, Dr Sanja van Huet, Dr Carol Freeman and Tim Low generously offered me their own research and writing, and Dr Agnès Hafez-Ergaut and Dr Adam Russell helped fine-tune my translations. Christine Leane proofread my thesis while I was in the throes of a house move, a kindness for which I cannot thank her enough. My postgraduate colleagues were a font of friendship, humour and support while on the home front—and as befitting an animal history—I received able assistance from Harvey. His interest in birds, extinct or extant, is as keen as my own.



Contents

Introduction

Little more has ever been recorded about the King Island emu,
apart from the fundamental fact that it has, regrettably,
long been extinct.

R. H. Hooper, *The King Island Story* (24)

One of the most precious items in the collection of the Tasmanian Museum and Art Gallery (TMAG) is a delicate, double-shafted feather. Placed on a satin pillow, overlaid with a plastic sheet, and locked in a case of glass and oak, it is treated with a reverence not extended to other specimens. This one feather represents a species. It is considered too valuable to be put on public display. TMAG and the Queen Victoria Museum and Art Gallery in Launceston have bone and shell fragments, the Museum of Victoria has whole eggs, and subfossilised remains are occasionally blown from sand dunes, but this one feather is the most visually recognisable evidence we have, in all of Australia, of the King Island emu (*Dromaius ater*).

The feather was a gift from the Muséum national d'Histoire naturelle in Paris. The owner of the feather was captured during Nicolas Baudin's voyage of discovery. The owner of the owner of the feather was at one time Napoléon Bonaparte's consort, the Empress Joséphine. The rest of the feathers—the bird's mounted skin—are held in a Paris vault. Her skeleton and organs are lost; her story has been similarly eviscerated. This bird and her kind have for almost two centuries been taxonomically tangled with the Australian ("mainland") emu (*Dromaius novaehollandiae*), the Kangaroo Island emu (*Dromaius baudinianus*), the Tasmanian emu (*Dromaius novaehollandiae diemenensis*) and even the occasional cassowary. Basic facts are still confused; for example, the TMAG publication *Collections* accompanies a photograph of the plume with text stating the King Island emu "was extinct before 1860" (196). But this (perhaps deliberate) vagueness is in fact revealing: it was the Tasmanian emu who may have been killed off by then. The Tasmanian Government's 2003 report on the State of the Environment, which declares that the Tasmanian emu "was considered

extinct by 1850," neglects to mention the King Island emu at all (n. pag.). The King Island emu's biological and historical identity are so confused, if not denied, that the University of Adelaide's Ecology and Environmental Biology unit reports that it holds two King Island emu bones, one of which is labelled "not King Island" (Austin). While the fate of the thylacine looms large in the Tasmanian public consciousness, the strange dwarf emu endemic to Tasmania's King Island, extinct in the wild since 1805, is almost unknown.

This thesis traces the natural and cultural history of the King Island emu, a history in which pieces are missing, names have changed, and ironies and incongruities are commonplace. Perhaps the greatest irony—and thus the focus of this thesis—lies in the activity and the aftermath of the Baudin expedition of 1800-04. Nicolas Baudin and the expedition naturalist, François Péron, collected emu specimens during one of the most ambitious ordering enterprises in nineteenth-century science. Given the significance of such animals in the rationale, conduct and success of the expedition, the paucity of material written about them is both surprising and unfortunate. In the case of the King Island emu, this paucity adds insult to the total and permanent injury of extinction.

By contrast, there is a wealth of research on the political theories and practical realities of the Baudin expedition, with a particular focus on Baudin's posthumous vilification by Péron.[1] While these works range from descriptive narratives to sustained analysis, any discussion of animals for the most part extends only to the

[1] Ernest Scott's 1911 publication *Terre Napoléon: A History of French Explorations and Projects in Australia* was perhaps the first English-language publication to question the validity of Péron's accounts. The 1974 publication of Christine Cornell's translation of *The Journal of Post Captain Nicolas Baudin, Commander-in-Chief of the Corvettes* Géographe *and* Naturaliste further revealed the character and accomplishments of this relatively little-known explorer, and gave rise to Frank Horner's masterful *The French Reconnaissance: Baudin in Australia 1801-1803* (1987). The bicentenary of Baudin's meeting with the far more famous Matthew Flinders in Encounter Bay, South Australia, in 1802, encouraged academic and popular works discussing the uncanny parallels between the two explorers, including Anthony Brown's *Ill-Starred Captains* (2000); Robert Tiley's *Australian Navigators: Picking up Shells and Catching Butterflies in an Age of Revolution* (2002); *Alas, for the Pelicans! Flinders, Baudin and Beyond*, edited by Anne Chittleborough et al (2002); and Jean Fornasiero et al's *Encountering Terre Australis: The Australian Voyages of Nicolas Baudin and Matthew Flinders* (2004). In 2004 the *Australian Journal of French Studies* published a supplement dedicated entirely to papers discussing various aspects of the Baudin expedition, while the publication of Cornell's translations of Péron's official account, *Voyage of Discovery of the Southern Lands* (Book IV in 2003 and Books I-III in 2006) was followed by Edward Duyker's *François Péron: An Impetuous Life* (2006) and Danielle Clode's *Voyage to the South Seas: In Search of Terres Australes* (2007).

detailing of their study and collection in fulfilment of expedition objectives. It is almost as though the animals themselves, including the dwarf emu from King Island, have been crushed under the weight of all these publications. Even zoological artworks by expedition artists Charles-Alexandre Lesueur and Nicolas Petit[2] typically say more about the expedition than the animals. However, there are two notable exceptions: Jean Fornasiero et al's *Encountering Terre Australis: The Australian Voyages of Nicolas Baudin and Matthew Flinders* (2004) and Christian Jouanin's "Nicolas Baudin chargé de réunir une collection pour la future Impératrice Joséphine" in the *Australian Journal of French Studies* (2004). Through closer analysis of Baudin's instructions and *journal de mer*, these authors begin to hint at the other kind of influence that animals, including the emus, may have exerted on the expedition. This thesis aims to build on these foundations while simultaneously re-examining them using an alternative and innovative focus: keeping the animal central to the narrative.

****

Since the collection of animals was the *raison d'être* of the Baudin expedition and its aftermath, the expedition in general and the story of the King Island emu in particular are well suited to scrutiny through the lens of Animal Studies. An interdisciplinary field of scholarship encompassing the humanities, social sciences and life sciences, Animal Studies "is primarily devoted to examining, understanding, and critically evaluating the complex and multidimensional relationships between humans and other animals" (Shapiro 5) and "the attitudes that shape and constrain those relationships" (Shapiro 13). Acknowledging that human perceptions of animals "are often prejudiced and anthropocentric, consisting of layers of ideological and linguistic biases that only serve human interests" (Shapiro 1), Animal Studies scholars examine and expose social constructions of animals to reveal animals as such: "as they live and experience the world independently of our constructions of them" (Shapiro 9) or indeed in many cases participate in outcomes within the human sphere. For example,

[2] These artworks are lavishly reproduced in *Baudin in Australian Waters: The Artwork of the French Voyage of Discovery to the Southern Lands 1800–1804* (1988), edited by Jacqueline Bonnemains et al; *Les Velins de Charles-Alexandre Lesueur* (1996), also edited by Bonnemains; Susan Hunt and Paul Carter's *Terre Napoléon: Australia Through French Eyes 1800-1804* (1999) and Sarah Thomas' *The Encounter, 1802: Art of the Flinders and Baudin Voyages* (2002).

unlike "pure" biological science, which abstracts and objectifies animals within an intellectual, political and cultural context, an Animal Studies scholar might consider animals in a way traditionally reserved for humans: i.e. as individual subjects. Moreover, by demonstrating how perceptions such as humans' dominion over other animals are ideological rather than natural, such interrogations can contribute to the reconceptualisation of what it means to be human, and re-situate humans within ecological systems. It can also re-situate animals in ethical terms (Ecological Humanities n. pag.), for linked to such interrogations is the revelation of how human perceptions and practices have had often devastating consequences for animal welfare and well-being. Human history is, among other things, the history of animal extinction.

However, the difficulty of writing about animals as subjects, particularly when writing the history of animals, is that traditional history is based on analyses of texts written (and spoken) by humans. How can one gain access to a subject whose "language" is unavailable to us and who is distanced from us by time, space and species? Since this thesis analyses ship's logs, colonial newspapers, auction catalogues, museum accession registers, ornithological literature, artwork and taxidermy specimens, it would perhaps be more accurate to describe it as a history of human attitudes to, and representations of, the King Island emu. Such analysis is not without merit: in showing how far animals such as the emu are central to what are apparently human achievements, it forces a rethinking of our past and our place in the world; the extent to which "humans [are] embedded within and reliant upon the natural order" (Fudge 15).

Paradoxically, placing the emu in the centre of what is ostensibly a human narrative also assists in uncovering the birds as such. Their importance to the Baudin expedition, for example, meant that their experiences at sea leveraged a surprising amount of influence; they were, in some small way, agents of change. Furthermore, evidence of these life experiences, written on and in their physical remains, provides insight into animal realities only hinted at in the human documents. This approach is in keeping with the practice of "history from below", which acknowledges the lives and roles of human groups previously thought of as insignificant, powerless and

without their own textual histories—workers, women, homosexuals, ethnic minorities, the poor, the enslaved, the disabled. Jim Sharpe discusses how historians working from below have

> shown how the historical imagination can be applied not only to forming new conceptualizations of the subject-matter of history, but also asking new questions of documents and doing different things with them.... the imaginative use of source materials can illuminate many areas of history that might otherwise have been thought of as doomed to remain in darkness. (36)

Exploring the lives and experiences of a group usually considered the most powerless of all—animals—reveals a rich seam of alternative experience and thus interpretation, helping to not only bridge distances in space and time—the role of history—but between species, which is the role of animal history, and Animal Studies.

This thesis continues with three chapters and a conclusion that not only broadly recount the King Island emus' own story but also the general pattern of collecting activity during the late eighteenth and early nineteenth centuries. It identifies and discusses several ironies and paradoxes in the nature and history of natural history: the links between discovery and demise; exploration and extinction; intimacy and vandalism.[3] In Chapter One, "Finding," I begin my search for the emu by interrogating the culture of collecting, especially European scientific collecting. I demonstrate the extent to which the collection and possession of animals was (and is still) a source of human power even though, as demonstrated by the loss of a rare specimen, this power can be fragile and fleeting. Chapter Two, "Forgetting," further demonstrates "the centrality of the animal in human understanding of the self" (Fudge 10) by detailing the King Island emus' encounter with the Baudin expedition and their journey to France and the Muséum. I examine how the hierarchical ordering of animals in terms of their cultural value, combined with the expedition's dual scientific objectives, contributed to the species' textual and literal extinction. I also question the received history of the expedition by exploring why the animals' contribution to the

[3] I am conscious that with its echoes of some aspects of the nineteenth-century appropriation and assessment of specimens that I criticise, my study may itself be regarded as contributing yet another irony—what is a thesis but the collection and classification (and thus the interpretation) of facts?

expedition has been hitherto relatively unacknowledged. Chapter Three, "Recollecting," discusses the emus' treatment by artists, taxonomists and curators struggling to retrieve and reassemble knowledge of a species that existed just beyond memory. I show that rather than advancing understandings of the species, the bickering about provenance, taxonomy and nomenclature not only exacerbated confusion about the emus' fate but also revealed how and why natural history is sometimes actually practised. The Conclusion, "Release," documents my own visit to the King Island emus in the Muséum national d'Histoire naturelle in Paris. Even here, in a memorial to collecting as well as to the collected, these lost birds still assert their own quiet power.

Chapter 1

Finding

> [A]nimals ... are the objects of our ever-extending knowledge. What we know about them is an index of our power, and thus an index of what separates us from them. The more we know, the further away they are.
>
> John Berger, "Why Look at Animals?" (14)

On 24 March 1804 a curious cargo arrived in Lorient, southern Brittany. Two lions, four panthers, a civet, a gnu, two mongooses, a jackal, a hyena, two deer, five lemurs, two baboons, two porcupines, a zebra, an ostrich, two kangaroos, a cassowary, two rails, thirty-two tortoises and assorted parrots and frogs crammed the corvette *Le Géographe*, the principal ship of Post-Captain Nicolas Baudin's voyage of discovery to Australia (Horner 328). Among this menagerie was a bird never before seen in Europe, and seldom seen again: a dwarf emu from King Island, Bass Strait, Australia.

At least seventy live animals were landed at Lorient, including species from Australia, Île de France (Mauritius) and South Africa.[4] Under the direction of a naval clerk, the animals' cages were mounted on nine horse-drawn carriages and escorted by four gendarmes for the five-week journey to Paris. The procession also included almost three hundred living plants and some two hundred crates of dead plant and animal specimens (Horner 328; Burkhardt, "Unpacking Baudin" 506) that, upon their arrival in Paris, received a rapturous response from the professors at the Muséum national d'Histoire naturelle. Celebrated biologist Jean-Baptiste Lamarck declared that the invertebrate collection alone included 1,035 species of insect, 112 species of crustacean and 36 species of arachnid, of which some eight hundred species were new to science (qtd. in Burkhardt, "Unpacking Baudin" 508). Botanist and Muséum

[4] Expedition naturalist François Péron listed seventy-nine live animals on board *Le Géographe*, but a manifest of those disembarked, compiled on the same day (4 germinal an XII), lists seventy-three (Burkhardt, "Unpacking Baudin" 502 fn. 12). Péron later wrote that "one hundred or so live animals of species either rare or completely new" were disembarked from *Le Géographe* (*Voyage* II: 265). As I will demonstrate, good record-keeping was not always apparent in the aftermath of the expedition.

Director Antoine-Laurent de Jussieu wrote "la collection zoologique du Muséum est enrichie de 2542 espèces nouvelles" including 880 insect species, 134 crustaceans and arachnids, 32 mammals, 144 birds, 26 reptiles, 185 fishes, 241 echinoderms, 640 testacea, 28 worms, 191 zoophytes and 41 mysterious "quadrupèdes et bipèdes ovipares" (Jussieu 10-11). Given the enormity of the expedition's haul, it is not surprising the learned professors lost count. By June 1806 they were forced to resort to rounded figures; a report penned by a Commission of the Institut de France and delivered at the Palais des Sciences et des Artes by its Chairman, eminent zoologist and anatomist Georges Cuvier, stated that the

> extent and importance [of the zoological collection has] become more obvious with each passing day. It contains more than *one hundred thousand specimens* [emphasis added] of creatures large and small. It has already supplied several important genera; many more remain to be revealed, and, according to the report from the professors at the Muséum, the new species number more than two thousand five hundred. (qtd. in Péron, *Voyage* I: lvi)

Cuvier made special note of the "zeal and dedication" of expedition naturalist François Péron and the "skilful and tireless" artist Charles-Alexandre Lesueur, whose 1,500 drawings and paintings had contributed to the expedition's "dazzling successes" (qtd. in Péron, *Voyage* I: lv, lxi-lxii). Lesueur was also a collector and taxidermist who had already assisted Péron "to arrange safely and methodically more than 40,000 creatures of every species" (Péron, *Voyage* I: 329) into thirty-three crates for the return voyage of *Le Naturaliste*, *Le Géographe*'s consort, in November 1802.[5] Péron boasted that these collections were "the biggest and richest that any traveller had ever sent to Europe" (*Voyage* I: 329), but they were obviously surpassed by this second haul.

[5] Commanded by Emmanuel Hamelin, *Le Naturaliste* returned to France on 7 June 1803 loaded with sick and "unfit" humans as well as the preserved specimens and one live emu (the species of mainland Australia, *Dromaius novaehollandiae*), one black swan, six other birds, three wombats, two dingoes, two Indian gazelles, a four-horned ram, and a long-necked tortoise (Horner 251-52, 358).

Given the deluge of congratulations poured on the men it is surprising that not more was made of the animals. Were they not the *raison d'être* for the voyage? Back at the Palais, Cuvier's speech was revealing. He continued:

> If one now recalls that Cook's second voyage—thus far the most brilliant of this kind—nevertheless did not produce more than two hundred and fifty new species, and that the combined voyages of Carteret, Wallis, Furneaux, Meares and Vancouver himself did not produce as great a number of them; if one observes that the same holds true for all the French expeditions, one must draw the conclusion that MM. Peron and Lesueur will, on their own, have made known more new creatures than all recent travelling naturalists put together....
>
> We are not afraid to declare that such work is infinitely superior to everything of a similar nature that has thus far been performed on expeditions of discovery, whether French or foreign. (qtd. in Péron, *Voyage* I: lvi-lix)

Such responses suggest that it was the prestige linked to the quantity of animals collected that was of greater importance to the professors than the opportunity to engage with the animals themselves.

This chapter will introduce the motivations for the Baudin expedition and discuss how the theories and practices enacted by nineteenth-century scientific collecting impacted on the constituents of the collections—the animals—as well as those who collected them. This discussion will mark the beginning of an exploration of the historical record of the King Island emu—not just their natural history but what Nigel Rothfels calls an "*un*natural history," their truncated life and prolonged afterlife in the human realm of ships' logs, books and museums (*Savages* 6).[6] The discussion will also highlight one of the many ironies to be encountered en route: that while the discovery of the species was instrumental in its disappearance, the circumstances of its

[6] Throughout this thesis I will use sex-specific pronouns for animals and humans wherever possible. Where the sex of individual animals is unknown, I have surmised the sex or used the unspecific term "their."

disappearance are now instrumental in the emu's rediscovery. Since humans collect in order to *re*collect, this chapter will begin to recover and reassemble fragments lost long ago but which now, with the help (or hindrance) of human and animal archives, can begin to tell a new and different story.

The culture of collections

Equipped with a coterie of *savants*, Nicolas Baudin's expedition to Australia was sponsored by the Institut de France and endorsed by Napoléon Bonaparte. Although the strategic motives of the expedition are still the subject of speculation (see Horner 55–56),[7] the expedition's primary aim was the expansion of intellectual territory. "The real conquests, the only ones that do not cause regret, are those that are won over ignorance," Napoléon wrote to the Institut National (as it was then known) after his election to its Première Classe (Sciences Mathématiques et Physiques) in December 1797: "The most honourable occupation and the most useful to nations is to contribute to the extension of human ideas" (qtd. in Crosland 13). Accordingly, Baudin's itinerary stressed the opportunities "for research of all kinds which can combine to perfect the natural sciences and increase the mass of human knowledge," particularly "the collecting of [products] which appear capable of being preserved" (Fleurieu qtd. in Baudin 1).

'Preserve' (in French, *préserver, conserver*) was an interesting choice of word. Like many commonly used words it is not as straightforward as it seems. Collectors ostensibly preserve objects to *save* them, so that they can be studied in another moment or context, or to *protect* or rescue them from damage, past or predicted. Inherent in this concept is the manipulation of time and space. When a collector preserves an object they stop the time in which the object existed, while simultaneously (and paradoxically) bringing the past a little closer to the present and ensuring the object's perpetuity. As well as bridging temporal distances, preserved objects bridge historical, cultural, psychological, physical and, in the case of religious relics, metaphysical distances. "[I]t is only really in one's study (*cabinet*) that one can roam freely throughout the universe," wrote Cuvier:

[7] Baudin's itinerary included a demand for "the reconnaissance and examination" of southern Tasmania "to ascertain whether or not the English have established a settlement there" (Fleurieu qtd. in Baudin 2).

> If a sedentary naturalist does not see nature in action, he can yet survey all her products spread before him. He can compare them with each other as often as is necessary to reach reliable conclusions.... He can bring together the relevant facts from anywhere he needs to. (qtd. in Outram, "New Spaces" 260-61)[8]

John Elsner and Roger Cardinal suggest that the history of collecting is "the narrative of how human beings have striven to accommodate, to appropriate and to extend the taxonomies and systems of knowledge they have inherited" (2). Scientific collecting during the Enlightenment perhaps epitomises this quest, ostensibly conducted to subject the world's biota to a rational, systematic, unambiguous and complete inventory via demarcation into numerous nested hierarchies: Kingdom, Phylum, Class, Order, Family, Genus, Species. Such collections provided an empirical foundation on which scientists such as Cuvier compared anatomy, built and revised theories, and revealed linkages between lifeforms. By calming the chaos of natural history "into a law-abiding discipline" (Asma 135) collectors carved up reality, imposed meaning and, in doing so, endowed themselves with intellectual and aesthetic authority, particularly if they had the "complete set."

Thus through collections humans expand their own experience, living through the items they collect, and even (if the collection remains intact) continuing to exist after their own death. Collections are integral to identity. And herein perhaps lies the core meaning of collecting, even that executed with the most noble of intentions. Within the definition of *preserve* lurk other definitions: to keep, to guard. An object cannot be stockpiled, named and controlled until it is *possessed*, and with possession comes power. Conversely, with power comes possessions: the menageries, treasure troves and *wunderkammer* hoarded by princes and popes through the ages attest not only to the prestige of possessing objects shared by few others but also to the authority to acquire more. This authority of ownership is enhanced by control over not just the collection, but of how it is managed, who has access to it, and the dissemination of its meaning. As a variety of historians including Harriet Ritvo, Susan M. Pearce, R. J. Hoage and William Deiss, and Emma Spary have explained, natural history

[8] Outram provides this translation, and gives the French-language original in *Georges Cuvier* (62-63).

collections can be used to maintain and demonstrate a network of power relationships between amateur and professional, science and government, Empire and colony. Anthropologist Nicholas Thomas points out that while "it is sometimes argued that science justified imperial expansion ... it would seem closer to the mark to suggest that imperialism legitimized science" (116).

In a France transitioning from the First Republic to the First Empire, "Jacobin" natural history in particular was the pretext for the collection of the "biotic resources of foreign lands" and the discovery of utilitarian applications for them (Osborne 125-26). The drive for acclimatisation (see Spary) was clear in Baudin's itinerary, which ordered the captain to "apply himself principally to the procuring of the useful animals and plants which, unknown in our climate, could be introduced here" (Fleurieu qtd. in Baudin 1). The scientific study of animals was thus a form of strategic reconnaissance, and the utilitarian motive closely connected to national prestige. The contradiction inherent in using a voyage "to increase the mass of human knowledge" (Fleurieu qtd. in Baudin 1) to acquire imperial possessions for national prosperity is encapsulated in Napoléon's somewhat proprietary attitude. In a letter to the Directorate of the Institut dated October 1797 he wrote, "New truths and new discoveries will reveal secrets even more essential to human happiness; but we must show our love for scientists and protect the sciences" (qtd. in Crosland 10). He reiterated this in his December 1797 letter to the Première Classe: "The true power of the French republic must henceforth consist in not allowing there to be new ideas which do not belong to it" (qtd. in Crosland 13). The economic and intellectual harvests to be reaped from the possession of exotic animals, formerly the accoutrements of the *ancien regime*, held similarly powerful appeal to those hoarding for the new political order.

The evolving First Republic displayed other vestiges of the past. Just one month before he was due to leave France, Baudin received more instructions from the Minister of Marine, Pierre-Alexandre-Laurent Forfait. Despite the Navy's ban on *pacotillage*, the private collection and trading of merchandise that could compromise the expedition's passport (all of the expedition's property, including natural history collections, belonged to the State), Baudin was ordered to amass "a special collection for Mme Bonaparte, wife of the First Consul ... of living animals of all kinds, insects,

and especially of birds with beautiful plumage.... a collection of pure pleasure" (Forfait qtd. in Horner 82). The desire for ownership for its own sake is never far from the loftier intentions of collectors, and although Joséphine's genuine interest in natural history has been noted (see d'Arneville et al.; Douglas-Hamilton; Lack; Clode), even "casual pleasure ... bears testimony to the standards and rules of the mighty cultural system of which collecting is a part" (Elsner and Cardinal 5). As the Minister for the Interior chided the Muséum professors, reluctant to share their loot from *Le Géographe*:

> You know, as do I, with what success Madame Bonaparte [she was not yet Empress] occupies herself ... with the nurturing of rare animals. It is in the interests of science, as of the glory of France, to encourage such distinguished taste and I invite you to support her aims, and mine, with all means within your power. (qtd. in Jouanin, "Nicolas Baudin" 45-46) [9]

So the animals in that triumphant procession to Paris had a multiplicity of meanings. They were the spoils of the war for knowledge between Europe's imperial powers; scientific currency, trade items and (for Joséphine) cult cargo; bounty from a *Terres Australes* collected, classified and perhaps—intellectually if not politically—controlled by Napoléon. "Ownership is the most intimate relationship that one can have to objects," social theorist Walter Benjamin, an inveterate collector, once observed (69). To have, to hoard, to save, to discard: a collector's power over an object, it seems, is absolute. But what if the object is, in fact, a subject? [10] How and why does the process by which a subject becomes an object occur? How is a subject's identity sacrificed for that of a collector? And how can an object be returned to subject-hood, to tell its own history?

---

[9] Quote translated from the original French, at my request, by Janet Upcher. Burkhardt reports that the professors took possession of just twenty-three of the seventy-three animals unloaded from *Le Géographe*. This is not only due to the deaths of several animals, including a "giant kangaroo" and sixteen tortoises, en route to Paris (Burkhardt, "Unpacking Baudin" 505-06). Many of the animals were collected especially for Joséphine and some, such as the panthers, were diplomatic sweeteners from colonial authorities at Cape Town and Île de France (Horner 323; Brown, "François Péron" xxiii). Joséphine let the Muséum keep the panthers.

[10] Human individuals and human groups can also be objectified and "animalised." "History is about Europe and what it does or does not do," writes Clare Johnson, "while non-Europeans become history's objects, denied the possibility of active participation, yet expected to provide the proof of Europe's superiority"(34). The uncomfortable juxtaposition between the possession and exploitation of human and animal subjects/objects certainly merits closer attention, but is beyond the bounds of this thesis. For a discussion of speciesism and racism, see Tiffin.

The ironies of objectification

In *Stuffed Animals and Pickled Heads* philosopher Stephen Asma explains that the histories of specimens in natural history museum collections "largely go untold, because, unlike fine art objects, their individuality must be subjugated to the needs of scientific pedagogy" (3). This subjugation is three-fold. First, natural history pedagogy requires an individual to represent a species and, because "unique specimens in isolation ... are not scientifically illuminating" (76), a multitude of individuals must be collected so that an understanding of what constitutes the "typical" characteristics of the species can be determined. The erasure of individual intra-species idiosyncrasies facilitates comparison with other standardised specimens, and through this the differentiation of one species from another.

The word "specimen" is used here instead of "object," because a specimen is not simply an object but also an artificial product of a cultural practice. This practice marks the specimen's second subjugation. In order to cope with the practical complexities of a teeming planet, natural history collectors must reduce an animal to simpler, static elements: a beak, a bone, a skin, a sketch (Figure 1.1). In his speech at the Palais Cuvier noted that Péron and Lesueur

> brought back anything that it was physically possible to preserve, whether in alcohol, carefully stuffed, dried or in brine.... When, as with the big seals and the large dog-fish, etc., the size of the animals made it impossible to transport them by the usual means, they brought back their skins, their jawbones, teeth or, simply hair. (qtd. in Péron, *Voyage* I: lviii)

Thus rendered, a specimen can be handled, examined and filed away for later use, often very far from where it was collected—we see again the manipulation of time and space. And this is the crux of the third subjugation, and one of the great paradoxes inherent in collections. The act of collecting means that an animal may be destroyed by the act, and the fact, of their collection. In becoming a specimen, an individual's physical and ecological integrity is violated. They are abstracted from their content, alienated from their context, paralysed in perpetuity. Even a living specimen is killed, metaphorically if not literally. They come to represent something else, rather than

themselves; an isolated exotic, "carrying no meaning other than that imposed by the culture to which [they are] exhibited" (Wasserman 132).

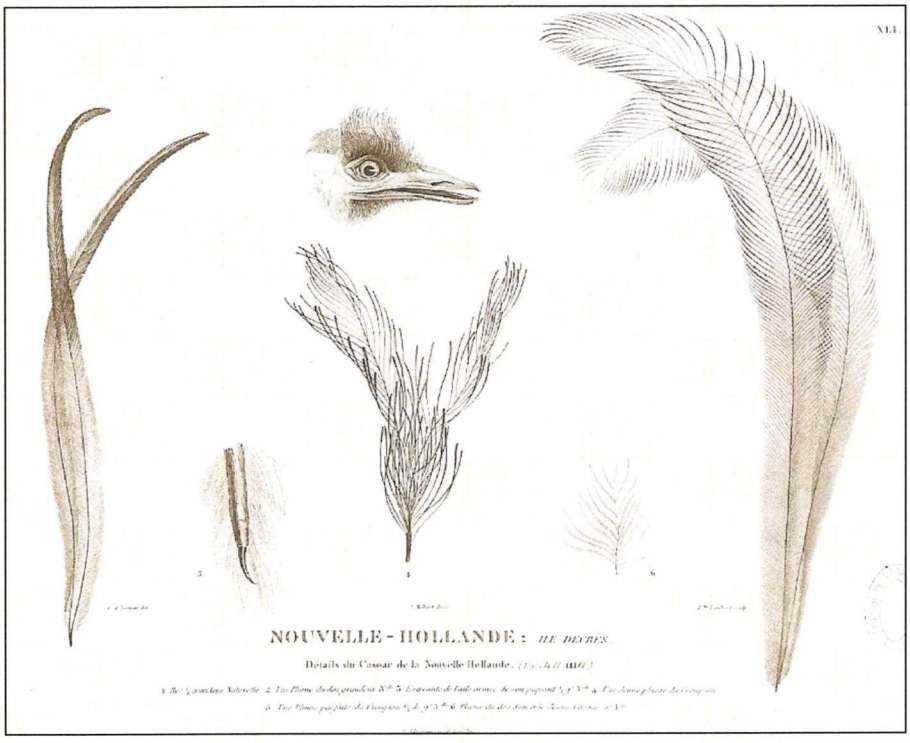


Fig. 1.1. Charles-Alexandre Lesueur, *Plate XLI. Nouvelle-Hollande: Ile Decrès—Détails du Casoar de la Nouvelle Hollande.* Engraving from the *Atlas* of *Voyage de découvertes aux Terres Australes* (Paris: Imprimerie impériale, 1807). The captions read: "1. Beak, half natural size—2. Back feather, nat. size—3. Tip of the wing armed with its spike, half nat. size—4. An immature feather from the rump—5. A perfect feather from the rump, 2/3 nat. size—6. Back feather of a very young cassowary, nat. size…." Translation from Bonnemains, Forsyth and Smith (299).

Asma attributes the dearth (if not death) of individual histories to pedagogical tradition, but I believe there is another tradition at work here. Unlike the "fine art objects" to which Asma refers, which are created mostly by human beings, the vast majority of (biological) natural history specimens are non-human. This is not only due to the obvious fact that there are more non-human species than human ones. It is also because of the attitude, pervasive in many human societies and increasingly since the late seventeenth century, that non-human species are other to humanity; biologically and geographically remote, morally bereft, spiritually forsaken. Yet (and as Cuvier's address to the Institut de France helps to demonstrate), non-human species are absolutely fundamental to human status; to social, political, cultural and economic

identity. They are a "cultural characteristic ... rendered nebulous by its very ubiquity" (MacKenzie 7), so intertwined with human life and functioning that they are forgotten about, or at best not remembered. It is this demarcation and forgetting—this distancing—that enables and justifies the collection and serial killing of animals for a variety of purposes, not all of them scientific. Péron collected 100,000 specimens not only to fulfil expedition objectives, *but because the specimens were animals*, and because he could.

So here is another of the ironies of scientific collecting. Cuvier declared that Baudin's expedition "made known more new creatures" (qtd. in Péron, *Voyage* I: lvi-lix), but while he and the similarly illustrious Lamarck, comte de Lacépède and Étienne Geoffroy Saint-Hilaire published papers in the immediate aftermath of the expedition (Burkhardt, "Unpacking Baudin" 503n. 14), it could be argued that, with their knowledge based on the part rather than the whole, their discoveries were basically incomplete. The act of bringing an abstracted animal specimen closer in order to understand it, a manifestation of the distancing of humans from non-humans, may actually widen the gap; rather than being the source of Cuvier's "reliable conclusions" and "relevant facts" (qtd. in Outram, "New Spaces" 260-61), the animal has its full identity diminished if not destroyed. Historian of science Dorinda Outram goes further, interpreting Cuvier's argument to mean that it was the physical distance of sedentary naturalists from the site and moment of collection that, upon surveying the specimens at close range, gave them a mental distance. This level of objectivity set them apart from impressionistic field naturalists whose observations, Cuvier wrote, "are broken and fleeting" (qtd. in Outram, "New Spaces" 260). Outram believes this distance was used by such naturalists to guarantee "the superior truth-value of their brand of natural history" which was "dominating in its control over the whole range of the natural order" ("New Spaces" 263).

Thus the maintenance of distance was considered scientifically and philosophically advantageous, since it facilitated the rational observation of material evidence. It was also culturally advantageous, enabling the manufacture and performance of certain human identities (collector, scientist) while perpetuating human separation from and mastery over the state of nature, particularly exotic nature which, until its creation by Western European science, did not exist. Despite (and because of) this quest for

knowledge and understanding of other species, that "otherness" remains intrinsically and increasingly elusive. Real animals and their life and death experiences are forever interpreted through human mediation, marginalised, or deliberately "disappeared." Since human attitudes can have material consequences for animal conservation, these "disappearances" can be factual as well as figurative.

The dwarf emu from King Island is one such disappearance. The reason for this disappearance was practical as well as political: a few bird specimens in a hoard of 100,000 are liable to go missing. Before these objects can be returned to their full-bodied subjectivity, they must first be located. Given the size of the expedition's collection it is worth first making a preliminary assessment to gather a sense of the species and the lie of the land: the extent of the challenge to make present an absence. A *re*collector's search is frequently a series of such off-ramps, sidetracks and twists. But one path often leads to another and rather than discourage, such digressions whet another primary (and primal) appetite for collecting: the thrill of the chase, though not the kill.

The elusive, allusive emu

The King Island emu became extinct in the wild sometime between 1802 and 1805 (Brasil 88; Green 1). The species disappeared in the lacuna between the island's inhabitation by Aboriginal people and the later settlers. Unlike prehistoric animals preserved in stone it seems relatively accessible, just two hundred years away. But in life, as in death, the emus were often elusive to European observers. They flickered like ghosts amongst the trees, somewhere near the horizon, on the margin of the page; just beyond memory, almost imaginary, often mistaken. [11] Over time, like bones exposed, their features have become indistinct. Now bone and eggshell fragments exposed by the King Island winds are the only local proof that they ever existed at all.

Reports of the King Island emu first appear in 1802, when on 12 January a party from the British survey ship *Lady Nelson*, commanded by John Murray, had what was to become a typical encounter with the island's inhabitants. "[T]hey found feathers of *emus* and a dead one," Murray recorded (Lee 118). But on 17 January "woods full of

[11] I am indebted to Tim Low for the idea of 'ghost birds.'

kangaroo, emmues, badgers, etc.," were discovered and an emu "was caught by the dog about 50 lbs weight and surprisingly fat." Murray's reports of woods "full of animals" and "shores ... lined with fine oil (if I may be allowed the expression)" (120, 121) were of interest to sealers, some of whom arrived on the *Harrington* in March and, when not off depriving 5,200 fur seals of their skins and rendering "500 Galls. Elephants Oil" (King 641), observed "great Quantities of Kangaroos, Badgers, Porcupines, Emues etc." (Campbell 524). This might have come as a surprise to Matthew Flinders, who explored the island on 22-24 April but failed to spot a single emu. Since he wrote that "[o]n stepping out of the boat, I shot one of those little bear-like quadrupeds, called *Wombat*, and another was afterwards killed" (206) it is possible that the birds, unaccustomed to gunfire, ran terrified into the undergrowth.[12] However, his companion Robert Brown turned his botanical eye to their dung, which "was found pretty frequently. They appear to feed chiefly on the berries of the Styphelia acerosa [*Cyathodes juniperina*, or cheeseberry]" (qtd. in Vallance, Moore and Groves 187). In December 1802 Surveyor-General Charles Grimes, toting a theodolite instead of a firearm, noted that "[e]mews ... are plenty on the coast—but not inland" (qtd. in Hooper 24).

Further traces can be found in the *Sydney Gazette and NSW Advertiser*, which on 26 June 1803 reported that "two young Emues, procured at King's Island, were sold to a Master of a Vessel for seven Guineas, a price by no means exorbitant, as they come under the denomination of WILD FOWL" ("Sydney" 3). The birds' appearance in what was, at the time, the colony's only newspaper indicates that even then they were a curiosity to a populace accustomed to seeing the remote island's animals arriving as stacks of skins or casks of oil. It also demonstrates that the trade in curiosities to European collectors was, along with sealing, one of the colony's first export commodities.[13] On 28 August the *Gazette* reported the arrival from King Island of Captain Moody in the *Governor King* with sixty-three butts of oil and "six pair of Emues, four pair of the largest died on the passage, the surviving ones are likely to live." The sealers also provided Moody with two kangaroos, "one of which fosters a young one in its false belly, which frequently shews itself" ("Ship News" 2).

[12] Wombats are also now extinct on King Island.
[13] Indeed, the *Sydney Gazette* of 19 June 1803 carried a lengthy article, "Directions for Collecting and Preserving Birds."

According to the *Gazette* of 11 September, the kangaroos were sold to Captain Cummings of the *Rolla* for £1 ("Miscellaneous Occurrences" 3), but despite the newspaper's breezy confidence, the fate of the emus is unclear.

Other nineteenth-century texts reveal only fleeting glimpses. The twelfth edition of the *Companion to Mr Bullock's London Museum and Pantherion* lists, among items ranging from the "Ursine Baboon" to the "Great Black Wasp of Pensylvania" (3, 118), a "*Great Emea,* or *New Holland Cassowary* (S. Nova Hollandia), upwards of 7 feet high" and a "*Lesser Emea,* not half the size of the above, and a distinct species" (Bullock, *Companion* 80).[14] Bullock's awareness of the Lesser Emea's singularity suggests that the species was as curious to this British collector as it may have been to merchants in Sydney—if this was indeed the bird's (secondary) provenance.

Fig. 1.2. R. Sands, engraving from a drawing by J. P. Neale. Interior of the Egyptian Hall of Bullock's Museum in Piccadilly. Larger ("mainland") emus are visible in the central gallery. From *Repository of the Arts* 3 [1810], plate 35, reproduced in Sweet, Plate II.

In 1812, the year the taxidermy Lesser Emea made its debut, William Bullock had "the pleasure of chasing" the last surviving Great Auk for hours around Orkney's

[14] This quote is from page 80 of the *Companion to the London Museum*, confusingly bound within the 1812 volume of the *Companion to Mr Bullock's London Museum and Pantherion*.

freezing seas in a six-oared boat. A fervid collector of "Natural and Foreign Curiosities, Antiquities, and Productions of the Fine Arts," Bullock knew the value of rarity (*Companion* tp). He was a consummate showman—one of his most popular exhibits, a boa locked in mortal combat with a tiger, was composed of two snake skins and a wooden head (Sweet 27)—but he was also a Fellow of the Linnean Society and exhibited his specimens "in the order they stand in the *Systema Naturæ*" (Bullock, *Companion* 38). Nevertheless, he was unable to reveal further details about his Lesser Emea. Perhaps this is unsurprising; as P. J. P. Whitehead notes about the loss of specimens collected during the voyages of Captain Cook:

> Specimens [are] passed to collectors, to societies, to museums, sometimes back to collectors and then again to museums, all with a bewildering lack of documentation and with it a loss of both specimens and information at every step, so that the wonder is that anything can be traced at all. (162)

By 1818 Bullock's collection—a small section of which is depicted in Figure 1.2—was reputedly worth £55,000 (Mullens 133). But in 1819, wanting to conduct his own field trips in Mexico and then retire (Steinheimer, "Martin Hinrich" 88), Bullock sold his collection in an auction lasting twenty-six days. In a final act of control, he played auctioneer, selling lot "97. Emew, Casuarius Nova Holandiae, of New Holland; very fine specimen" and lot "98. Lesser Emew; a distinct species from the last" to the Linnean Society on Day 11 (May 18, 1819) for £10.10s. and £7.10s. respectively (Bullock *Catalogue* 75; Newton 151). However, the Linnean Society has no record of the emus entering their collection—a consummate irony for an institution dedicated to the accurate organisation of knowledge. In 1863 the Society auctioned many of its specimens, donating its bird collection to the British Museum, but the emus are not listed in the auction catalogue and they are absent from the British Museum's accessions register (Brooks; Linnean Society 6-7; Sharpe 254-55, 414-15; Clarke). The Lesser Emea may have passed into the hands of another collector[15] or, if they

[15] In case the Linnean Society was not in fact the buyer, I checked the collections of some other institutions that also purchased specimens at Bullock's auction, i.e. the University of Edinburgh, Zoologisch Museum Berlin (now the Museum für Naturkunde der Humbolt-Universität zu Berlin) and the Liverpool Museum. There is no record of a dwarf emu in their collections (Preston; Steinheimer, "Martin Hinrich" 91-95; Fisher). Furthermore, a facsimile of Bullock's auction catalogue, annotated by another hand, also records the birds as having been sold to the Linnean Society. It adds that Lot 97 (the

ever did reach the British Museum, perhaps disintegrated in the newer but equally inadequate edifice at Bloomsbury. John G. Children, Keeper of Zoology, complained of the "miserable momentos" that lay in the Museum's drawers, "more in mock than mark," a basement filled with moth-ridden "rubbish" and specimen cases that admitted so much dust "that the frequent cleaning, and ... the dust itself" made the contents "liable to serious injury.... it is a very great evil" (56-57; 12-13).[16]

In 1948 zoologist Tom Iredale (235) argued that Bullock's Lesser Emea was a Kangaroo Island emu, "probably brought back by a companion of Flinders or even Flinders himself." But Flinders made no record of collecting Kangaroo Island emus ("it so happened that they were fired at only once, and that ineffectually," he wrote in his journal [184]) and the bird specimens collected by Flinders and auctioned by Bullock on Day 20 of the sale, 2 June 1819, did not include an emu and fetched a total of just £9.12s.6d. (Vallance, Moore and Groves 173). This was not to be the first time the King Island emu would be subsumed by another species for as we will see, texts, like taxonomy, do not always reflect Cuvier's "reliable conclusions" (Outram, "New Spaces" 260). What we will also see is that the afterlife of this otherwise elusive bird intersects with those of the birds brought to France by the Baudin expedition—as their lives may have done, in their island home.

The passion of Nicolas Baudin

Nicolas Baudin's passion for collecting took hold long before his encounter with the King Island emu. But "passion," like "preserve," is another word often taken for granted. Its everyday meanings have travelled some distance from its Latin origins (*pati, passus, passio*), which denote suffering and submission. *Passion* can thus connote the sufferings of a martyr, or the narrative of that suffering.[17] Of course, the passion of one can cause the suffering of another.

---

larger, probably "mainland" Australian emu) had once lived in Mr Polito's menagerie at the Exeter 'Change, where it had been "killed by one of his Tigers" (Johnson and Hewitt 75).

[16] In another irony, Bullock's offer to sell his collection directly to the British Museum before the auction was refused on the grounds that there was not enough room at Montague House (Günther 50; Sweet 23, 24).

[17] Stephen Jay Gould touches upon this point in his book with Rosamund Wolff Purcell, *Finders, Keepers* (10).

In January 1788, the month the First Fleet sailed into Botany Bay, Baudin was loading his ship with ostriches, zebras and other animals and plants at the Cape of Good Hope. It was the first of four trips made for Joseph II, Emperor of Austria, "essentially joint ventures between the government and mercantile interests," explains historian Anthony J. Brown, "in which the latter underwrote most of the costs" (*Ill-Starred Captains* 22). Baudin had earlier abandoned a career in the navy as an *officier bleu*, a commoner, after being ordered to give command of his ship to an *officier rouge*, an officer of aristocratic birth. Disgusted, he had returned to the merchant service in which he had served his apprenticeship. Between 1785 and 1795 he plied the oceans, sailing to Louisiana, the Caribbean, southern and eastern Africa, India and Arabia, carrying French emigrants, African slaves, merchandise for east Asian markets and natural history collections for the Schönbrunn Palace. When he returned to France in 1795, he was a captain in the Austrian navy.

But once again Baudin found it difficult to receive acceptance. Since revolutionary France had in 1792 declared war on imperial Austria, he had to actively cultivate the French establishment if he were to rejoin the French navy (Horner 25-28; Brown, *Ill-Starred Captains* 21-23). His collecting expertise provided leverage. Horner explains how Baudin "began quietly" (28), sending a few plant specimens to Jussieu at the Muséum in March 1796. Baudin then lured the professors with tales of hidden treasures, the "madrepores, petrifications, insects, shells, molluscs, fish, and the skins and skeletons of birds and quadruped animals ... hippopotami .... [and] living plants and trees" of an Austrian collection he had stored in Trinidad (Jussieu qtd. in Horner 29). The bait was taken: just six months later, Baudin was bound for the West Indies with instructions to recover and supplement the stored collection with new collections of his own. Pierre Ledru, the expedition's botanist, reported that the captain was "as eager of any of us and more tireless, he puts his own hands to the task of pulling out, carrying and planting our living trees and shrubs, and sets us an example by his ceaseless activity" (qtd. Horner 33). This enthusiasm resulted in a cargo, unloaded in 1798, worth an estimated 1,072,500 francs. It included four thousand butterflies and other insects, seven cases of sea creatures and eight hundred living plants and shrubs which, Baudin wrote to Jussieu, were "of a marvellous beauty" (Horner 36; Brown, *Ill-Starred Captains* 25; qtd. Horner 34). Joining the parade of plunder from Napoleon's Italian campaign, Baudin's cargo and the acclaim it received must have

done much to ease the sting of the "most revolting injustice" he had suffered as an *officier bleu* under the pre-Revolutionary code (qtd. in Horner 25).

So Baudin collected professors as well as plants and animals; the professors in turn acquired power through their protégé. In a letter dated 21 July 1798 his ally Jussieu, "astonished that such a quantity should have been collected in such a short time," extolled his virtues to Fortfait, the Minister of Marine. "[H]e follows worthily in the steps of Bougainville, La Pérouse and d'Entrecasteaux, and," Jussieu added reassuringly, "... he will be more fortunate than the last two" (qtd Horner 36). Two weeks later Baudin was appointed Post-Captain in the French navy, and his plan for a new voyage of discovery received official support (Horner 37). By March 1800 he was presenting his revised itinerary to the Institut de France. Baudin's plans now focused on New Holland, where

> Natural history, which has found nothing but new objects in the collections of animals and dried plants gathered on these shores, requires that the same objects be transported alive to people its gardens and menageries, and must hope as well that new researches will produce further new discoveries. (qtd. in Horner 40)

Baudin's itinerary, like his relatively swift ascendancy, reflected the temper of the times. Animals from far-flung lands were "new objects" waiting to be discovered and brought closer to the taken-for-granted centre, Western science. But, more interestingly, Baudin almost prioritised collecting over the actual *science* of natural history; "new discoveries," are an "as well," an afterthought, and seem only significant if they enlarge the collection. The "gardens and menageries," the new, unnatural context of the objectified animal, seemed most important to Baudin. Of course, he was also keen to advertise his expertise with live cargo.

In September 1800 Baudin received his final instructions, summarised in the vignette published as the frontispiece of the *Atlas* accompanying the only account of the voyage (Figure 1.3). Dwarf emus, black swans and kangaroos relax amongst acclimatised Australian plants, but the charts in the foreground and Joséphine's Château Malmaison at the epicentre again hint at the true meaning of this leafy idyll:

the submission of nature via the extension of a civilising intellect to the boundaries of the known world. For Baudin, whose identity was so contingent on his collections, this civilising intellect was to lead to other kinds of submission. For the King Island emu, Baudin's passion—in all senses of the word—was to prove fatal.

Fig. 1.3. Frères Lambert, engraving from a sketch by Charles-Alexandre Lesueur. *New Holland Better Known / Useful Plants Naturalised in France*. Frontispiece from the *Atlas* of *Voyage de découvertes aux Terres Australes* (Paris: Imprimerie impériale, 1807).

Chapter 2

Forgetting

[W]e cannot remember too often that when we observe nature, and
especially the ordering of nature, it is always ourselves alone we are observing.

Georg Christoph Lichtenberg, *The Waste Books* (141)

There is no explanation for the disappearance of [this] species.... It is possible
that fires started by men or by lightning on so small an island may have been responsible.

James C. Greenway Jr., *Extinct and Vanishing Birds of the World* (143)

The first King Island emus François Péron saw were hanging from "a sort of butcher's hook" in a sealer's hut. It was December 1802 and he and his companions, including the artist Lesueur, mineralogist Charles Bailly, gardener Antoine Guichenot and botanist Jean-Baptiste Leschenault de la Tour, had been stranded by King Island's notorious weather. With their provisions long since exhausted, and without the means to gather more—*Le Géographe* had been forced to stand out to sea, violent surf pounded the shoreline and "[a]ll the animals had retreated to their holes and shelters for protection"—the hapless humans' appetites were "heart-breaking." The sealers proved their "salvation," feeding the storm-tossed French a stew containing what Péron described as "masses of different meats, essentially delicate and well-cooked in their own juices." Cooked in a "large cauldron" and "giving off an agreeable smell," the wombat, kangaroo and emu "provided a savoury meal, even though," he complained, "we had to eat them without bread or biscuit" (Péron, *Voyage* II: 14-15).

Péron's hunger is evident in his descriptions of King Island. Indeed, it appears that few local inhabitants escaped the plate. He detailed the tender and tasty flesh of the local kangaroos, the seabirds' eggs that were "almost as good as those of our domestic hens", and the wombat, whom, he wrote

> reduced by the English sealers to a state of domesticity, goes looking for food in the forests by day and returns by night to the hut which serves as its shelter. A gentle, stupid animal, it is prized for the delicacy of its flesh, which we preferred to that of all the other animals of these regions. (*Voyage* II: 12)

Péron's assessment of the animals' palatability, relative to other native species and those domesticated in his own land, both exemplified and undermined his dual expeditionary agendas. His motive to collect in order to allow an objective analysis of zoological specimens ran parallel to his motive to demonstrate his commitment to the expedition's Republican (and at its core, imperialist) objectives. His was consumption not only in the cause of science, but in the quest for what he termed "zoological products" for "human subsistence" (*Voyage* II: 12). Historians Keith Thomas (53-67) and Harriet Ritvo (*Animal Estate* 1-30; *Platypus* 38-41) discuss the human tendency to place animals in categories according to human needs and values, such as edible/inedible; tame/wild; useful/useless. This was manifested particularly in the bestiary tradition, but Ritvo notes that even eighteenth-century scientific systems often reflected such competing principles of organisation: "Rather than analyzing nature exclusively on its own terms—the claim embodied in their formal systems—naturalists often implicitly presented it in terms of its relationship to people" (*Platypus* 39).

Péron's epicurean interests indicate that these competing principles leaked into natural science in the early nineteenth century as well. By ranking King Island's "products" according to their usefulness, he exhibited a profoundly anthropocentric view of nature, one that presumed human ascendancy and which, despite the advent of the supposedly objective Linnaean system, still manifested vestiges of ancient hierarchies. (Thomas reports that even Linnaeus "mingled his zoological descriptions with moral and aesthetic judgements" [69].) Péron was thus no different from most of his contemporaries who "[f]or the most part" deemed that "wild animals were not even important enough to merit a moral judgement unless they somehow reflected human experience" (Ritvo, *Animal Estate* 23). Animals such as the docile and dependable wombat were thus worthy of Péron's comment; simultaneously— and this also demonstrates the unfairness of human logic—wild animals which were easily

"reduced" to a domesticated state were perhaps less valued; the "gentle" wombat is so "stupid" that it returns by choice or by habit to the site of its eventual slaughter.

And what of the King Island emu? "The mighty cassowary, 5 to 7 feet tall," wrote Péron, "lays eggs the size of an ostrich's, but more delicately flavoured; the flesh ... half-way (so to speak) between that of the turkey-cock and that of the young pig, is truly exquisite" (*Voyage* II: 12). Here again a supposedly objective (albeit inaccurate[18]) scientific description segues into a highly subjective, anthropocentric classification, using prior understandings to bestow meaning and perpetuate established cultural values. Whether "useful" or "useless," the animals served their function, providing Péron sufficient specimens and experiences to equip him with the authority to interpret and thus affect their fate.

In this chapter I will discuss how these competing and sometimes contradictory principles of organisation in French Republican science dictated how the emu and other animals were treated, in scientific literature and in life. And because, as Ritvo and Thomas suggest, human perceptions of animals were (and still are) influenced by human relationships, this chapter will also explore the competing and sometimes contradictory principles of organisation in a French Republican scientific *expedition*. I will demonstrate the extent to which the Baudin expedition and those associated with it relied upon animals to establish and sustain human superiority over other humans, as well as other animals, and how these relationships also influenced the animals' futures. I will argue too that this reliance on animals in fact gave them a curiously paradoxical power: as well as being a helpless victim, the emu actually exerted an influential agency that contributed, like Péron's judgement, to the making of their own history. I will begin by describing the expedition power relations that were later to be challenged, both psychologically and physically, as the lives of the men grew inextricably entwined with the lives of the animals they had collected.

[18] Péron's use of *casoar* (cassowary) was in accordance with the nomenclature of the time; *casoar* and *emu* were used interchangeably by the French, including Cuvier et al. (441-443). His "real" error, discussed in further detail below, is his confusion of this dwarf, insular emu with the much larger species of the Australian mainland. No wonder Cuvier thought the impressions of field naturalists were "broken and fleeting" (qtd. in Outram, "New Spaces" 260).

Human hierarchies

The Baudin expedition is infamous for its acrimony.[19] Of the 238 men (not including 11 stowaways and 2 passengers) who left France in 1800, more than 60 men deserted, defected or died (Horner 63; Duyker 70-71). The expedition was burdened before it had even left port, ironically as a result of Baudin's expertise and the eagerness with which his proposed itinerary was accepted, and then co-opted, by the Institut. For example, Institut Commission member Vice-Admiral Louis-Antoine de Bougainville had so much confidence in the captain that he had his 18-year-old son, Hyacinthe, appointed as a midshipman—one of fifteen midshipmen, aged between fifteen and twenty-three, to be trained in the ways of the sea. But Baudin, mindful of the expedition's primary (scientific) objectives, had requested no midshipmen at all (Horner 64-65, 374-76).

Baudin had also requested that each ship be assigned eight scientists for the practical work of collecting specimens; the close (yet paradoxically "distant") work of taxonomy, as discussed in the previous chapter, was best left to cabinet scientists like Cuvier and Jussieu. But in its zeal the Institut sent twenty-two scientists. Many were as young as the midshipmen: Guichenot was seventeen and Lesueur was twenty-two when the expedition set sail. A few were veterans of the Revolutionary Wars: twenty-five-year-old Péron had served for almost three years in the 2nd Allier Battalion of Volunteers, was wounded in battle, and kept as a prisoner of war in Prussia (Duyker 22-36). Of the original twenty-two, ten scientists left the expedition before it had even reached New Holland. Only three, including Péron, saw the voyage to its completion (Horner 2-3, 374-76).

To the impressionable young midshipmen, Péron must have been a bona fide war hero. Not bound by naval discipline and, being highly educated (Péron's teachers included such Institut élites as the naturalist Lacépède and chemist Antoine François de Fourcroy, as well as Cuvier) he and the others were perhaps disinclined to take the advice of an autodidact naturalist-collector like Baudin.[20] The captain's task was not

[19] The works of historians including Frank Horner, Edward Duyker, Anthony Brown, Jean Fornasiero, Peter Monteath and John West-Sooby include detailed analysis of this particularly troubled expedition.
[20] For a discussion on how chief zoologist Georges Bory de Saint-Vincent's criticism of Baudin's shipboard library further (and unfairly) discredited the captain's scientific reputation, see Fornasiero

aided by reforms that required all men to be addressed as "Citizen," regardless of their pre- or post-Revolutionary status and entitlement. Perhaps as a consequence of this reform, this expedition of career officers, some upper-class yet juvenile trainees and the crème of French *savants* were acutely aware of their place in the social and intellectual hierarchy, and were not afraid to pull rank when it suited them. Baudin was repeatedly "infuriated" by the "pomp and magnificence" of his "gentlemen" scientists (442). The officers in turn did not readily accept the word of one who was not only an erstwhile merchant seaman, but who had not long before served France's enemy, Austria. In his memoirs one-time midshipman Charles Baudin (no relation) recalled that the

> sub-lieutenants were very young and tolerably scatter-brained. The midshipmen.... were treated as spoiled children; a familiarity was encouraged to which we were only too disposed, for few of us had any notion of discipline or propriety as regards naval service.... Captain Nicolas Baudin ... was determined to establish discipline and hierarchy on a proper basis. He soon became the *bête noire*.... (qtd. in Horner 84)

One event on 28 April 1802, en route to Port Jackson, epitomises the extent of Baudin's aggravations. "During the morning Citizen [Henri de] Freycinet ...told me that since most of our helmsmen were sick and unable to perform their duties, it was absolutely necessary to choose some men from the rest of the crew who could replace them," Baudin reported. Freycinet asked for permission to order the master carpenter and second caulker to steer the ship, but Baudin believed "a simple request made with good grace" would suffice. The twenty-three-year-old acting lieutenant refused, saying that "such a proceeding, with regard to men so inferior to him, could not be taken by an officer like himself, etc., etc." Baudin then decided to make the midshipmen each spend an hour and a half steering,

> certainly not an arduous task for them and [one which] could only help in their education. However ... all these gentlemen regarded it as dishonouring and schemed to evade it. Mr. Bougainville ... refused point blank to steer and

---

and West-Sooby's "Baudin's Books." Bory was one of the ten *savants* who left the expedition at Île de France in April 1801.

> pretended sickness in order to disguise his disobedience. Mr. Brue claimed that according to the regulations he was exempted from it by right. (393-94)

Somehow Baudin managed to navigate the ship to Port Jackson, where the reception provided by the British was the antithesis of the disobedience, insolence, sickness and spite that characterised shipboard relations. Governor Philip Gidley King's reaction to the expedition's "state of distress" was even more remarkable considering he believed France and Britain to be at war when *Le Naturaliste* arrived on 24 April 1802; "the signing of the peace was still not known and we only learnt of it once our sick had recovered, our ships were repaired, our supplies [were] on board and our departure imminent," wrote Baudin. "Governor King has given the whole of Europe the example of an act of charity which should be made known" (qtd. in Fornasiero, Monteath and West-Sooby 213). Péron interpreted the colonists' "most delicate goodwill" as reciprocity for "France's magnanimous conduct towards Cook's and Vancouver's vessels" since "they were frequently so good as to repeat that fine axiom that France was the first to inscribe in the code of European nations: '... *Causa scientiarum, causa populorum*'" (*Voyage* I: 301). If knowledge was indeed the cause of nations, scientific knowledge seemed beyond the banalities of the economic and territorial conflicts of the time: the *savants'* observatory at Bennelong Point was guarded by English soldiers; King permitted Baudin's purchase of the schooner *Casuarina*, for inshore exploration; while Lieutenant-Governor Colonel William Paterson, a "knowledgeable" and "celebrated naturalist" and "member of the Royal Society of London," befriended Péron and facilitated his numerous collecting forays, during which Lesueur "killed and prepared more than 200 birds [and] ... 68 quadrupeds." Péron was convinced King's "noble" conduct was a manifestation of "that great and loyal generosity that the advanced state of European civilization can alone account for and has, alone, been able to produce" (*Voyage* I: 300, 305, 329, 295, 328, 301, 290). However, he was to soon discover that a certain European civilisation's generosity only extended so far. While Napoléon's proprietary attitude to knowledge, and to the objects that sustained that knowledge, was acceptable to a *savant* in his service, it was unacceptable when it was echoed in the greedy hoarding of a rival power. When the genial sharing of copious resources transformed into "the business of conquest and possession" (Blom 170), the collector's lust to accumulate

the unattainable got the better of Péron. These rivalries, as well as those onboard, further influenced perceptions of the objects of pursuit: the animals.

Horner reports that while in Port Jackson the naturalist was "angered" by the news of the wreck of the French sealing vessel *Enterprise* whose captain, Alexandre Lecorre, had been given limited access by Governor King to Bass Strait's sealing grounds. Had he been allowed to use the safe anchorage frequented by English sealers, Péron believed, Lecorre and most of his crew may not have lost their lives. Horner writes that by allocating separate areas to rival sealing gangs King may have merely been trying to prevent (human) bloodshed; Péron interpreted King's act as an example of "exclusion and monopoly," typical of a nation that had "arrogat[ed] to herself the possession of this vast expanse of earth and sea" that included "half of New Holland" and "New Zealand and most of the archipelagos of the great [Pacific] ocean" and east to "the coast of Peru and Chili" (Horner 251, 269; Péron, *Voyage* II: 4). It seems Péron was unable to mask his resentment even in Port Jackson, for ironically his effusiveness resulted in the French, as well as the seals, becoming the quarry.

Refitted and refreshed, *Le Géographe* and her consorts left Port Jackson on 18 November 1802. But on 8 December 1802 the French, anchored at Sea Elephant Bay, King Island, were surprised by the appearance of the armed schooner *Cumberland*, commanded by Charles Robbins. Horner (269-70), Fornasiero, Monteath and West-Sooby (220-23) and Duyker (154) agree that it was Péron who had told Colonel Paterson (rightly or wrongly; the possibility of "secret" French territorial ambitions is the subject of much debate) that the French planned to colonise Van Diemen's Land, specifically d'Entrecasteaux Channel. Upon hearing the news, Governor King had dispatched the *Cumberland* to pre-empt any French claim to these seal-strewn coasts. When Baudin finally landed on King Island, on 14 December, he

> was somewhat amazed to see an English flag absolutely where our tents were set up.... [and] a soldier in a red uniform with a bayonet in his hand.... Our scientists .... did not know what it meant, unless it was to inform us that the island belonged to [Robbins].... [I]t is a fact that it was their fishermen who discovered and frequented this island before us. But if possession of it belongs

to whoever circumnavigated it first, then it is patent that it is to the French. (446)

Baudin reiterated this latter point in a letter to Governor King ("Mr Robbins ... perhaps ... has arrived too late")[21] and Péron, possibly fearful of being identified as the source of the embarrassing rumours, was careful to overlay his official account with a tone of indignant self-righteousness. "[S]ince people have always used nature as a contrast and example for society," notes environmental historian Thomas Dunlap (34), "[nature writing] has also been a vehicle for social criticism." Péron's account was no different, as issues of human status and priority were to be played out in attitudes toward King Island's wildlife.

Animal hierarchies I: The seals

To understand the complexities of Péron's attitude toward the King Island emu, it is necessary to first analyse his attitude toward the seals, and the men who hunted them. Péron's "chameleon-like property"—to use Horner's phrase (275)—that is, his ability to adopt his philosophy to suit his circumstances, is exemplified by his attitudes to his rescuers, the sealers on King Island. There is something of the noble savage in his depiction of their leader, "the honest Cowper,"[22] his ten men, and his "woman of the Sandwich Islands ... who served as wife and principal housekeeper" who, despite living in "wretched hovels" warmed by a "great fire, kept burning day and night with big tree trunks" and wearing clothes made "by subjecting seal and kangaroo skins to some rough preparation," nevertheless "all enjoyed the most vigorous good health." Péron wrote: "these good men overwhelmed us with demonstrations of concern and kindness."

---

[21] To which King noted in the margin: "If Monsieur Baudin insinuates any claim from this visit, the island was first discovered in 1798 by Mr Reid in the *Martha*, afterwards seen by Mr Black in the *Harbinger*, and surveyed by Mr Murray in February 1802" (qtd. in Fornasiero, Monteath and West-Sooby 226). (Murray had in fact visited on the *Lady Nelson* in January; it was he who made the first written account of the King Island emu.) Of course, Aboriginal people frequented the region before sea level rises at the end of the last glacial episode isolated King Island from mainland Australia and mainland Tasmania. Péron noted during his stay that "everything suggests that the island is unknown to both the wild tribes of Van Diemen's Land and those of New Holland" (*Voyage* II: 11); this may help to explain the abundance of the wildlife; the apparent lack of fear of some animals, such as the wombat, toward humans (Hooper 24); and adaptations that rendered the emus vulnerable to the sealers' fast-moving dogs.

[22] Cowper Point, on Sea Elephant Bay on King Island's east, was named for this sealer, whose name was in fact Daniel Cooper.

> Why is it that this touching hospitality ... should almost always be shown by men whose roughness of character and miserable condition seem least to oblige them to act in this way! ... Alas, rather than our brilliant education and philosophy, it would be more fitting to develop in us that noble and disinterested quality that gives us sympathy for another's troubles! (*Voyage* II: 15, 16, 15, 18)

Perhaps the sealers, so far from "the perfection of European civilization" expressed in Port Jackson and seemingly so close to nature, were not dissimilar, in Péron's view, to the wild animals of which Ritvo writes, worthy of moral judgement if they somehow reflected his own experience. But Péron's assessment changed markedly in his account of the sealers' operations, and it was not always clear where his sympathies lay.

Péron dedicated an entire chapter (*Voyage* II: 27-54) of his two-volume account of the expedition to a detailed description of the elephant seals, whom he wrote were "gentle, innocent," "good, docile," "intelligent, gentle," "good," "peaceful," "gentle and peaceful" and "so powerful, so gentle and so unfortunate":

> One can wander amongst them without fear; and none of them have ever been seen to lunge at a man unless they were attacked or provoked in the most violent manner.... [Y]oung seals of an infinitely smaller species often come and swim in the midst of these monstrous amphibians, without the latter doing the slightest harm to the feeble strangers. (*Voyage* II: 38, 42, 38)

"It also appears that these animals are capable of real attachment," Péron continued, musing, "all these animals have so kind and gentle an expression, that I have little doubt as to the possibility, by taming them, of reproducing some of the wonders handed down to us from antiquity concerning dolphins" (*Voyage* II: 38, 53). Lesueur's drawing of the extravagantly eyelashed phocids (Figure 2.1) indulges Péron's observations; abandoning all pretence at the dispassionate scientific observation of wild animals, he makes the seal in the foreground return the viewers' gaze with an easy familiarity.

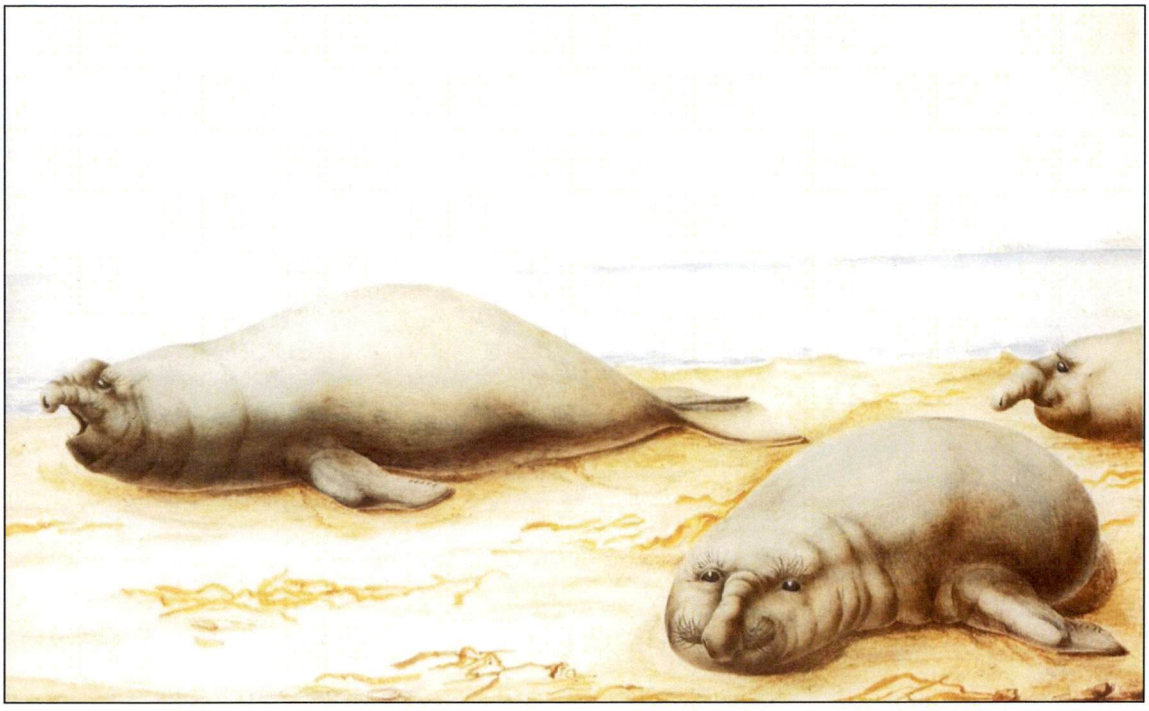


Fig. 2.1. Charles-Alexandre Lesueur, *Mirounga leonina* (elephant seal, King Island). Muséum d'Histoire naturelle du Havre, No. 80001. From Bonnemains, Forsyth and Smith (337).

According to Duyker (156), Péron was "shocked by the environmental crime unfolding before his eyes" and, in a "landmark in Australian ecological writing," the naturalist was moved to remark:

> Until now, the animals … guided by some wise instinct, have known how to conceal themselves from the wrath of the human race…. Henceforth everything is changed for them … they will not now escape the mercantile greed which appears to have sworn the annihilation of their race. Indeed, the English have invaded these retreats, which for so long protected them; they have organised massacres everywhere, which cannot fail shortly to cause a noticeable and irreparable reduction in the population of these animals. (*Voyage* II: 40)

While this passage does disclose a nascent environmentalism, I believe it was more likely spurred by offences against other, somewhat opposing, sensibilities. All

through the chapter Péron stresses the sealers' English nationality[23] and, with the exception of one reference to "the honest Cowper" (*Voyage* II: 45), the individual sealers are depersonalised (I use this word deliberately). By juxtaposing the "human race" with "their [the seals'] race," and by referring to "massacres," Péron humanises already anthropomorphised animals while rendering the (in)human English, whom he earlier depicted as noble savages, decidedly less noble. The war-like discourse (invasions and "massacres") Péron employs further indicates that the "good men" whose kindness had hitherto "overwhelmed" the French scientists were regarded very differently when, with "mercantile greed," they plundered the resources of a territory that Péron seemed to consider French. Indeed, Péron bolstered his chapter with three appendices in which he details, with a taxonomic eye usually reserved for specimens, the economic and geopolitical "Advantages Gained by the English from the Seals of the Southern Seas" (*Voyage* II: 47-51, 53-54). His environmental ethic was also difficult to discern in his observations of the profits reaped from the sealing and fur-trading activities of France's ally:

> Skilful traders, thrifty and courageous navigators, the Americans have for some years been inconvenient rivals for the English.... Already, complaints ... have come from the English ship-owners; already, ways have been proposed to the government to exclude the Americans from the southern seas and thereby ruin their trade in Canton. (*Voyage* II: 48 n.**)

However, Péron's outrage at "this cruel operation" against wild and charismatic yet docile and seemingly tameable animals—characteristics which, in this context, raised them in the echelons of cultural classification—extended beyond the English "murderers":

> The female seals rarely meet violence with violence.... If their retreat is cut off, they shake violently; an expression of despair comes into their eyes and they dissolve into tears. I, myself, saw one of these young females shedding copious tears while one of our sailors (a cruel, wicked man) amused himself,

[23] Peron had earlier noted, during his more positive depiction of the sealers and their camp, that at least two of Cowper's gang were in fact "Irishmen, who had been deported for their political opinions" (13); such differentiations were abandoned in this later attack on their activities.

> every time she opened her mouth, by smashing her teeth with the broad end of one of the oars from our long-boat. This poor animal filled one with pity; her whole mouth was bleeding; and tears streamed from her eyes. (*Voyage* II: 40, 41)

While it would be churlish to discredit Péron for this compassionate text,[24] it is interesting to note that again, it is a human of another category—in this example differentiated by naval rank (and perhaps, class) rather than nationality—who is singled out for censure. It is more interesting still to observe that Péron did not record any actions to stop or punish the sailor; indeed, despite his concerns, he seemed content to instead indulge in nostalgia for a species almost already past:

> [The] eloquent prediction of one of my earliest and dearest teachers will undoubtedly come true: 'This great species will become extinct ... vanquished by the irresistible force of human intelligence, it will disappear from the face of the earth.... It will exist only in the memory of men and in works of genius.' (46)

The quote used by Péron is from Lacépède's *Histoire Naturelle des Cétacés* and its inclusion (along with the anti-English sentiment) indicates his awareness of the patronage of the Institut—in whose company Péron, writing of the seals in his *Voyage*, his own work of genius, included himself. And while it would certainly be perverse to accuse Péron of using a species' extinction to advance his own career, it is less so to observe how his position as a scientist and collector allowed him to assume this higher ground, from the elevated position of which he could disengage from an object that he could closely—sometimes simultaneously—engage with as a subject. It is for this reason Péron could recount how he and Lesueur "collected a host of species unknown in Europe" on King Island,[25] and even eat more than a few of the island's inhabitants to test their suitability to the European palate, while decrying the slaughter of seals with an envy barely concealed (44, 11). King Island's animals were there for

[24] As it would be to point out his apparent ignorance that seals "cry" due to their lack of nasolacrimal ducts that, in most other mammals, drain excess tears into the nasal cavity (Berta, Sumich and Kovacs 152).

[25] These included tiger quolls, echidnas, wombats, kangaroos, lizards, snakes, toads, molluscs, worms, zoophytes and, of course, the King Island emu (Peron, *Voyage* II: 11).

the taking, but who took what, and why, and how, was entirely conditional on their status, entitlement and ranking in the human and animal hierarchy.

Baudin had his own contradictions. He chided King, with whom he had forged a strong friendship, in a private letter dated 23 December 1802:

> There is every appearance that in a short time your fishermen will have drained the island of its resources by the fishery of the sea-wolf and the sea-elephant. Both will soon abandon their resorts to you if time be not allowed them to recruit their numbers, which have been much diminished by the destructive war carried on against them.... [I]f you do not issue an order you will soon hear that they have entirely disappeared. (qtd. in Giblin 296-97)[26]

Two months later, in King George's Sound, *Le Géographe* crossed paths with the *Union*, an American ship captained by Isaac Pendleton with a contract for 20,000 seal skins for the Chinese market. Having been misled by reports of abundant seal colonies around the southwest Australian coast, or having misjudged the seals' seasonal movements—"he had obtained only three or four hundred skins" wrote Baudin—Pendleton asked for advice. As well as dinner, Baudin

> gave him two of Citizen Beautemps Beaupré's charts and one ... drawn up by [Matthew] Flinders, as well as some private observations on the entrances to Port Phillip and Western Port and on the position of King Island.... [and] indicated the best anchorage to him, telling him as well of the place where he would find a reasonable number of seals. (488, 489)[27]

Baudin's actions seem unfathomable. Had he not just warned his friend to protect this resource? Perhaps aware that Péron's descriptions, published in the years to come, would threaten the very animals he had described (indeed, news of their scarcity

---

[26] King did advise the British government that it would be "expedient to restrain Individuals from resorting [on the Bass Strait islands] in too great numbers, and to fix certain Times for their visiting these places" but, perhaps unwilling to shut down what he deemed "the most considerable among the very few natural productions of this country that can be esteemed commercial," he took no action (qtd. in Bonyhady, 10). Horner reports that seals were locally extinct by 1804 (269).

[27] Pendleton went to Kangaroo Island—another sealing ground recommended by Baudin—and duly massacred 14,000 seals. After sailing to the Antipodes Islands to deposit another sealing gang, he went to the "Fee Jee Islands, to procure a cargo of sandal wood for the Canton market" and was himself "most inhumanly massacred" (Fanning 233-34).

would exacerbate their predicament), Baudin chose to possess by proxy: if the ever-dutiful captain could not procure these "useful" animals for France, then he could at least ensure that an ally could, before it was too late.[28] Time, as Baudin was to discover, was not on his side, and it was this discovery that was to be influential in his treatment of another collector's item, the King Island emu.

Animal hierarchies II: The King Island emu

It is ironic that Péron wrote more about the elephant seals, a species the French apparently did not collect—except on paper—than the apparently "useful" emu they did. It is also ironic that most of what is known about the King Island emu was garnered by a man whose closest encounter with the wild bird was in a casserole. Péron reported: "The depths of the forests harbour a great quantity of cassowaries" (*Voyage* II: 11), but due to the weather it is unlikely he saw any living King Island emus in the wild. Instead, he prepared the most significant of all documents relating to the King Island emu: a thirty-three-point questionnaire recording an interview he conducted with a sealer, probably Daniel Cooper, about the bird's life and habits. But instead of being published in Péron's official account, the questionnaire was mislaid. It was found (along with the drawing reproduced as Figure 3.3) in a large dossier of Lesueur's miscellaneous papers acquired from a bookseller in Le Havre "some years" before 1899 (Milne-Edwards and Oustalet, "Note" 207, trans. von Bertouch; Horner 368).[29] In 1899 the questionnaire was published in the *Bulletin du Muséum d'Histoire naturelle*, but its only publication in English was as an excerpt in an Australian ornithological journal in 1914, in a paper (Brasil) that was itself translated from the *Bulletin de la Société Linnéenne de Normandie* (6^{e} serie, 6^{e} volume, 1913). Appendix A therefore represents the first time an English translation of the entire questionnaire has been provided. Unfortunately it has not been possible to ascertain in which language the interview was originally conducted. Indeed, given that some of the responses were recorded in the third person ("He does not know..."; "He believes..."), it is possible that an intermediary translated for both Péron and Cooper (Appendix A: q. 2, 9).

[28] Professional solidarity with fellow seamen and a desire to break the English monopoly may have also been motivations.

[29] Horner (359) believes many missing notebooks and drawings were recovered between 1874-84.

With its ostensible ecological focus the questionnaire is remarkable for "an age in which zoology was still dominated by the collection and cataloguing of dead specimens" (Duyker 159). Brasil notes that it "shows us how carefully these travellers were making their investigations and to what degree of confidence we can accept their observations" (94). To be sure, Cooper was an observant man; Péron wrote that he had been on King Island for thirteen months, awaiting a cargo ship "with an impatience made all the greater by the fact that the casks given him had been full for a long time and that he found himself reduced to an inactivity completely contrary to his interests." This had given him plenty of time to observe the other wildlife (18, 13). However, shipping records indicate that Cooper and his team sailed from Sydney on 5 June 1802 (King 639; Cumpston 46). They had therefore been on King Island for about six months before Péron met them in December, a blunder that arouses suspicions about the accuracy of Péron's other observations.[30] Missing reports, translated transcriptions: unlike the ghost birds of Chapter One, these textual emus are more real than ethereal, but even their reality is second-hand. Unreliable memoirs must by necessity inform this unnatural history; the fact that they are unreliable, and seem to be received uncritically (i.e. Duyker 156, 158), reveals much about attitudes to the bird.

Péron's official account, published several years after the expedition, recalls the "mighty cassowary, 5 to 7 feet tall," but the questionnaire states that the adult King Island emu was "about 4½ feet" tall and at most weighed "45 to 50 pounds" (1.4 m high and 23 kg), a stocky bird smaller than the Tasmanian emu and the emu of the Australian mainland (which can stand up to 2 m high and weigh 50 kg).[31] Péron learned that the little emus inhabited the secluded scrub near lagoons, emerging in the morning and evening to pick at grasses, berries, native succulents and seaweed along the shoreline. The birds scratched themselves with "the nail which is at the end of each wing" and swam well, "but only when it is necessary; afterwards they stop and shake off the water" (Appendix A: q. 6, 17, 19, 13, 16, 14).

[30] This may also cast doubt on whether Péron actually saw any sealing activity on King Island, or whether he based his observations, like those he made of the King Island emu, on second-hand accounts.

[31] Milne-Edwards and Oustalet ("Note" 214) write that even the height of 4½ feet "seems much too high ... for the black [dwarf] emu. This would seem more appropriate for the common [Australian] emu"; Balouet and Jouanin (317) record that subfossilised tarsometatarsi (the long bone of the birds' lower legs) found on King Island measure between 175–292 mm, confirming the species' small size.

They were mostly solitary, only gathering during the breeding season "in flocks of 10 to 20" on the shoreline, where "each male chooses a female." Once paired, the birds separated from the others to build a shallow oval nest of small branches on the ground, which they padded with dead leaves and moss plucked from the foot of trees. Between seven and nine eggs were laid in late July; Cooper observed that the females of "a large number of emus" he had killed between 25 and 26 July "all had eggs in their bellies." He also believed that the males took "a share in the brooding" of the chicks, which were born "[a]s large as a man's fist," but weak and unable to run. The chicks were "covered like young turkey-hens, but [were] all striped with black lines in the length of their bodies." Juveniles had greyish plumage that turned black as they matured and the adult males, whom Cooper believed were "bigger" than the females, had "brighter" feathers (Appendix A: q. 3, 17, 23, 24, 25, 26, 4, 7).

Snakes, rats and quolls ate the emus' eggs, and quolls were also opportunistic predators of the chicks. Cooper also reported that hungry crows were "chased off with blows of the mothers' beaks."[32] When threatened themselves, the adults preferred to run for cover, but island life had made them vulnerable to intruders. "They run very quickly, but ... being too fat, run ten times less quickly than those from Port Jackson," Péron recorded. "Generally, no faster than a very good dog." Unfortunately for the emu, very good dogs had the run of the island, forcing the birds to "defend themselves with their feet, like horses do," Cooper told Péron. His own dog had "been thrown ten feet by a kick" and was "often stunned" by the force of the blow (Appendix A: q. 9, 8, 11, 14, 10). As domesticated animals, dogs were privileged: whatever affected them affected their human owners. Their welfare was paramount because, as Péron noted in his *Voyage*: "In order to obtain the enormous quantity of meat that they consume, the sealers use a method as simple as it is cheap.... [T]rained dogs ... beat the woods by themselves and seldom fail to strangle several of these animals each day" (*Voyage* II: 15-16). He saw the carnage first-hand when one of these "intelligent hunters" was released on Kangaroo Island (off the coast of what is now South Australia) some days later, and predicted:

[32] Although it was probably the father defending the chicks; the fact that parenting (including incubation) is exclusively male emu behaviour was not yet sufficiently recognised to confound gender stereotypes held by sealer and scientist alike.

> it is conceivable, even, that the innocent and gentle race of kangaroos would surely be destroyed in several years by a few dogs of the kind that I am speaking of. (*Voyage* II: 16, 63)[33]

Once again Péron registered his sympathy for an "innocent and gentle race" (*Voyage* II: 63)—kangaroos this time, instead of seals—but this sympathy did not seem to extend to the equally assailable King Island emus. The questionnaire starts with standard, disinterested queries, but eventually Péron reveals his intentions and casts Cooper's earlier responses in a new light. "Are they likely to be fattened easily and a great deal?" he asked Cooper, who confirmed the emu could be tamed and bred in captivity. The scientist learned of uses for their grease and even whether the white of their eggs, which were "very good to eat," coagulated when cooked. "[T]he best way of preparing the flesh" was by roasting, but it could also be dried, salted and even smoked, and kept "as well as ham." One can almost sense Péron's excitement—and his acquisitive agenda—in his supplementary note: "The Emus which we are talking about here are literally swarming on King Island" (Appendix A: q. 28, 29, 32, 24, 31 *passim*).

Cooper told him that he had already "caught or killed more than 300" birds, but it is uncertain how an island just sixty-four kilometres long and twenty-seven kilometres wide could sustain "swarms" of emus that, according to the Surveyor-General Charles Grimes, inhabited the coastal fringes. Furthermore, since the sealers had been on the island six months this figure suggests Cooper alone killed fifty birds a month; his eleven-man gang and his wife could have slaughtered up to 3,600 emus by the time of Péron's visit. However Péron, who bewailed the massacre of the seals, did not criticise the sealers for this other sustained onslaught. Executing the expedition's instructions with "zeal and dedication" (qtd. in Péron, *Voyage* I: lv), he instead seemed blinded by the possibilities. By describing the emus as "swarming" he indicated their supposed unlimited fertility and inexhaustible supply while simultaneously robbing them of individual appeal—and thus the sympathy afforded more individualised, charismatic animals. It was a cruel irony that Péron assessed the

[33] Surveying King Island in 1826 and 1827, G. W. Barnard reported that "economic animal life had been depleted by sealers and by increasing numbers of feral dogs" (Hooper 42), no doubt the offspring of those brought to the island by Cooper and his men.

abundance of the species based on the number already killed; that he intimated such familiarity with a cryptic, crepuscular bird that he never saw alive in the wild. And without first-hand observations of the birds and their decline, nor a clear understanding of their range restriction, he failed to infer the inevitable. The fact that his second-hand access to and evidence of the bird was on a sealer's terms must have also affected his perception. This perception was to prove influential.

King Island's elephant seals, by contrast, were large, mammalian, diurnal, gendered and readily accessible by humans. Their familiarity to the French was real rather than imagined and their numbers were evidently dwindling. They were the source of obvious, immediate and sizeable economic and geopolitical benefits, while the emus' usefulness to the French, potential rather than actual, was not tinged with the same kind of jealous urgency. Perhaps, given the expedition's competing principles of organisation, it is not surprising that in Péron's mind there also seemed to exist another, internal hierarchy; a sliding scale of economic usefulness. His questionnaire emphasises the birds' importance as a food item for "honest" working people lacking "our brilliant education and philosophy" (*Voyage* II: 15, 18). Like the "gentle," "stupid" wombat (*Voyage* II: 12), the emus could be tamed by these men and slaughtered with ease. There was no glory in hunting small game too fat to escape trained dogs. The emu posed no real human danger, challenge or even sport. They yielded no furs or barrelfuls of oil and, perhaps most importantly, did not "dissolve into tears" (*Voyage* II: 41).[34] Péron's questionnaire does more than crystallise the dual purposes of Revolutionary natural science. It marks, with unusual precision, an exact nexus of natural and cultural history. Although not included in Péron's official account, Cooper's observations were perhaps enough to justify and possibly even defend the birds' slaughter in Péron's mind, and this attitude found its way into the *Voyage*. Why else would a seemingly useful species, accorded so much attention—the only one, besides the elephant seal, to receive such scrutiny—then be so readily forgotten?[35]

---

[34] Interestingly, neither Milne-Edwards and Oustalet or Brasil discuss the plans, obvious in the questionnaire, for the emu's economic exploitation; indeed, Brasil edits these questions out of his paper. Instead, both papers use the questionnaire to establish and verify the identity and appearance of the now-extinct bird, without acknowledging that perhaps the main reason the questionnaire exists is due to interests other than ornithology.

[35] To be fair, it is possible that the emus would have received greater attention had Péron not died of tuberculosis on 14 December 1810 (Duyker 234). Horner (328-33) and Fornasiero, Monteath and

It seems the unseen yet swarming emus were useful, but of secondary value. They were quite literally fuel for the commercial exploitation of the more coveted and obviously less numerous seals, exploitation vehemently opposed unless it directly benefited the French. For, just pages after lamenting the fate of the seals of King Island, and *immediately following* his prediction of the destruction of "innocent and gentle" kangaroos by introduced dogs, Péron switched modes of inquiry. On Kangaroo Island, he wrote, "we observed ... a new species of otary ... [and] some other, smaller species of phocacean," the hunting of whom, he coolly calculated, "would offer valuable profits.... If such a venture were to be undertaken ... the kangaroos and cassowaries would supply them with a wholesome and inexhaustible source of food" (*Voyage* II: 63). In turning the animals into objects, he distanced them while elevating himself, now subject, beyond the sealers' moral realm; ennobling his own economic speculation with the imprimatur of scientific language.

Of course, it could be argued that such incompatible yet coexisting opinions are symptomatic of human attitudes to animals throughout history. "The line between cold, rational practice, dissecting and analyzing, and empathetic identification with nature does not run between people," writes Dunlap. "It runs through each one" (36). Perhaps Péron was embodying the connection and the conflict between discovery and exploration; reason and emotion; preservation and destruction. So contradictory was the naturalist's mind that despite having given so much attention to the emu on King Island, his *Voyage* fails to mention that some were collected and brought onto *Le Géographe*. This oversight was to wipe this already elusive bird from history, as well as zoology, for years to come.

Sojourn on Kangaroo Island

On 24 December 1802 Baudin returned to King Island to collect the *savants* and repay Cooper for the provisions he had supplied. "I also bought some emus or cassowaries from his men," he reported, "as well as a very tame male kangaroo and three wombats" (Baudin 453). (Here Baudin demonstrates an unusual, Péron-like

---

West-Sooby (348-50) explain how Napoléon's changing maritime priorities and Baudin's discredited reputation thwarted the publication of scientific results and besides, what was left of Péron's energies was taken up writing the *Voyage*. Horner adds that as Péron's health "deteriorated, his plan to write the scientific as well as the historical parts of the *Voyage* must have seemed more and more hopeless; perhaps this is why some scientific chapters [such as that about the seals] begin to appear in the historical part" (335).

vagueness that can only be resolved by conducting an emu body-count in reverse chronological order. Duyker [162] believes he collected three King Island emus; I calculate four, based on the number of deaths recorded in Baudin's *journal de mer*; but Christian Jouanin's examination of Muséum records suggests five were brought aboard ["Les Emeus" 183].[36]) Baudin also bought at least one of the sealer's hunting dogs, who was first put to work on Kangaroo Island on 9 January.[37]

The dog's efficacy has already been noted: Péron (*Voyage* II: 62) records that as well as numerous kangaroos killed for meat, twenty-seven live kangaroos were brought aboard at Kangaroo Island for scientific and other purposes. Baudin wrote: "[a]mongst these ones that we hope to carry back to our country, are three females which have offspring and may prosper." Not all came quietly. According to Baudin, one male "tried to escape by throwing himself into the water, but fell into our hands after putting up magnificent resistance" (469). The kangaroo was lucky to have been captured more or less unharmed. A litany of his fellows, on this island and on coastlines to come, were "throttled" and "severely wounded" by the dog, trained to tear at their jugular. By the end of January two captives had died of their trauma (Baudin 470, 471; Péron, *Voyage* II: 62).

Given the gore and struggle it is not surprising that on 31 January Baudin wrote, with almost palpable satisfaction, of the collection of "two pretty, live emus" (471), another dwarf species endemic to Kangaroo Island. Péron, keen to classify the quality if not the quantity, noted

> of all the birds that this island received as its share from Nature, the most useful to man are the cassowaries. These big animals appear to live on the island in large flocks, but because they are very agile runners and because we did not take much care in hunting them, we were only able to obtain three live ones. (*Voyage* II: 63)[38]

[36] As we will see, Baudin took great interest in the wellbeing of the emus and carefully noted each death at sea. The fact that he did not record the death of this "extra" bird suggests the emu was predeceased, and was acquired as a skin.

[37] Péron mentions the use of one dog (*Voyage* II: 62); Baudin mentions a "dog" (464) and "our dogs" (469).

[38] The Kangaroo Island emu was "big", but not much larger than their King Island counterpart, and just as defenceless. Although the exact date of their extinction is unknown, they had certainly disappeared

However *Le Géographe*'s engineer, Lieutenant Ronsard, confirmed in his journal that "we had only taken two which we brought aboard alive" (qtd. in Fornasiero, Monteath and West-Sooby 236). A brief discussion of these birds is necessary, for their collection (including the numerical discrepancy) was instrumental in the textual representation, and erasure, of their King Island counterparts.

Relieved to have snapped up the birds that had for days eluded him, Baudin wrote that they were a "lucky capture" (471). But given the circumstances, his use of "lucky" deserves closer examination. Since Baudin was the first to circumnavigate Kangaroo Island (Duyker 163) the emus validated his discovery. Feathered evidence of the existence and inventory of new land, an emu graces Lesueur's cartouche in Louis de Freycinet's map of Terre Napoléon (Figures 2.2 and 2.2a). Furthermore, Baudin might have considered himself "lucky" to have caught the emus before they disappeared; his aforementioned environmental awareness is indicative of his observational skills, perhaps honed by his collector's acquisitive eye. His numerous dealings at Île de France in both the merchant and imperial navies means it is unlikely he would have been unaware of the fate of the dodo and the elephant birds (ratites like the emu) of nearby Madagascar, by then a French territory for almost one hundred and fifty years.[39] The discovery of the emus could signal their demise or, if Republican science could engineer domestication, their salvation from certain extinction. Certainly the existence of such a rarity in Joséphine's garden would have been a most exclusive trophy of scientific and imperial pursuits. And as the procurer of these curiosities Baudin, legitimised and admired, may have anticipated celebrations like those he had enjoyed in 1798. But as the captain appointed the contents of his own ark, he again faced what Philipp Blom calls "the curious dialectic" of collecting: of making an item "dead to the world" in order to give it a life, however circumscribed, in another (152-53). In the ambiguous between-worlds of *Le Géographe*, a ship measuring just thirty-eight metres long and nine metres wide (Horner 57), the emus' lives were reduced to a small gangway pen.

---

before the arrival of the South Australian Company's colonists in 1836 (O'Brien, "Family DROMAIIDAE" 59; Martin 656).

[39] The first French governor of Madagascar, Étienne de Flacourt, made in 1658 probably the first written description of the elephant bird (Fuller 35).

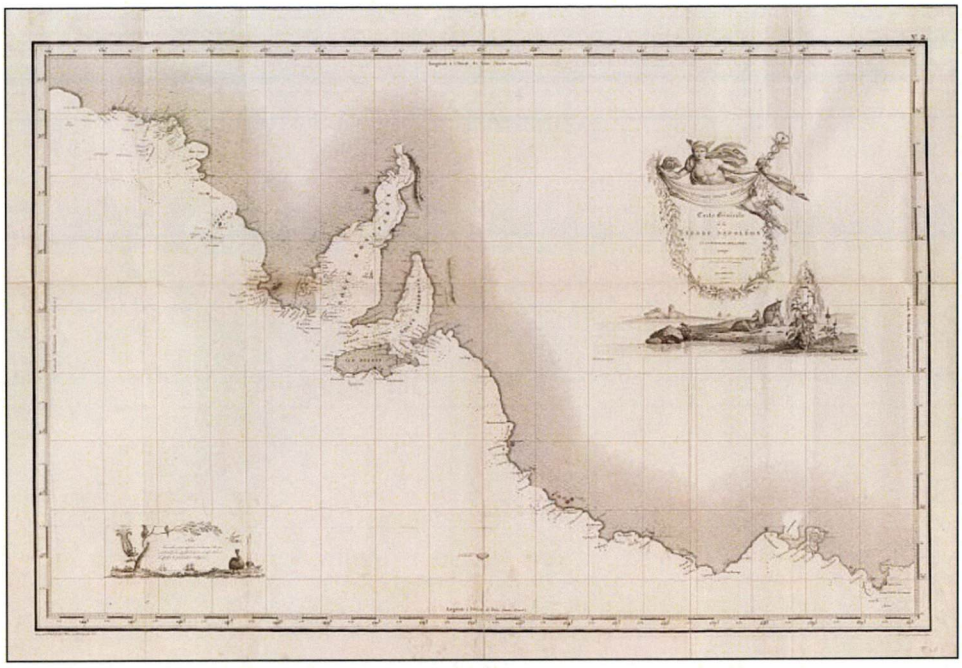


Fig. 2.2. Louis de Freycinet, *Plate II. Terre Napoléon* (showing southeast Australia and Kangaroo Island). Engraving from the *Atlas* of *Voyage de découvertes aux Terres Australes* (2[e] partie) (Paris: Imprimerie impériale, 1811).

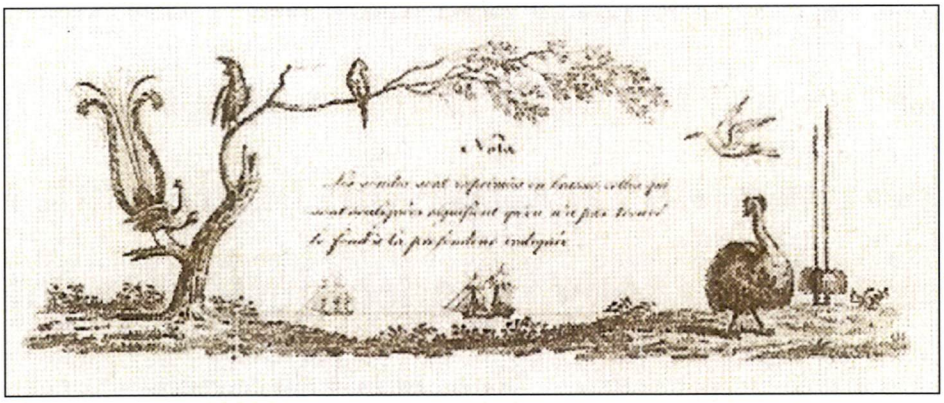


Fig. 2.2a. Cartouche from Freycinet's map.

Changing places

On 4 February, "we found two of our kangaroos dead in their pens," wrote Baudin. "I had no doubt at all of the bad weather's being responsible, for they were completely soaked with the rain and the continuous mist … in spite of our having been very careful to cover their pens well with good tarpaulins" (473). Cabins became cages, as the animals' accommodation was upgraded and the officers and *savants*, including the botanist Leschenault, were removed from their quarters and herded into ever-decreasing spaces. Baudin noted with grim humour the "lamentations" and

"displeasure" shown "in no uncertain way" by the "malcontents." When an acting sub-lieutenant, Ransonnet, complained of having to relinquish his cabin to some kangaroos, Baudin chided him for preferring his "own comfort and a few temporary advantages to the greater success of the expedition and whatever may serve our country" (492, 473).

The "lamentations" continued even when Pierre-Bernard Milius was appointed captain after Baudin's death on 16 September 1803. By the time *Le Géographe* reached France, scientists and officers of all ranks (except Milius) were crammed together into the great cabin and gun-room. "This measure was not to the taste of everybody, particularly persons taught to calculate only their convenience," Milius observed. As resentment built he was, like Baudin, obliged to relieve officers of their duties, including the brothers Louis and Henri de Freycinet and the ever-irritable Ransonnet. His health already delicate (he had previously left the expedition at Port Jackson due to illness), Milius was admitted to hospital for forty days soon after his arrival in Lorient. "The hardships and pain of all kinds that I endured on this voyage led to the complete breakdown of my health," he reported. "It is pointless to name here those responsible for all my woes" (Milius 53, 60, my trans.; Horner 323; Brown, "François Péron" xxiii).

The continuity of such tensions suggests that they were not based solely on poor interpersonal relations with Baudin. As tables were (literally) turned, food became fodder and the men's water was rationed so no animal went thirsty (Baudin 477, 560), assumptions about human hegemony and dominion—the Linnaean conventions that informed much of the expedition's activity—may have been similarly inverted. The physical and psychological space occupied by the growing menagerie could only have reiterated its preeminence, forcing men to reassess their place not only in the pecking order (so to speak) of the ship, but in the expedition as a whole. This must surely have contributed to the interpersonal problems on board: men who by birth or rank considered themselves socially elite, men who had Péron's "brilliant education and philosophy" (*Voyage* II: 18) would not have appreciated being treated like animals. And as animals and men came into ever-increasing contact and endured similar hardships and pressures, the differences between them became still less defined. Birds

that were "swarming" on King Island took on a new distinction when they were encountered on an individual basis.

But as Erica Fudge warns, the "perceived links between animals and humans ... bring with them dangers" ("A Left-Handed Blow" 7). Drawing attention to the shared characteristics of humans and animals can itself be anthropocentric, and thus may block insights into, and understandings of, the experiences of real animals. The blurring of spatial and other boundaries on *Le Géographe* did not mean that certain power relations were no longer in force. After all, on 15 March, off Dirk Hartog Island (on the western Australian coast), Baudin wrote

> We lost a kangaroo and an emu in the course of the day. It was the second time that this accident had occurred and we attributed it to the heavy movements of the ship, which ... was thrown about in every way by the rough, uncomfortable sea.
>
> We stuffed the animals in order to preserve their skins. (504)

Taxidermy was certainly not to be the fate of any deceased human voyager. Nevertheless, it is possible to garner some idea of the emus' experience based on evidence of shipboard conditions reported by the men. Penned in the gangway, the birds were trapped without recourse or retreat (Figure 2.3). They suffered the torments of the ship's rats and cockroaches, the sounds and smells of the wild carnivores, the reeking men, the heaving sea.[40] Flung about their cage, they were probably battered and drenched—and Baudin believed they were seasick. On 2 July he reported the weather

> had caused the ship to shake so violently that all our animals, which I so wanted to preserve to be of use to France, were greatly incommoded by it.

[40] One of the younger officers, Pierre-Roch Jurien de la Gravière, wrote: "The cockroaches had multiplied with such fertility that the corvettes had become infested with them... the rats on their side had multiplied with no less success. All these animals caused a nauseating smell" enhanced by the shellfish left buried by the scientists in buckets of sand "until we considered the decay of the animal sufficiently advanced." The scurvy-stricken men too "gave out a fetid smell," wrote medical officer Hubert-Jules Taillefer, "which, when you breathed it, seemed to attack the very root of life" (qtd. in Dunmore 40, 42).

This was particularly the case with the emus, which we had to feed by force so that they would not die of hunger. (557)

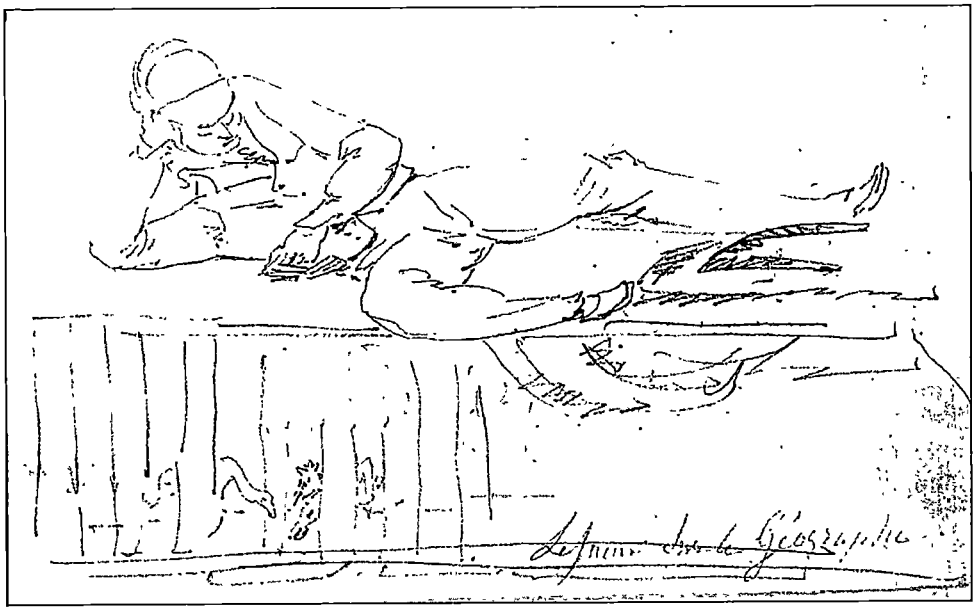


Fig. 2.3. Charles-Alexandre Lesueur, self-portrait on board *Le Géographe.* Muséum d'Histoire naturelle du Havre, No. 13032. From Bonnemains, Forsyth and Smith (23). Note the birds in the cage.

Since the animals shared at least some experiences with the men, Baudin's log can also be used as a kind of proxy through which the animals' realities can be gleaned. Conversely, Baudin almost showed signs of becoming animal: as well as preserving his specimens, he seemed intent on literally preserving his own body, of turning scientific scrutiny usually reserved for the other onto himself. He had tuberculosis, and was "spitting blood ... so thick," he reported, "that one could have said that it was pieces of lung coming away from my body" (544). Former midshipman Charles Baudin recalled that the captain

> collected in a jar of spirits of wine the lungs he had brought up in the course of his untold suffering, and he showed them to everyone who came to visit him. 'Are the lungs indispensable to life?' he would say. 'You see I no longer have any, yet I still exist.' (qtd. in Horner 317)

With the success of the expedition reliant on the wellbeing of its captives, it is little wonder Baudin engaged and empathised with his animals. I write "his" animals since

his references to "pretty emus" and "magnificent" (and gendered) kangaroos seem to indicate a subjective, emotional investment that is unexpected in the reportage of one just doing his duty. Wild animals on a wooden ship; Europeans in the Antipodes: both groups conceptually and materially othered, both in service—and servitude—to the Republic. On 31 July he did not hesitate to draw parallels:

> Our twenty sick men obtained little relief from the remedies administered to them. This was attributed to the humid and unhealthy atmosphere that had surrounded us for so long.
>
> Our quadrupeds were no less exhausted by the bad weather and the ship's movement than we all were, and I am very afraid of losing several of them, if it continues without at least some interruption that would enable them to regain strength. (568)

Baudin seemed to not only observe parallels between animals and humans, however. His correspondence, one of few windows on his thoughts, also reveals an interesting slippage between different classes of animals. In a letter to his patron Jussieu, written in Timor two months earlier, he had been pleased to report:

> The quadrupeds, such as the kangaroos, emu and umback [wombat] are in a good state…; there remain ten of the former that are bigger than sheep, four of the second (emus), and only two of the latter; I also have about fifty beautiful birds of different species. (qtd. in Jouanin, "Live Animals" 64)

Given Baudin's plans for the herding of kangaroos (469) it is possible his choice of animal comparison (sheep) was not based solely on size alone. But also of interest is his classification of emus as "quadrupeds." They are quite clearly differentiated from the birds; Baudin did not, for example, write "fifty *other* beautiful birds." His bestowal on the emus of a significance usually reserved for mammals could of course have been a slip of the pen of a dying man—the emu's distinctive feathers can seem more like fur—or indeed acknowledgement that the birds were to be farmed like quadrupeds—another example of animal classification according to human use. But as the monsoonal winds reversed direction and the ship teetered on the edge of disorder, it seems fitting that Baudin's emus were, in text at least, similarly

inconsistent. Baudin's concern for them, however, was not. He wrote of "giving them such attention as should have secured them a happier fate" (560), and he cared enough to allow them to literally (although unwittingly) change the course of the voyage, and its outcomes.

Once the survey of Australia's northwest coast was completed, the expedition was to continue east to explore the Gulf of Carpentaria region across to the northeast tip of Australia (Forfait qtd. in Horner 382-83). But on 7 July 1803 Baudin set sail west, to Île de France. His log reveals the priority he gave to his animals, the loss of which, he reasoned, "will certainly not be made up for the slight amount of geographical knowledge that it seems we may gain." He decided to turn the ship back, "rather than lose them all." He wrote:

> [O]ur ... emus were very sick. We could only attribute this to the violent and incessant movement of the heavy sea, which left them not a moment's peace.... Since the emus refused to eat, we fed them by force, opening their beaks and introducing pellets of rice mash into their stomachs. We gave them ... wine and sugar; and although I was very short of these same things for myself, I shall be very happy to have gone without them for their sake if they can help in restoring them to health.
>
> On this day I had a worse bout of spitting blood than I had had before. (557, 560)[41]

Baudin's log thereafter is a document of despair. His entries grow shorter but on 19 July, somewhere in the Indian Ocean, he made the effort to note "the unpleasant experience of losing one of our emus.... This loss was particularly great, as we found, upon skinning it to stuff it, that it was a female. It is possible that there is not another amongst the three that remain." Baudin's hopes for the domestication of the emus were dwindling as were, we can guess, his hopes for personal glory.[42] On 2 August, just five days from landfall at Île de France, another emu died and was stuffed for the

[41] Noting that "the sweetened wine ... had done them good," Baudin had the sick animals dosed twice a day (561).

[42] Of the Australian species, six kangaroos, the last two wombats and another forty-five birds died on the journey from Timor to Paris. Horner notes such losses "would have distressed Baudin" (328). Interestingly, seven pigs aboard *Casuarina*—"perhaps with a presentiment of their fate," writes Duyker (198)—jumped ship in Timor. Only three were recaptured.

museum. "I shall consider myself fortunate if I manage to keep the two that I still have of this species," wrote Baudin. But the unfortunate captain himself died six weeks later (564, 569, 570).

Aftermath

By the time the emus arrived in France, those captured on King Island had been on the ship for fifteen months. They survived a four-month soujourn at Île de France and a three-week stopover in South Africa. They survived Milius' re-organisation and re-housing of the Asian, African and Australian species—a process complicated by the presence of several large carnivores. They survived more than a week becalmed in the heat north of the Equator. They survived eleven months at Malmaison, Joséphine's estate ten miles west of Paris, before she sent them to the Muséum's menagerie at the Jardin des Plantes. They survived Joséphine, who died in 1814, and they survived their wild counterparts, who became extinct soon after Baudin's visit. When the last captive emu died in Paris in May 1822, the species was gone forever (Horner 315, 319, 323, 324; Milius 53, 57, 60; Duyker 208; Brown, *Ill-Starred Captains* 417; Jouanin, "L'Impératrice Joséphine" 32, "Les Emeus" 181).

This presumes that a King Island emu did in fact reach France alive—something that was not conclusively proved until 1990 (Balouet and Jouanin 314-18). Apart from the vignette from Péron's *Voyage* there are few records of the birds at Malmaison, and the surviving evidence is as obscure as ever. What is clear from the 547 contracts of sale and exchange required to create the Malmaison estate, and the glasshouse, greenhouse, hothouse, coolhouse, summerhouse, sheep-fold, cow-shed, chalet, dairy, aviary, orangerie, menagerie, theatre, fountains, frescoes, statues, steles, marbles, bronzes, grottoes, vineyards, vistas, heathlands, farmlands, forests, lawns, lakes, brooks, bridges, boats and a Temple of Love (Figure 2.4) complete with "two bronze sacrificial urns, smouldering with incense to the God of Nature" (Lack 24-32, Stuart 242, 284, 286, 381; von Uklanski qtd in Lack 53; Douglas-Hamilton 22, 64), is that Joséphine had "a predatory love of objects.... a desire for excess and profusion.... a desire to be remembered that was not dissimilar to Napoleon's" (Stuart 387). Walter Lack relates a visitor's account of a tour with the Empress through her glasshouse:

It is here [she said], where I am enthroned among the host of plants … the lily from the Nile, the rose from Damietta; these conquests from Italy and Egypt will not be enemies of Napoleon; but here are my conquests, she added, while she showed us her beautiful jasmine from Martinique … (29).

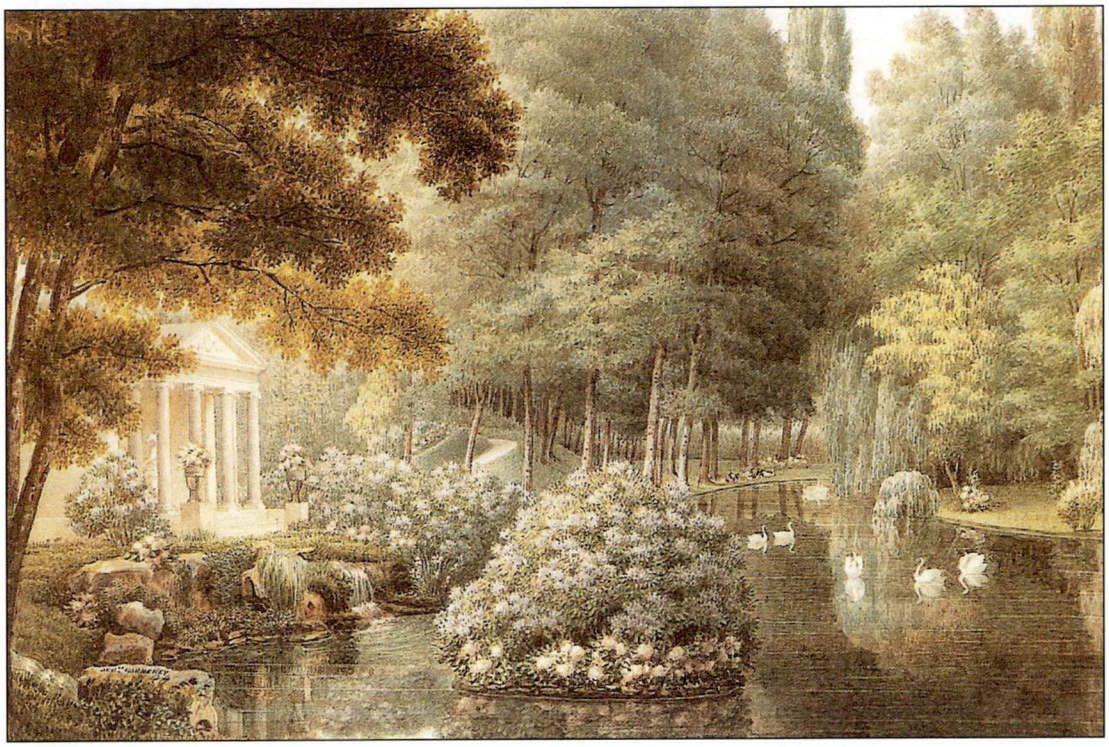


Fig. 2.4. Auguste Garnerey. *Le Temple l'Amour*, c. 1812-13. Musée national du Château Rueil-Malmaison. From Douglas-Hamilton (191).

Outside the glasshouse, Chinese pheasants and Scottish ponies joined the llamas, lemurs, zebras, gazelles, flying squirrels and other zoological "booty" acquired by the Empress via her husband (Lack 12, 34). She was of course upholding the tradition of imperial menageries, albeit with a Jacobin twist. Since in pre-Revolutionary times "[c]aged animals could stand in metaphorically not only for slaves but also for victims of royal despotism," writes Cissie Fairchilds, "... when the Revolution came, animal shows were abolished and the beasts 'freed' from their masters" (1071). Thus Joséphine's animals were permitted to "run about hither and thither in those places most suitable for them" (qtd. in Lack 34). But the word *menagerie* comes from *ménage*, the management of a household, and it seems ideology was not enough to subdue this collector's passion to control a world of her own making. Wild animals were welcome at Malmaison as long as they weren't actually wild: a female orang-

utan, wearing a white cotton chemise, occasionally took tea with the Empress. Animals who weren't tame "or at least harmless" or who required special care, such as the panthers carried from the Cape of Good Hope on *Le Géographe*, were sent to the Jardin's pens and pits and thence to Cuvier's cabinet at the Muséum (Lack 34; Stuart 284). The Empress' peaceable kingdom was as manufactured as the landscape, a cage (and stage) with bars as strong as they were invisible. Perhaps some of the inmates sensed the deception. A visitor to Malmaison in 1809 recalled: "the only kangaroo jumped over the ditch along one side of the Park, seeking freedom, but the poor animal broke both its forelegs" (von Uklanski qtd. in Lack 54).

In February 1805 François Brisseau de Mirabel, property manager at Malmaison, sent the emus, three ostriches, a cassowary (*"un Casoar casqué"*)[43] and a lone pelican to the menagerie at the Jardin des Plantes (qtd. in Jouanin, "Les Emeus" 181). While ratites were to Péron's taste, they may not have been to Joséphine's; perhaps they did not suit her aesthetic, and a cassowary's claws can indeed be dangerous to humans. An entry in the menagerie's catalogue on 27 February notes the receipt of "*[c]asoars* [emus] *de la Nouvelle-Hollande. Ces oiseaux, venus par le capitaine Baudin, ont été donnés par Sa Majesté l'Impératrice*" (qtd. in Jouanin, "Les Emeus" 181) and a history of the Muséum, published in 1823, confirms that "the ostriches and emus [*cazoars*] had a special enclosure" in the Jardin's menagerie around 1805 (Deleuze 109, my trans.). Journalist John Scott saw this enclosure during his visit in 1814:

> A large circular building lately erected contains ... a specimen of the Arnee or Indian Bull. In enclosures around the tame fowls, peacocks, pheasants, and cassowarys, ducks and swans, roam about or resort to the piece of water at the bottom. (290)

There nevertheless remains some uncertainty. Not only were the terms "cassowary" (*cazoar* or *casoar*) and "emu" used interchangeably during this period (and there was

[43] The cassowary was also collected on the expedition. Milius makes note of "*Cazoards de l'Ile de Java*" in his list of the live animals disembarked from *Le Géographe* (63); Cuvier et al. detail "an emu in the French menagerie" who, on the strength of their description, could only be this bird from "Java" (441-42). In fact, cassowaries are found only in northeast Australia, Papua New Guinea and the Moluccan Islands (O'Brien, "Family CASUARIIDAE" 60-61); this well-travelled bird was a gift from Général Dacaen, Governor of Île de France, who in turn received the bird, "[a]pporté des Moluques," from an Admiral Decker of the *Batave* (Péron qtd. in Jouanin, "Les Emeus" 187).

"*un Casoar casqué*" in the mix) but, if these "cassowarys" *were* emus, they might not have included a King Island emu. When the dwarf emus arrived at the Jardin, its menagerie was already home to the Australian emu brought back on *Le Naturaliste* in 1803 (Duyker 163). Just to confuse matters, the current curator of Birds and Mammals at the Muséum, Jacques Cuisin, believes the dwarf emus were not sent away in 1805, but lived at Malmaison until the estate was broken up after Joséphine's death in 1814 (Cuisin). Indeed, the visitor to Malmaison in 1809 reported seeing "a central pond" where "flightless birds splashed about in the water" (von Uklanski qtd. in Lack 52-53).

The problems of provenance of course stem from the expedition records. Baudin was aware that the dwarf species were not like the emu of mainland Australia: in a letter dated 29 May 1803, he informed the Minister of Marine of the capture of the Kangaroo Island emus and noted they were "of a species different from that of Port Jackson" (my trans.). However, his letter did not add that the Kangaroo Island birds were also distinct from those collected on King Island, and his journal entry regarding "the two that I still have of this species" (569) further indicates his assumption that the dwarf emus were conspecific. In contrast (and as demonstrated by his account of the "mighty cassowary"), Péron did not even seem to distinguish between the two dwarf species and the mainland emu. In Lorient, he told Étienne Geoffroy Saint-Hilaire that

> The *Casoar* of New Holland is much stronger, more vigorous and nimbler in the middle of the hotter and drier regions of the Australian continent ... than it is in the middle of the damp and cold woods of King Island. (qtd. in Jouanin, "Les Emeus" 170, my trans.)

The nomenclature Péron used in an ever-increasing collection of catalogues is also revealing. He repeatedly conflates the mainland emu with the King Island bird. "Casuarius Hollandiae=novae (2)—Ile King—donnés par l'anglais Cowper" was item thirty-one on page seventeen of his *Diarium zoographicum* of 27 brumaire an XI (18 November 1802) to 30 pluviôse an XII (20 February 1804). "Casuarius Hollandaie novae—2—*Île King*," the thirteenth item in his list of animals dated 10 February 1804, were recorded living in a cage on the starboard side of *Le Géographe*'s

quarterdeck (Péron, *Diarium* 17; "Liste" 9).[44] On 25 March the birds reappeared in Péron's manifest of live cargo (see Chapter 1 n 1):

> Casuarius Hollandiae Novae. *Place embarked: King Island. Number of individuals: 2. This animal is indisputably one of the more invaluable of New Holland; the flesh is excellent; it is easily tamed.* (qtd. in Jouanin, "Les Emeus" 187, my trans.)[45]

Perhaps Péron's stock-taking was an attempt to regain some semblance of order over the expedition—a reappraisal as well as an inventory—although this attempt at control, to make things better known, only confused matters further. His assumptions meant when the emus died on *Le Géographe* it was not noted from which island they originally came, and those surviving birds, whichever species they were, were penned together regardless of provenance. Their physical distribution misunderstood and "the taxonomic uniqueness of insular species" (Turvey and Cheke 2008: 155) unrecognised, the scientific fate of the already imperilled emus was sealed before they had even left the ship. As time passed, and hopes and lives faded, the King Island emu was absorbed into one species, and then another, until it almost disappeared from the record altogether.

For years the singularity of Péron's account of the three Kangaroo Island birds, originally published in the second volume of his *Voyage* in 1816, gave researchers no reason to suspect the existence of an alternative story and an alternative species. In 1899, and working at the home of the collection, the Muséum d'Histoire naturelle, Alphonse Milne-Edwards and Émile Oustalet declared that three live Kangaroo Island emus were brought to Europe ("Note" 208). In 1901 Henry Giglioli, perhaps getting his insular and Australian emus confused, reported that two Kangaroo Island emus were sent to Malmaison and one Kangaroo Island emu lived at the Jardin ("On a Specimen" 2). Brasil, writing in 1913, asserted that three Kangaroo Island emus lived at the Jardin (95). In 1928 Alexander Morgan and John Sutton (4) agreed with

[44] I must thank Jean Fornasiero for bringing these documents and Baudin's letter of 29 May 1803 to my attention.

[45] Again, this close attention to the King Island emu and their economic potential is intriguing considering their complete erasure from (and the inclusion of the Kangaroo Island species in) Péron's *Voyage*.

Giglioli, but cited their information from an 1893 paper by Milne-Edwards and Oustalet. As scientific identification techniques changed, so too did opinions. In 1959, after a close analysis of expedition and Muséum documents, Jouanin concluded that the two live emus sent to Malmaison were "most likely from King Island" ("Les Emeus" 194, my trans.). By 1990 Jouanin's study of the emus' skeletal remains, conducted with environmental forensic scientist Jean-Christophe Balouet, had determined that one emu at Malmaison was from King Island, and one, slightly larger than its counterpart, was from Kangaroo Island (Balouet and Jouanin 314).

Much of the confusion also stemmed from the fact that Baudin's sea log, containing his record of the King Island emus, was published in English only in 1974 and remains unpublished in its original French.[46] It is possible that easier access to this document would have resulted in an earlier, better understanding of the emus and of the man who cared for them. Instead, ignored by Jussieu and Cuvier in their reports to the Institut, disparaged and insulted by his men (expunged from Péron's *Voyage*, he is referred to only as "the commandant" or "our leader"), Nicolas Baudin remains "largely passed over by the historians of both Australia and France" (Duyker 219, 223; Horner 2, xv). Out of sight, out of mind: it is poetic injustice that a man who did so much to save his emus—who, as is typical in this twisting tale, only required saving because his expedition was complicit in their endangerment[47]—was himself largely forgotten.

The dwarf emus died within months of each other in 1822. During their twenty years in captivity they never bred (Jouanin, "Les Emeus" 180-81, 194, 182). Birds from two worlds, both "victims of imperial contests" and "freak pets of the decadent nobility," they were lost by science, lost to agriculture and lost from their homeland and their kind (Rothfels, "Immersed with Animals" 216). They saw out their days in a living reliquary. "In zoos," writes John Berger, "[animals] constitute the living monument to their own disappearance" (24).

---

[46] Interestingly, despite having access to Baudin's log, both Horner (358) and Duyker (163) believe the two birds in Malmaison were from Kangaroo Island. Baudin's incomplete fair copy, *Mon voyage aux Terres Australes*, was published in 2000, but contains no account of King or Kangaroo Island.

[47] For example, neither Baudin nor Péron appealed to Governor King for the birds' conservation or for sustainable hunting practices, as Baudin did for King Island's seals.

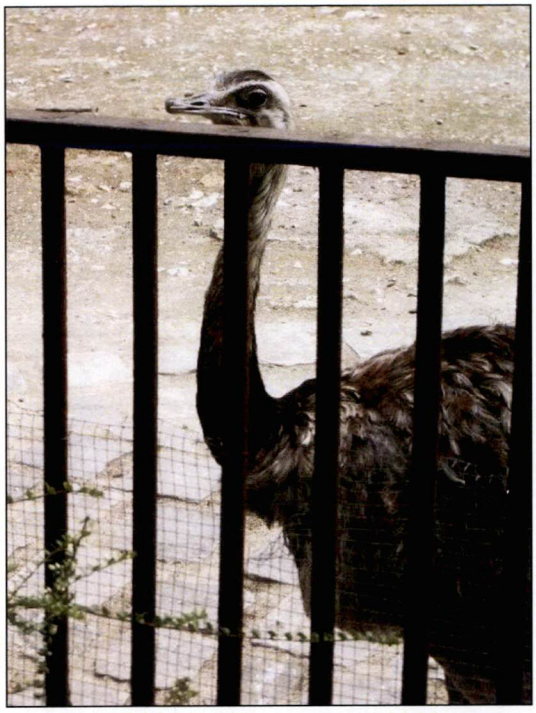


Fig. 2.5. Rhea, Ménagerie de Jardin des Plantes, Paris. Personal photograph by author. 12 July 2008. She was fenced in an enclosure just metres from where the dwarf emus would have been kept.

Inventory

After their deaths, the emus disappeared again. At least two of the five King Island emus brought to France on *Le Géographe* cannot be traced. They may languish yet, mislabelled, in a private or public European collection. Some of the others collected by Baudin now haunt the vaults of the museum underworld or stare from glass cages, foreign bodies made falsely familiar.

Three storeys beneath the feet of visitors to the Muséum national d'Histoire naturelle, Paris, the mounted skin of an adult King Island emu stands in a cabinet. A reject from Joséphine's private paradise, the bird, like her feather in TMAG, is now considered too precious for public display. The mounted skeleton of this bird's zoo companion, the larger Kangaroo Island emu, is kept in perpetual twilight in a gallery six storeys above. Another skin, very likely that which once covered the owner of this skeleton, is now in the Muséum d'Histoire naturelle in Geneva (Figure 2.6) (Balouet and Jouanin 314; Cibois). A taxidermy juvenile strolls beside the adult in the Paris basement; another youngster is an unexpected occupant of the zoological museum at the University of Turin (Figure 2.7).

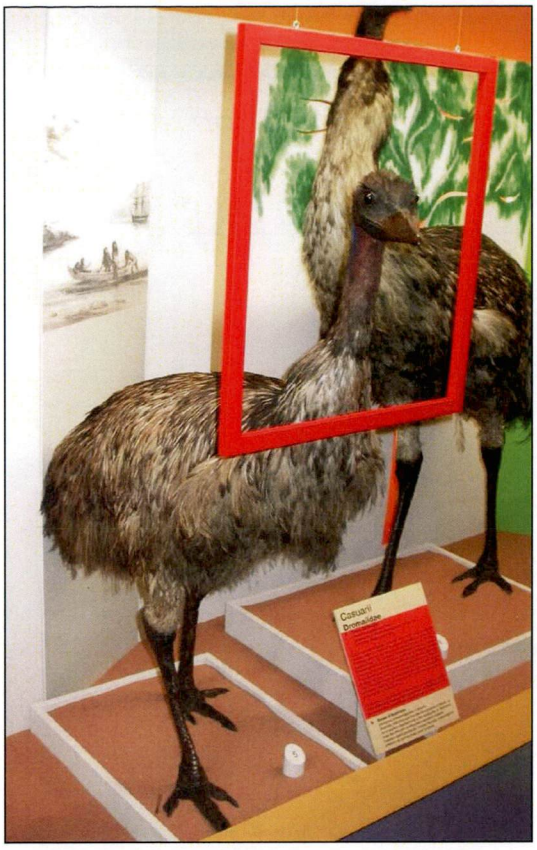


Fig. 2.6. Mounted skin of one of the two Kangaroo Island emus collected by Baudin. His skeleton is in Paris. Personal photograph by Laurent Vallotton, Muséum d'Histoire naturelle Genève, nd.

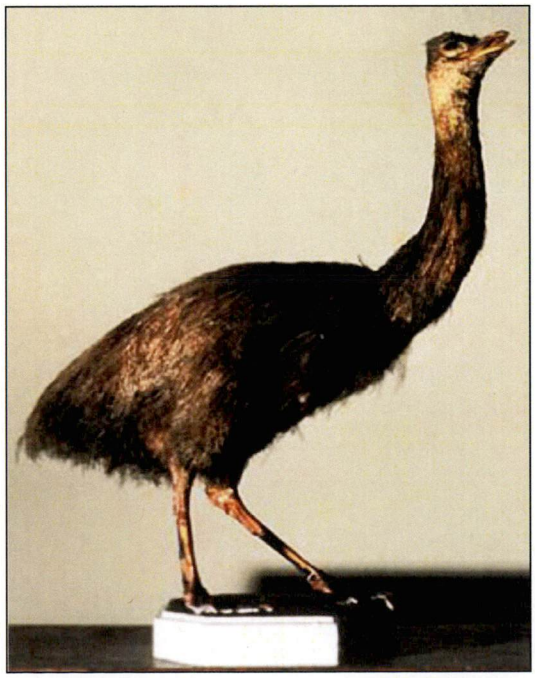


Fig. 2.7. "Emu' nero … Giovane esemplare proveniente dal viaggio in Australia del naturalista François Péron (1800-1803)." Museo di Zoologiae Anatomia Comparata, Università di Torino. Note that Baudin's *viaggio* has been overlooked. From <http://www.museounito.it/zoologia/visita/parte_visibile_1.html>.

In December 1825 the mounted skin of one bird, already in poor condition, was given to Florent Prévost, the Paris Muséum's assistant taxidermist who ran a little business on the side. Exchanged for other specimens, the emu's skin was probably sold to another collector and eventually destroyed by insects and time (Jouanin, "Les Emeus" 184, 198). The skeleton of this emu stood in a storeroom for seventy-five years before its significance was realised. As we will see, absence can be just as potent as presence.

Chapter 3

Recollecting

Remembering betrays Nature,
Because yesterday's Nature is not Nature.
What's past is nothing and remembering is not seeing.

Alberto Caeiro [Fernando Pessoa], *Poems of Fernando Pessoa* (23)

In the spring of 1900 Lionel Walter Rothschild, an avid zoological collector intent on "working out the Cassowaries," visited the Royal Zoological Museum in Florence. The museum's Director, Dr. Enrico Hillyer Giglioli[48], remembered to show him a mounted skeleton, part of the museum's "old didactic collection" kept in a storeroom. Ironically, this teaching specimen was somewhat "enigmatical." It was labelled "*Casoario*," but its skull bore little resemblance to its horny-helmeted namesake. It had three toes on each foot, but it wasn't a rhea. It was also remarkably small. Giglioli "felt it was a problem to be solved," but the skeleton "was not in first-rate condition" ("On a Specimen" 4). It was "badly kept, exposed to dust, and [had] a soiled and ancient aspect." Giglioli discovered the museum's paper records were similarly "very badly kept, and ... rarely indeed was any note made of [a specimen's] origin." He writes:

> I was pondering over the matter and contemplating the skeleton ... when I noticed for the first time something written on one of the leg-bones. Cleaning the spot with a brush, I found neatly written, in that clear round hand so common in the earlier years of the 19th century, *"Casoar mâle"*; a further application of the brush brought to light a similar inscription on almost every bone, and made it clear that the skeleton came from France....
>
> The bones are undoubtedly those of a fully adult, ... very old, bird. ("On a Specimen" 6, 8)

[48] This was his full name, although he signed his letters and papers "Henry H. Giglioli."

Giglioli began to piece together the fragments. He knew about the two emus sent to the Empress. He recalled that the Royal Zoological Museum was once "a dependency of the French Imperial Household" (Tuscany was annexed to the French Empire in 1807), making it subject to the education reforms of the Napoléonic era. He then learned that there was an exchange of specimens between Florence and the Muséum national d'Histoire naturelle between 1825-30, in the latter days of Cuvier's reign. Considering Péron's account of the three emus captured on Kangaroo Island—and to be fair, given Baudin's log was at that time unpublished, there was no reason for Giglioli to consider otherwise—he declared: "I have very little hesitation in identifying the Florence skeleton as the *third* specimen ... brought home by Péron in 1804, which has hitherto been unaccounted for" ("On a Specimen" 8).

Giglioli's declaration demonstrates not only the erasure of Baudin from the historical record and the failure of documentation—as I explained in Chapter Two (n. 26) the third living *casoar* brought to France on *Le Géographe* was a cassowary—but also the colonising power of science. The museum was a satellite of the Muséum, the epicentre and emblem of French scientific pre-eminence that, in turn, stemmed from French imperial might. Burkhardt observes how the Muséum's "power *of* place was integrally related to the power *to* place" ("Leopard" 677; 675).[49] But it was now time for the empire to write back.

In 1900 Giglioli trumpeted his "important discovery" in the venerable pages of *Nature* ("A Third Specimen" 102), and addressed the International Ornithological Congress in Paris ("On a Specimen" 5). In 1907 he reappeared in *Nature* to comment on excavations on King Island conducted by Tasmanian Museum director Alex Morton—perhaps the most literal demonstration of the drive to break new scientific ground—and to acknowledge the findings of Australian scientist Professor Baldwin Spencer. Comparing subfossilised bones from both island species, Spencer had

[49] The presence of the juvenile emu in Turin, Piedmont (annexed by the French Empire in September 1802) also demonstrates this imperial network. In 1810, Turin's Museum of Zoology and the Cabinet of the Academy of Sciences was reorganised into the Museum of Natural History at the University of Turin, and local scientists encouraged to study in Paris. In 1811 Franco Andrea Bonelli, a student of Lamarck and Geoffroy Saint-Hilaire, was appointed by Cuvier to the Chair of Zoology at the University. Bonelli held this position until 1830 and is almost certainly the reason why the emu from "Viaggio di Péron" entered the Museum sometime between 1819 and 1822 (Holmes 180, 181; Badino and Vellano np; Sermonti 9; Salvadori, *Notizie* 8; Elter 49, 186). (Jouanin ["Les Emeus" 185] suggests an exchange between the two institutions in 1812 may have included the emu.)

concluded: "I have little doubt but that the two are specifically distinct" (140). Giglioli wrote "Spencer ... has felt justified in proposing a name for that [King Island] bird ... *D[romæus]. minor*," but he went on to undermine the Professor and his bones. "[W]e possess two authentic specimens and two mounted specimens [in Europe]," he proudly reported.[50] "Mine is a skeleton," one of the three brought by "Péron in 1803 [sic] from l'Ile Decrès (Kangaroo Island)." He added that Morton had sent him some bones for comparative analysis, which he found "*were absolutely identical* with the corresponding bones of Peron's [sic] specimen from Kangaroo Island" ("On the Extinct Emeu" 534). Thus Giglioli rejected any possibility that "his" skeleton, of "*a notably smaller bird*" than the bird whose skeleton is in Paris ("On a Specimen" 9), may have in fact been that of a different species, as Spencer had deduced. Instead, Giglioli proposed that the emus found on King Island and perhaps also Tasmania were the same species as "his" specimen, what he thought was a Kangaroo Island bird. ("On the Extinct Emeu" 534).[51] As the presumed authority on a "precious" relic that he had "brought to light," it was he who knew it best. Alternative theories were not welcome. With its provenance ostensibly certain (give or take a year), and its prestigious Muséum pedigree (Baron Cuvier, no less) Giglioli judged his treasure "authentic" ("On a Specimen" 6).

Yet the authenticity of the skeleton, and thus the authority derived from it, was questionable. Without any trace of irony, Giglioli noted that parts were "replaced by imitations in wood":

> these are the *pectoral arches*, both *wings*, the *patellæ*, two *distal phalanges* in the right foot and *one* in the left ... in the skull, the *maxillo-jugal* rod is restored in wood, whilst the *palatines*, *pterygoids*, the *vomer*, and the *maxillary processes* of the nasals are missing. The first pair of *cervical ribs*

[50] Giglioli believed one of these four specimens was in the Liverpool museum. Despite it being "not located" he declared "it is undoubtedly *D. ater* [the black emu], but might hail from King Island or even from Tasmania; it may be the lost 'lesser emea' of the Bullock Museum, dispersed in 1819" ("On the Extinct Emeu" 534). It is now believed to be a juvenile of the mainland species, *D. novaehollandiae* (Fisher). We will shortly hear more of Bullock's Lesser Emea, first discussed in Chapter One.

[51] Ironically, he was half-right without realising it: he actually had a King Island emu skeleton, as Balouet and Jouanin (1990) have proved.

and two *lumbar ribs*, the left one of the first pair and the right one of the second, are also missing.

Giglioli asserted that the wooden imitations were "very faithful … evidently copied from those of the perfect mounted skeleton in the Paris Museum" ("On a Specimen" 8). But judging by the appearance of this King Island emu's skeleton (Figure 3.1), it appears to have been hybridised, post-mortem, with an ostrich as well as a Kangaroo Island bird (Morgan and Sutton 5). This was unnatural history in more ways than one.

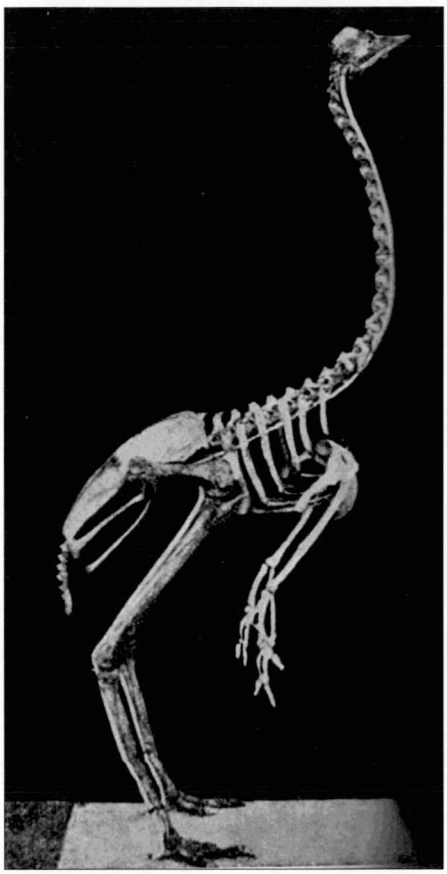


Fig. 3.1. King Island emu skeleton as it appeared in the Royal Zoological Museum, Florence, in 1901. From Giglioli ("On a Specimen" 7).

This chapter will discuss how scientists, curators and other collectors like Giglioli have struggled to gain epistemological control of a species whose posthumous rarity generated an excitement similar to that raised by their "swarming abundance" just a century before. It will explore attempts by those, forever denied direct experience with a living King Island emu, to *recollect*—both in terms of re-assembling

information (Figure 3.2), and recalling to memory—by reimagining the bird in museum displays and ornithological literature. As Steve Baker notes, "only by understanding who has power over the image can we begin to elaborate a worthwhile cultural history of the animal" (*Picturing* 15). While these reimaginings and their recontextualisation may seem to create better understandings of the emu, I will argue that they in fact contribute to the figurative extinction of the species, by being based on representations several generations removed from the reality of the birds' existence. In fact, they reveal more about human perceptions, presumptions and politics than about the birds themselves. However, King Island emus send their own signals through (or in spite of) these representations. This chapter will show how information embodied by the specimens now in museum vaults perhaps dispels to some extent the notion that "[t]the only documents available to the historian in any field are documents written, or spoken, by humans" (Fudge 5). Rather than objectifying the birds, reading their bodies as physical texts contributes much to the telling of their own, animal-centric history.

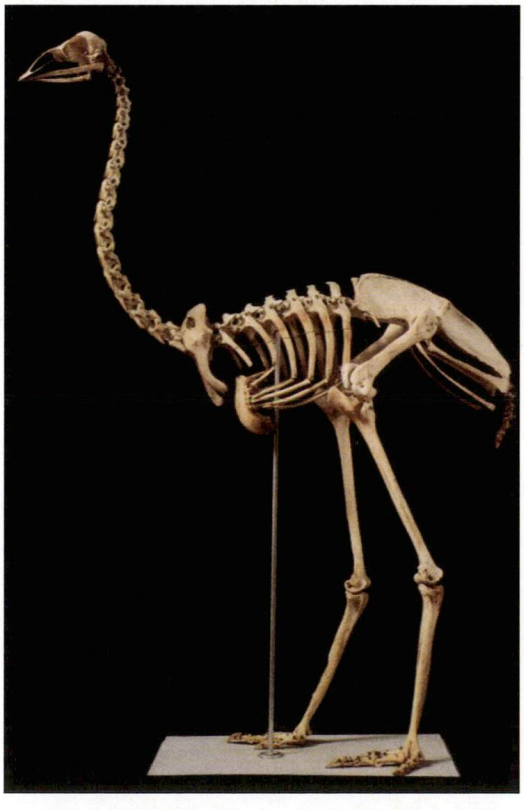


Fig. 3.2. King Island emu skeleton, reconstituted and rearticulated, as it currently appears at the Museo Zoologico e di Storia Naturale della Specola, Florence. It now has no wings at all. Note also the irregularity in the right tarsometatarsus (the visual equivalent of the human shin, although the bone is actually part of the bird's foot), broken during the bird's life.

Naming the emu

Giglioli was not the only post-Péron scientist to use the emu to annex new territory. Deprived of literal possession of a trophy like the Florence skeleton, other scientists sought abstracted, linguistic possession by classifying and naming the species. Dunlap believes the Linnean system "could be easily learned and used and.... did not require special apparatus. To classify it was necessary only to observe, count, and measure" (28-29). However, Ritvo argues more convincingly that nomenclature was in fact an exclusive code requiring "a command of classical language normally only acquired through an elite education" ("Zoological" 345). Furthermore, the ability to accurately apply such language to determine the salient characteristics of the specimen at hand demarcated serious scientists from rank amateurs, and cabinet naturalists from those who tramped the wilderness. (Field naturalist Philip Gosse in turn disparaged cabinet scientists' "mystic cloud of Graeco-Latino-English phraseology" [qtd. in Barber 41].) The convention of citing the name of the nomenclator alongside that of the species they have named was thus a symbolic stake in the claim for personal and professional territory, especially since the first published name usually has priority over any synonym. To name well was to know well (and vice versa), and to the specialists, such expertise exemplified mastery over not only the natural world but the "unstructured ignorance" of the preceding years—and people (Ritvo, "Zoological" 344, 322). And to describe and name not just a new species but that elusive last in the set, an extinct species, was to know the unknowable, control the uncontrollable, and commune with a richer, more authentic past. For the mysterious dwarf emus, whose extinction was known before 1842, the rush was on.[52]

Unfortunately for the emus, Linnaeus' uniform and universal classificatory system worked more smoothly in theory than it did in practice. Natural historian Errol Fuller is succinct: "The literature ... is confusing" (33). The following account of the

[52] In 1842 William Broderip (145) quoted John Gould's "fears that [the dwarf emu] may be extirpated" (thanks to Péron's erroneous account the existence of two different dwarf species, including one from King Island, was not yet widely understood). However, it is possible that their extinction was recognised much earlier. In his 1855 volume of *British Colonies* (656) Robert Montgomery Martin states that "the last emu on [Kangaroo] island" was killed "some years before the arrival of the South Australian Company's settlers, in 1836." Indeed, in 1887 Emile Oustalet wrote that *Dromaius ater*, which he believed was from Kangaroo Island, was "completely annihilated in the first years of our century" (37, my trans.). Meanwhile, surveyor John Oxley's 1810 account of King Island (774) noted that elephant seal numbers had been "greatly reduced" and made no mention of the King Island emu, confirming the sealers' toll on these species.

scientific debate demonstrates the extent of this confusion and its ironic result, a lack of recognition for the birds.

In 1817 Louis Jean Pierre Vieillot studied the dwarf emus in Paris and proposed their first (post-Péron) scientific description and name: in recognition of the birds' black plumage, he declared them *Dromaius ater* (*Nouveau dictionnaire* 212). However, Giglioli ("On a Specimen" 3) believed Vieillot was "under the impression that the smaller and darker specimens were [mainland] birds which had not attained their full growth." Rothschild agreed, noting that Vieillot "distinctly states" that his description "was a name given to [John] Latham's *Casuarius novaehollandiae* [itself a synonym of *D. novaehollandiae*, the emu of mainland Australia] and makes no mention of Péron or of the Isle Decrès" (*Extinct Birds* 235). But in 1825 Vieillot's *Galérie des Oiseaux* again referred to "L'Emeu noir, *Dromaius ater*" and included an illustration (Plate 226) based on the mounted skin now in the Paris Muséum (Rothschild, *Extinct Birds* 235; see Figures 3.7 and 3.8). Meanwhile, Latham based his 1823 description (384, Plate 138) on a live bird he saw in a London menagerie—quite possibly the bird who provided the Lesser Emea skin sold as Lot 98 at Bullock's auction in 1819.[53] But he copied a print of Lesueur's Plate XXXVI (from the *Atlas* accompanying Péron's *Voyage*; Figure 3.5) to illustrate his own work, called it the "Van Dieman's cassowary" (Figure 3.6) and, to the despair of future historians, snarled the Tasmanian emu in the tangle. In 1828 James Jennings copied Latham's copied copy and also its name, but with a Latinate flourish: *Casuarius diemenianus* (382). In 1842 John Gould not only changed the species' name but also its provenance, designating the small emu in the Muséum *Dromaius parvulus* and believing "that portion of Australia called New South Wales to be the habitat." But he seems to have then changed his mind, for despite arriving "at the safe conclusion" that this specimen was that of "a second species" of *Dromaius*, Gould did not include the species in his monumental *Birds of Australia* (Broderip 145, Howchin 251).

[53] We recall that Lot 97, the "Great Emea," was originally from Mr Polito's menagerie at the Exeter 'Change (Johnson and Hewitt 75); it is possible the "Lesser Emea" was penned in the same establishment. In 1900 eminent ornithologist Alfred Newton suggested the Lesser Emea was "a specimen of the extinct *Dromaeus ater*" (151), lending weight to the argument that this bird was one of those brought from King Island to Sydney in 1803 (see Chapter One).

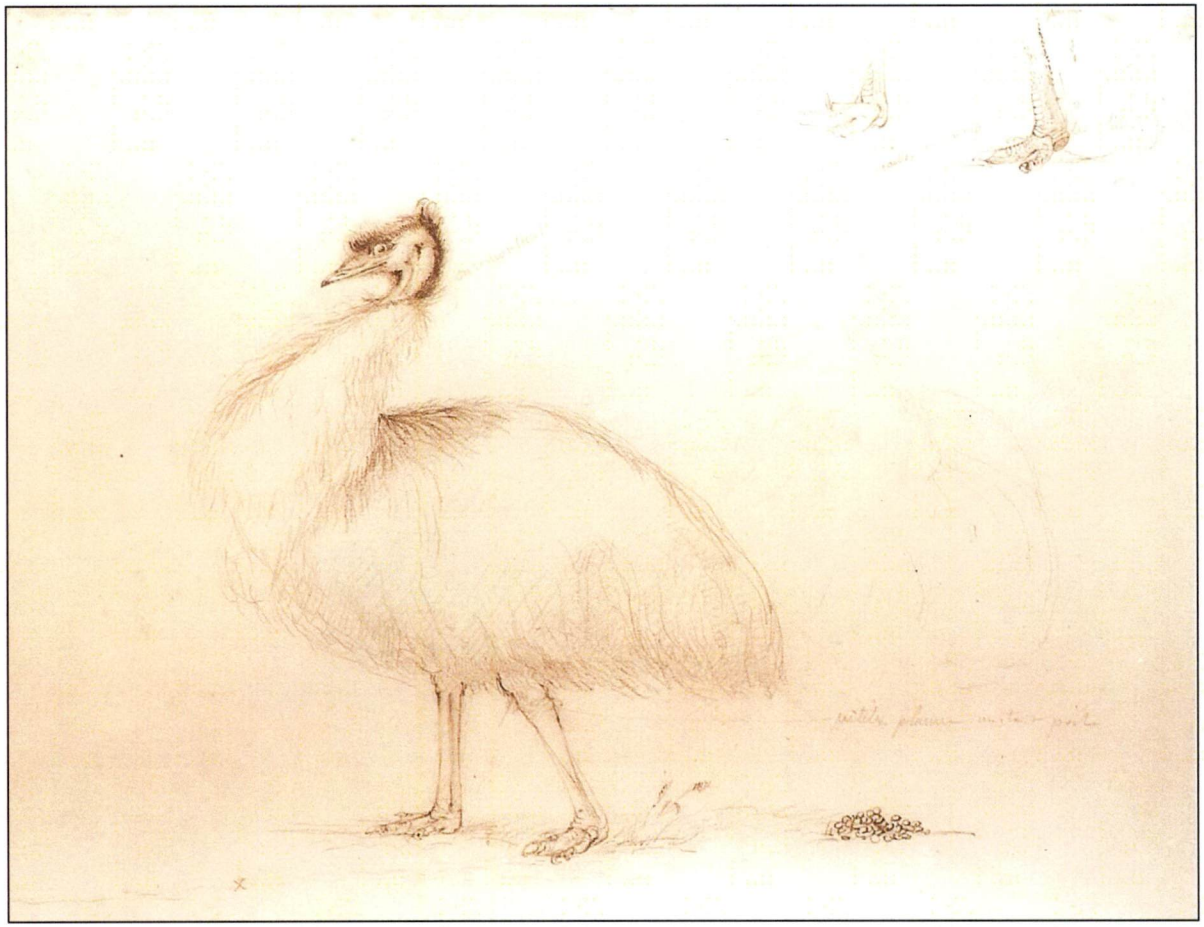


Fig. 3.3. Charles-Alexandre Lesueur, *Dromaius* species. Muséum d'Histoire naturelle du Havre, No. 79002. This drawing was found in the dossier of Lesueur's papers recovered between 1874-84 (Milne-Edwards and Oustalet, "Note" 207; Horner 368). Lesueur's notes for the feet read: "[anterior] scales overlapping—left [leg] — [posterior scales] very fine." The note near the neck reads: "higher up;" the note at the 'thigh' reads "small hair-like feathers." Translation from Bonnemains, Forsyth and Smith (298). These notes were for probably for himself, since his watercolour (Figure 3.4) features more detailed line work (lost in subsequent mechanical reproductions), especially around the bird's feet. The deformed toe is detailed at the top of the drawing. Note also the ghostly sketch on the right, depicting a frontal view.

Fig. 3.4. Charles-Alexandre Lesueur, *Dromaius* sp. Original watercolour on vellum. Muséum d'Histoire naturelle du Havre, No. 79001.1. From Bonnemains, Forsyth and Smith (297).

Fig. 3.5. Frères Lambert, engraving from watercolour by Charles-Alexandre Lesueur, Plate XXXVI: "Nouvelle-Hollande: Ile Decrès." From the *Atlas* of *Voyage de découvertes aux Terres Australes:* (Paris: Imprimerie impériale, 1807). The caption reads: "1. [Standing] Casoar mâle. 2. [Sitting] Casoar fémelle. 3. [Juvenile] Jeune casoar de 5 semaines environ. [Chicks] Les deux individus marqués de bandes longitudinales sont âgés de 20 à 25 jours." National Library of Australia Digital Collections, ref. nla.pic-an7568611.

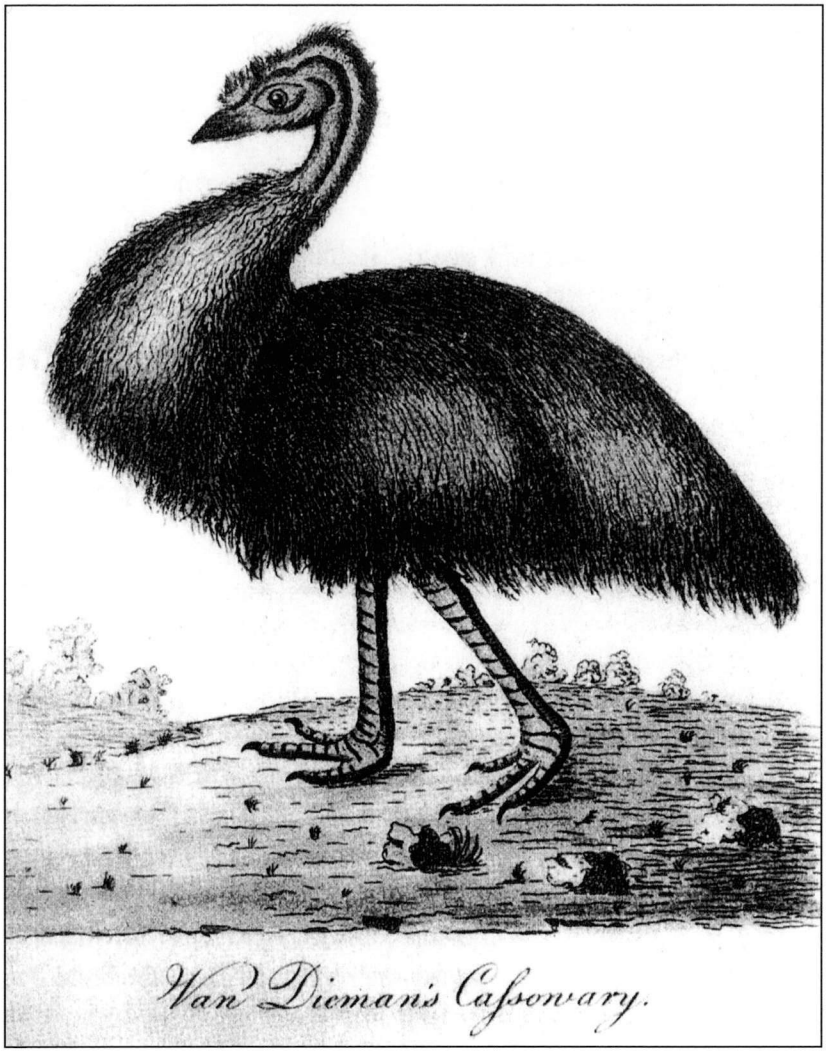
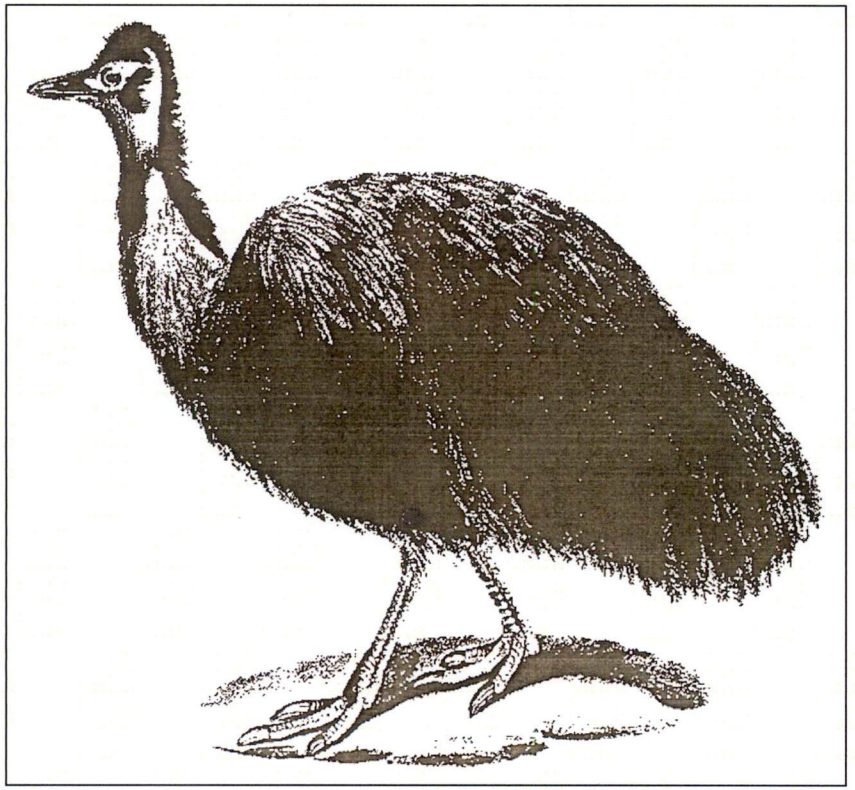


Fig. 3.6. John Latham. "Van Dieman's Cassowary." From Latham (Plate CXXXVIII, 385). Latham was in the habit of copying from other artists (Olsen 28), in this case Lesueur. To be fair, in this situation he had no choice, although his attempts appear to have resulted in the creation of a new species.



Left: Fig. 3.7. Paul Louis Oudart (engraved by Godefroy Engelmann). "L'Emeu noir, *Dromaius ater*." Plate 226 from Vieillot's *Galérie des Oiseaux* (Paris: Constant-Chantpie, 1825). Reproduced in Morgan and Sutton (as Plate 5). This illustration was based on the mounted skin of the King Island emu who died in Paris in 1822 (see Figure 3.8). Rothschild, who saw the bird in the late 1880s, wrote "the plate in the Galérie des Oiseaux is quite excellent" (Keulemans and Coldewey 23; Rothschild, *Extinct Birds* 235).

Right: Fig. 3.8. Mounted skins of adult and juvenile dwarf emus at the Muséum national d'Histoire naturelle, Paris. Personal photograph by author. 15 July 2008. The adult has a dated, confusing label: "Emeu noir—Dromiceius diemenianus—♀—ad. —Vieillot. Exp Baudin—ILE DECRÈS [Kangaroo Island]," even though Vieillot did not give the species this name. In 1990 Balouet and Jouanin (314) concluded that this adult is a King Island emu; Cuisin agrees. Almost every image of what was believed to be a Kangaroo Island emu, subsequent to those made by Lesueur (for example, those by Keulemans; see below), is based on this *King Island specimen*.

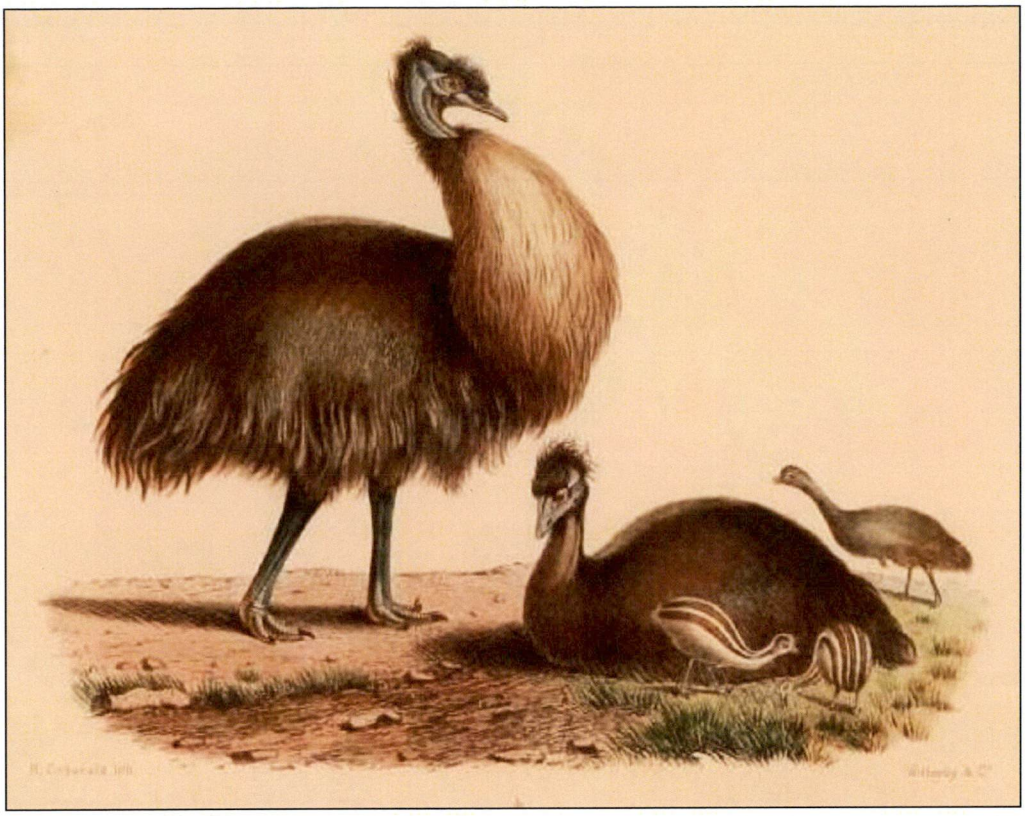


Fig. 3.9. Henrik Grönvold. "Dromæus minor (King Island Emu)." Lithograph of the engraving by the Frères Lambert of the original watercolour by Charles-Alexandre Lesueur. From Mathews (*Birds* Plate 4). This copy of a copy appears to have been further simplified from the original; the seated bird seems more *canard* than *casoar*.

In an 1856 study Prince Charles Bonaparte clung determinedly to Vieillot's *Dromaius ater*, even differentiating it from the mainland species (Salvadori, *Catalogue* 588). In 1893 his countrymen Milne-Edwards and Oustalet also upheld Vieillot's diagnosis ("Notice" Plate V; see Figure 3.11), and again in 1899 when they reasoned that "[o]n the face of it, it would be natural to assume that King Island had the same island species as Decrès [Kangaroo] Island" ("Note" 214, trans. von Bertouch). Within ten years this assumption had been disproved and the distinct identity of the King Island emu established although, as Ritvo has explained, the transport and communication networks of the time hampered the widespread exchange of such findings ("Zoological" 338-39), and imperial networks influenced the interpretations of scientific satellites such as Giglioli.

In 1907 a Tasmanian colonel, W. V. Legge, called the King Island emu *Dromæus bassi* (119) but upon learning that Baldwin Spencer (140) had just two months earlier called it *Dromæus minor*—another acknowledgment of the species' lesser size—relinquished his prize to the Professor. Over in England, geographic distance, publishing schedules and personal pride ensured the continued (con)fusion of the two species. In 1907 Rothschild sniped:

> It is most unfortunate that the larger number of authors have neglected to go carefully into the synonymy of this bird; if they had done so it would not have been necessary, after 81 years, to reject the very appropriate name of *ater*, and to rename the Emu of Kangaroo Island. (*Extinct Birds* 235)

He then duly added to the synonymy, declaring the bird *Dromaius peroni* and publishing an illustration based on the mounted skin in the Muséum that, although he could not have realised it at the time, is actually a King Island emu (Figure 3.13). Rothschild's diagnosis was included in the first volume of Gregory Mathews' *The Birds of Australia*, together with nine other names for the Kangaroo Island emu—including two different names Mathews had concocted himself—and six different names for the King Island emu (*Birds* 19, 23). Then in 1912 Mathews decided the accepted nomenclature needed "emendation" and called the King Island emu "*Dromiceius minor*, Spencer" although, perhaps unwilling to let the species slip from his grasp, he added the footnote: "As I am not convinced that the bones named *minor* by Spencer are the same as the bird figured by me (plate 4 in my 'Birds of Australia' [see Figure 3.9]), I name the latter *Dromiceius spenceri*, nom. nov" ("Reference List" 175-76). By 1913 Mathews, for reasons known only to himself, assigned the King Island emu to an entirely new genus and called them *Peronista spenceri* (*List* 2). The Royal Australasian Ornithologists Union (RAOU) was unconvinced, and in 1978 recommended both insular species be called *Dromaius minor* (255). The territorial dispute simmered until 1984, when Shane Parker from the South Australian Museum decided the emus were indeed separate species and "with pleasure" (and perhaps relief) called the Kangaroo Island emu *Dromaius baudinianus* in belated honour of

the now-published French commander (21).[54] The King Island emu ended up with the name Vieillot originally gave to the mainland emu—or was it the Kangaroo Island emu?—*Dromaius ater* (Christidis and Boles 57).

The disproportionate ratio of emu synonyms to specimens reveals something of how natural history was conducted, and why. To be sure, nineteenth-century innovations such as the steam-driven printing press, combined with improved literacy and burgeoning popular interest in natural history, encouraged the proliferation of publications and hence, synonyms; ironically, this mass of often obscure, non-specialist material hindered workers' ability to search for prior descriptions (Barber 14-26; Allen 96-99; Ritvo, "Zoological" 338-39; Salaman 13-14). Chaos reigned until such institutions as the International Commission of Zoological Nomenclature, set up in 1895, established its Code and system of arbitration to standardise classificatory methods and results although, as Mathews demonstrated, such standards are not always followed. On this issue Fuller is again succinct: "There has been nomenclatural sleight-of-hand over [the emus] and their technical names have been changed for reasons that may not be entirely proper" (33).

Species-mongering is nothing new: in 1800 Latham noted that "some persons seem to take pleasure in altering the names of previous describers" (qtd. in Finney 106). In his 1949 presidential speech to the RAOU, Dominic Serventy observed that Mathews

> so liberally applied his subspecific names all over the continent that he ... provided a name for most contingencies.... After the exacting task of delimiting subspecies a worker now will not have the satisfaction of applying his own names—it will be mostly a matter of selecting one of the numerous Mathewsian labels. (267)

[54] Nevertheless, Baudin is still to reach the heady heights of nomenclatorial immortality. Parker (22) used the adjectival form, *baudinianus*, rather than the genitive form, *baudini*, "out of personal preference, notwithstanding the preference for the latter indicated in the International Code of Zoological Nomenclature": while there is now a "*D. baudinianus* [Parker]," there will never be a "Baudin's emu." Furthermore, confusion still reigns: five years after Parker's work another publication stated that *Dromaius ater* was "restricted to King Island, Bass Strait, and Kangaroo Island, South Australia" (Green 1).

Pamela Rasmussen and Robert Prŷs-Jones are more direct, attributing Mathews' legacy to basic "[c]arelessness to the point of serious professional incompetence" (77). However, in the case of the emus a more charitable assessment would be that the paucity of comparative physical material—in addition to the problems of provenance—hampered those who sought to gain control of the birds by naming them. Using illustrations rather than specimens to describe the species, they relied on the skill of the artist and associated printing technicians to provide the essence of the "real" bird. But ironically, the pictorial representations upon which the textual representations were based were also unreliable, and with each successive representation the "reality" of the bird became more tenuous. Naming was thus not only a demonstration and justification of power, but also an invention: an act of human imagination, combined with technique, to create a new entity. It is worth pausing now to discuss how, caught on the page, reduced to two dimensions, the emus' own identity was flattened within the weighty tomes of ornithological literature.

Imag(in)ing the emu

"The primary purpose of any zoological illustration is to show what the animal is like," writes David Knight, "but that is more complicated than it appears" (*Zoological* 12). The problems associated with the birds' pictorial representations stemmed from technical limitations as well as political considerations. For example, because an engraver's stylus had to be held in one hand and the metal plate manoeuvred with the other, long, shallow, continuous lines were more suitable for copying (Jackson 17). Milne-Edwards and Oustalet, who had the luxury of studying Lesueur's preparatory sketches (Figure 3.3) of the living models for the watercolour (Figure 3.4) which was the basis of the engraving for Plate XXXVI (Figure 3.5) of Péron's *Atlas*, complained that Plate XXXVI failed to show "the nature and disposition of the feathers on the neck, back of the head and forehead." In one sketch, they observed

> these feathers … were very fine, very light, more or less piliform and appeared brushed the wrong way on the back of the neck, from the point at which the neck started to be bare on the sides. On the back of the head, they became a little longer to form a curly quiff, then lay to the front on the vertex, and then stood up again on the forehead in a little tuft….

These particulars, which they admitted "might seem too petty, do however have some importance" in differentiating between the emus and in reconstructing the extinct species ("Note" 207, trans. von Bertouch), but such filamentary details seem to have been deleted under the engraver's incisive hand, and the birds' appearance modified accordingly. The presentation of subtle details was further diminished by the colouring process, "always a slightly chancy business" vulnerable to such vagaries as the painters' skill and ability to judge colour (Knight, *Zoological* 40). This vulnerability is evident when different hand-coloured prints are compared: Plate XXXVI in the British Library's copy of the *Atlas* glows with luminous clots of blue and chestnut, which in some places smudge beyond the limit of the outline; a strong contrast to the subdued hues of the copy in the National Library of Australia (Figure 3.5).

Predictably, the assumptions and idiosyncrasies of engravers and colourists who had never seen the emus seeped into the written descriptions resulting from their work. Studying a copy of Plate XXXVI, Latham described the plumage as "dark brown, with a tinge of blue or blue-grey." However, the copy used by Italian ornithologist Tommaso Salvadori led him to describe the body feathers as "brown-fulvous." Latham observed that the bill was "dusky-blue" and "the legs are stout, of a dirty bluish colour." Salvadori believed the bill and feet were "blackish." Latham thought "the legs ... appear to come out of the middle of the body, in the manner of a Duck or Goose" but then, recalling his own encounter with "two specimens alive in a London Exhibition" (who later turned up in Bullock's collection) explained the emu's wing was "a round stump, two inches in length, with a spur at the end" (Latham qtd. in Mathews, *Birds* 23; Salvadori, *Catalogue* 588). Jennings, having only the Plate as a reference, declared the bird "has neither wings nor tail" (382). (He would have been surprised to see the gangling appendages of the skeleton in Florence [Figure 3.1].)

The ability of appearances to mislead became further apparent when it emerged that there were two different dwarf emu species. Opinions raged over the identity of Lesueur's standing, white-ruffed bird: Mathews (*Birds* 25) thought it was a King Island emu, although the Kangaroo Island emu depicted in his own book has white neck plumage (Figure 3.14). His "very remarkable and ingenious interpretation" was torn asunder by Brasil (94–95) who cited the description of the black King Island

emus in Péron's questionnaire. However, despite arguing that Lesueur's scant pencil strokes on the ruff of the standing emu in a preparatory sketch had given the engraver "a false interpretation of this bare space ... which caused him to give the bird the whitish aspect of its neck," Brasil refused to stray from the official account that all the birds collected on the expedition were from Kangaroo Island. In 1959 Jouanin ("Les Emeus" 200) complicated "l'incroyable puzzle" by suggesting the standing bird could have been the mainland emu brought to France by *Le Naturaliste*, and who lived in the menagerie at the Jardin de Plantes until 1809.

Sympathy should perhaps be extended to these ornithologists who, if only for their own egos, tried to impose precision and authority on fundamentally flawed foundations. "In reality it is impossible to know what Lesueur really depicted," Jouanin writes, "and ... the documentary qualities of the Plate do not appear to merit the lengthy discussions that validate it" ("Les Emeus" 200, my trans.). But this itself is a half-truth, for physical evidence presented by a couple of the emus drawn by Lesueur does enable their identification and, moreover, knowledge can be gained from reading Lesueur's painting from a symbolic rather than a scientific perspective. In other words, in *un*reality, it *is* possible to know what Lesueur depicted. For his artwork is a montage: the emus were either distant in time (drawn from memory) or from life (drawn from mounted specimens) or from original context (drawn from captive animals). It will now be explained how the emus Lesueur depicted were so distanced from their original models as to not really exist at all.

Representing the emu

Given the history of the Baudin expedition and the artistic evidence—preparatory sketches (see Figure 3.3) of birds standing, grazing and lying down—it is probable that the two adult emus depicted by Lesueur were those taken to Malmaison and thence to the menagerie at the Jardin des Plantes (Milne-Edwards and Oustalet, "Note" 207; Brasil 95). The fact that Lesueur could capture on paper birds renowned for their relative swiftness in the wild indicates that his models were habituated to human presence; Morgan and Sutton add that the deformity of the "outer toe of the left foot" (actually the outside toe of the right; the original is transposed in the printed

reproduction) "points to the model being a bird in confinement" (4).[55] The chicks, however, are another matter. Neither Baudin nor Péron noted the collection of any dwarf emu chicks and, considering the sealer Cooper's account of gravid females around late July and an incubation period of "five or six weeks" (Appendix A: q. 25), it would have been surprising if the French had seen very young birds during their visit to King Island in December and Kangaroo Island in January.[56] (Indeed, King Island's foul weather prevented them from seeing any free-living wild emus of any age.) Since the captive birds never bred, it can only be surmised that Lesueur's relatively impressionistic chicks were based either on Cooper's description of the striped youngsters, recorded in Péron's questionnaire (Appendix A: q. 26), or a memory of birds he may have seen during the expedition's winter sojourn in Port Jackson.

The imaginative processes that brought the adult bird and chicks to the page are amalgamated in Lesueur's depiction of the erroneously captioned "casoar de 5 semaines environ," the juvenile bird on the far left of Figure 3.4 (transposed in Figure 3.5). Like many zoological illustrators of the era Lesueur was required to refer to a mounted specimen (Figure 3.10), a bird who was removed not only from his real environment, but also his real body and the essence of real life: animation (Asma 46). Lesueur may have prepared this specimen himself, for it is probable, given the bird's estimated age—about five months, not five weeks—that he was the emu recorded by Baudin as having died on 15 March 1803 when the ship "was thrown about ... by the rough, uncomfortable sea" (504).[57] A small slit would have been made in his abdomen (taking care to not let his blood ruin his feathers) and through this most of his skeleton and organs pulled until his skin was peeled inside out. His brain and eyes would have been plucked from their casings, his bones and skin scraped of flesh and

[55] Such a deformity may have been congenital; if it affected the bird's speed it could have made him more vulnerable to capture.

[56] In the Australian emu, incubation lasts around fifty to fifty-six days (O'Brien, "Family DROMAIIDAE" 54). Since the breeding behaviour of the King Island emu seems to have been similar to that of the mainland bird, Cooper's account of a thirty-five to fourty-two day incubation seems too short. King Island emu chicks may have actually hatched in mid- to late September.

[57] Jouanin disagrees, arguing that Muséum taxidermist Louis Dufresne recorded putting on display five emu skins between 6–13 June 1804. However, I am not convinced that he prepared the birds, for Baudin refers to the birds being "stuffed" at sea on at least three separate occasions. Of course, it is possible that the juvenile was prepared by Lesueur and put on his base (and on display) by Dufresne. Unfortunately the bird's base was changed in 1847, and text on the bottom of this base states that there was no information written on the original (Jouanin, "Les Emeus" 183; Baudin 504, 564, 569).

fat, and his skin coated with Bécoeur's arsenical soap—a mixture of powdered white arsenic, powdered lime, salt of tartar, camphor and soap—to ward off attack by impertinent insects. Thus de-in*carn*ated, his reincarnation could commence.[58]

Taxidermy means to arrange (*taxis*) the skin (*derma*), entailing—like so many other aspects of collecting—conscious decisions in order to organise, manipulate and control; to breathe life into still life; to reconcile memory with reality. With his skull and tarsometatarsus still attached, the little emu's skin was turned the right way round and his body cavity compensated with local grasses. Later, perhaps in Paris, his lower legs would have been lacquered, wired into a presumed realistic pose and stapled to a wooden base (Laseron 94; Farber 559; Cook; Cuisin). But these efforts to preserve the bird effectively erased him. Both animal and artwork are as culturally constructed as the scientific system later used, somewhat unsuccessfully, to define them. Now three steps removed from his original, wild authenticity, the emu's actual appearance will never be known. Illustrators struggle to reimage birds whose skins and bills have faded, legs and feet have shrunk, and plumage lay and colouration changed post-mortem (Woodcock 250), and it is possible that Lesueur faced similar challenges representing what was itself a mere representation of a living emu. These challenges continue, for belly skin of the little emu is now bright orange and tissue-thin. In Lesueur's cramped confines, in the "rough, uncomfortable sea," he failed to strip the bird completely. The emu's body fats are oxidising, and the acidic residue migrating through his skin on a slow march to (re)destruction.[59]

---

[58] I am using the masculine pronoun for this bird as a default since, unlike that of the female emu who died on 19 July 1803 (and was so precious for any future breeding programs), his sex was not recorded by Baudin. I believe the juvenile in Paris is the bird depicted by Lesueur because of the similarity of his posture, the estimated time of his hatching (late September 1802), and because his plumage is suggestive of a mainland emu of five to six months of age (O'Brien, "Family DROMAIIDAE" 51). Jouanin, noting the Plate's caption of "cinq semaines environ", perhaps unintentionally casts doubt on the caption by observing that despite his small size, the King Island juvenile's feathers are at a more advanced stage of growth than those of a five-week-old mainland chick: "the mesoptyle plumage is competely moulted, teleoptyle plumage has appeared and nevertheless the tarsus of this bird does not measure more than 136 mm" ("Les Emeus" 197, my trans.). The juvenile in Turin is smaller and probably younger: Jouanin reports that "traces of down are still present at the end of the feathers" ("Les Emeus" 198, my trans.). It is possible this bird died before the juvenile now in Paris: recording the death of this latter bird, Baudin notes: "It was *the second time* that this accident had occurred" (504, emphasis added).

[59] I thank Deborah Lau of the CSIRO for her patient explanation of this chemical process.

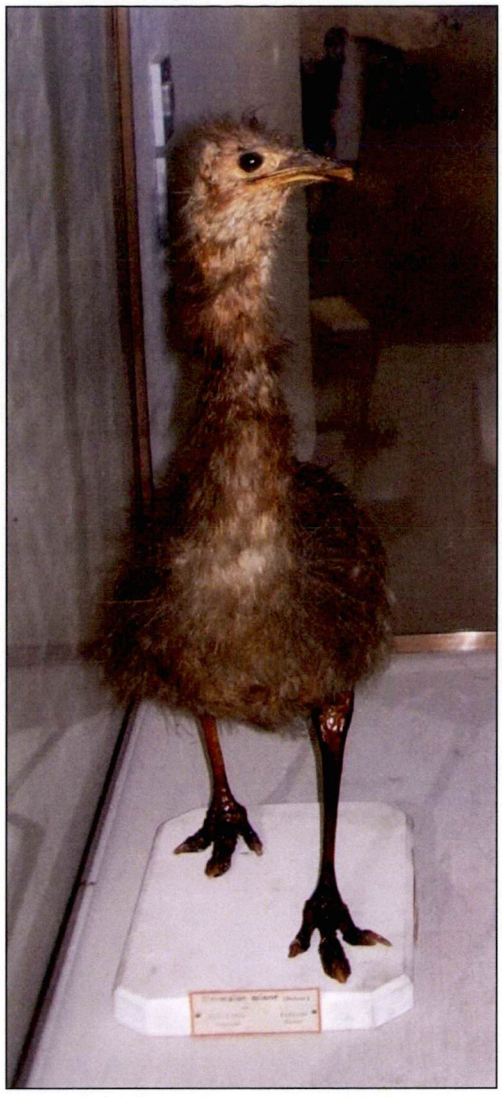


Fig. 3.10. Mounted juvenile at the Muséum national d'Histoire naturelle, Paris. Personal photograph by author. 15 July 2008. Citing Jouanin ("Les Emeus"), a note written on the underside of the base exclaims: "Sans doubte! Dromaius minor Spencer": a King Island emu.

Signifying the emu

The nomenclatural chaos accompanying the pictorial representations demonstrates how meaning can similarly decay, although this was not only due to the quality of the representations upon which the descriptions were based. Knight writes: "In scientific illustration, the artist's intentions can be illuminated by the text; they are pictures with a clear context" ("Scientific Theory" 107). Martin Kemp elaborates: viewers are reliant "on a complex interaction of prior knowledge, automatic expectation, illustrative technique, emotional context and the given framework of verbal information, if we are to read an image in a meaningful way" (128). Plate XXXVI

(Figure 3.5) was an iconographic record of a State-sponsored expedition, reproduced in "a treatise only a government could afford to publish" (Hunt 8). The ability to read the emus' representation within this context was central to its comprehension. When the representation was decontextualised, the emus lost significance at every step.

Given the value of their work as a diagnostic tool—and what happens when the work is lacking—eighteenth- and early-nineteenth-century scientific illustrators laboured under a heavy burden of responsibility. A bird's individual quirks were disregarded in the artist's efforts to delineate the anatomy, attitude, form, feather structure and colour of a typical member of the species. This standardised bird was usually placed in a formulaic composition: perched in profile on a twig or rock, or bobbing on a blue wash of water; alone or perhaps, if it was a smaller species, with a mate, depending on the page size. Eggs, nests and chicks were included only if convenient to the composition (Knight, *Zoological* 23; Jackson 86, 94; Elphick 97-117; Skipwith 17, 23, 33).[60] Lesueur's montage of sexes and age groups, featuring an emu with a highly idiosyncratic outer toe, is clearly not typical of this genre. The extent to which it differs from convention is worth exploring further, for to *illustrate* is not just to illuminate or elucidate but to also *embellish*; to enhance either by ornamentation or (perhaps fictitious) additions.

"[N]atural history painting is not portrait painting," Knight (*Zoological* 23) reminds us, but a viewer unfamiliar with the story behind the picture would probably surmise that Lesueur's artwork (Figures 3.4 and 3.5) is indeed a portrait of a contentedly domesticated family group. Such a representation was likely informed by "Jacobin rhetoric which erected 'nature' and the 'natural' almost into ethical norms" (Outram, "New Spaces" 257). Moral and inherently incorrupt, "the operations of the animal world," as interpreted by late-eighteenth-century French naturalists, "were simultaneously claims about the best course of action for particular societies and for the human races as a whole" (Spary 186). The use of animal behaviour as a paradigm for Revolutionary reform corresponded with literary, medical and scientific ideas surrounding the naturalization of the human family, "a biological and social unit" in which "[s]ociety, morality and civilization all rested upon the union of two opposite

[60] Exceptions include some of the works of Pieter de Bevere, in which detailed foliage backdrops almost double as botanical studies (Elphick 105-11).

elements, male and female, both part of nature, yet finely adapted to their moral functions and social goals" (Jordanova 96-98). Contemporary pictorial treatments of humans employed visual metaphors that "relied on putatively natural objects and processes to contain and express a wide range of social and cultural meaning" (Jordanova 116). Lesueur's artwork, prepared during the transition from "the Republic of virtue" (Outram, "New Spaces" 257) to First Empire, similarly illustrates not just the emus but also the allegories of the times. The male struts protectively, or perhaps triumphantly, about the passive and demure female. Her chicks peck by her plump and warming side while behind her back, the juvenile sneaks off on some innocent mischief. The birds' surrounds are not important; Lesueur's composition distracts the viewer from the absence of any environmental context by drawing the viewer's eye to the centre, where a small gap between the male's chest and female's head reiterates their close relationship. Their intimacy is further expressed by the repetition of their semicircular body shapes, arranged in diagonal sympathy across the page. Lesueur's careful detailing of the male's deformed toe is also interesting. Perhaps by including it, he was subconsciously indicating that the bird was not "typical" but in possession of a unique flaw that, in the collector's world at least, made him more valuable; a kind of limited edition, in more ways than one. Perhaps, if the emu's toe was indeed the legacy of a captive life, Lesueur wished to indicate that this hitherto wild bird, from the farthest reaches of the known world, had been tamed. This family, the artwork suggests, was "a prototype and microcosm of society as a whole" (Jordanova 96): regenerated, (re)productive, organized and improved. In the context of the *Atlas* the emus are thus not merely birds, but both a symbol of and vision for the moral, political and economic superiority of France.

The degree to which Lesueur's illustration is encoded with France's social and economic ambitions is extensive, given what is now known about the Australian ("mainland") emu. The family group depicted is biologically improbable, and not only because the different provenances of the models—King Island and Kangaroo Island—made their co-existence unlikely. If the dwarf emus were behaviourally similar to their mainland counterpart—and Péron's questionnaire suggests they were—the adults' pair bond would have ended when the male bird started incubating

their eggs.[61] Only male parents incubate and raise the chicks; when unmated, emus are either solitary or only loosely gregarious (O'Brien, "Family DROMAIIDAE" 48, 51). (The sealer, Cooper, observed that the King Island emus lived "alone," congregating only during the breeding season [Appendix A: q. 3]). Furthermore, the *Atlas* in which Plate XXXVI appeared was published in 1807 and the first and only account of the captive emus' supposed breeding appeared in a pamphlet in 1809 (Jouanin, "Les Emeus" 182). (Obviously, this pairing was not reproductively successful.) Lesueur thus made a (conventional) leap of the imagination, representing the female in adherence to ideals of human family and gender relations. The extent of the leap becomes more apparent considering the possibility that the model for this supposedly female bird may actually have been male.

There are numerous hints that the emu's sex may have been misdiagnosed, perhaps as a result of presumption as well as inconsistent record-keeping. As I have explained, the King Island emu was smaller than the Kangaroo Island species but because it was thought the two species were one, logic (and Péron's questionnaire) dictated that the smaller bird was female. However, unlike the situation of many other species, adult female emus are, on average, larger than adult males. During the breeding season the female can also develop plumage that is thicker and more intensely coloured than that of her mate, another reversal of more usual bird breeding norms (O'Brien, "Family DROMAIIDAE" 48, 55-56; Morcombe 14). Cooper told Péron that the "male is bigger" than the female, although "the difference is not great," and their plumage "brighter," but it is possible that both men were applying conventional wisdom to a species that has since been found to invert such conventions (Appendix A: q. 7, 4). Interestingly, Balouet and Jouanin comment that the mounted skin of the King Island emu in Paris is that of a "small individual (while it was a full-grown adult) of this small species" (315, my trans.), which may have contributed to contemporary perceptions—and expectations—of this "female" bird.

Furthermore, the sealers' arrival in King Island in June 1802 (Cumpston 46) closely coincided with the birds' breeding cycle, which may explain Cooper's observation of

[61] Emu reproductive behaviour is characterised by successive polyandry. After laying their eggs a female emu usually leaves their territory, mates and lays again, or "simply wanders off" (O'Brien, "Family DROMAIIDAE" 51).

the different seasonal plumage. Baudin's record of the death on *Le Géographe* of one of the emus (564) indicates that their non-breeding plumage was such that neither he, Péron nor Lesueur could tell the sexes apart,[62] a feature which would have led to a greater reliance on other external physical characteristics (such as size) for potentially incorrect identification. It is also noteworthy that while the mounted skin in Paris contains numerous bones (Jouanin, "Les Emeus" 195), a crucial indicator of sex, the pelvis, is not among them. These details perhaps clarify Jouanin's cryptic observation that the skin is displayed "without indication of sex (but labelled ♀ after the tradition)" ("Les Emeus" 198, my trans.).

Held captive in the zoo and the cabinet, and in the *Atlas'* paper cage, the emus re-enacted a situation that did not and could never take place. When Lesueur portrayed the future fruits of progress he probably did not realise that his "female" emu may have been male. But by anthropomorphising this zoological exotica into a model human family structure (which was, in a circular irony, itself modelled on "a new moral order, founded on nature" [Jordanova 89]), he harnessed existing cultural conventions to create meaning and in doing so, further erased the "real" birds. He was also "making Terra Australis 'knowable'" by drawing, and hence making the viewer read, "the familiar onto what was essentially alien, thereby taming the Other but at the same time diminishing its Otherness" (Fornasiero and West-Sooby, "Taming" 78-79). Lesueur subjugated the birds by turning them into specimens while simultaneously treating them as subjects: that is, subjects both in and of themselves, whose individual quirks were recorded; and subjects of Napoléon, animal citizens of the First Empire.

As human interest in the emus waned, either as a consequence of Péron's death and the mislaid questionnaire or, more probably, the failure to produce their promised economic potential, they seem to have become mere animals again. Removed from their original referent, the *Atlas* (Figure 3.5), and recontextualised in ornithological literature (Figures 3.6 and 3.9 for example), they lost their subjectivity and symbolic meaning. Subsequent publishers seemed to assume that Plate XXXVI was unprobematically accurate, adhering to "the deeply rooted conviction that the epistemic purchase of scientific illustrations is directly tied to their faithfully

[62] Recall that Baudin wrote that it was only while the emu was being skinned that she was discovered to female (564).

representing physical objects" (Baigrie xxi). Viewers unaware of the code and the original context, with its discussion of the emus' "delicately flavoured ... flesh" (Péron, *Voyage* II: 12), were left to draw their own conclusions which, despite their multitude, were singularly inconclusive.

Alternative imag(in)ings

Lesueur's montage is not the only artwork featuring the King Island emu. There are at least three other original representations, two of which are by the Victorian ornithological artist John Gerrard Keulemans.[63] Fascinating for their relative dispassion, Keulemans' works also demonstrate how changing contexts can not only diminish what is left of the original information but add new layers of meaning, until a new species emerges from the brush, if not the bush.

Keuleman's first illustration of the emu, based on the mounted skin in the Paris Muséum (Figure 3.11), marked "her" second "original" representation and probably also her second sea journey. The artist, who had moved to Southend-on-Sea around 1887 to recover from rheumatic fever, exchanged sketches, proofs and specimens by post; his biographers note that "[e]ven a complete Emu was posted on one occasion!" (Keulemans and Coldewey 23). Removed from the *Atlas* and its residue of thwarted ambitions, and subjected to the conventions of scientific illustration—unlike Lesueur, Keulemans was a professional artist trained in anatomy (Keulemans and Coldewey 33; Jackson 84)—Keulemans' emu stands alone and, as could be expected, preternaturally still. The lack of crisp lines and close detail, combined with the softer tones typical of lithography, give her a hazy, almost nostalgic aspect. Perhaps this is fitting, since Keulemans' commission was for a volume about extinct species, bound within a tome commemorating the Muséum national d'Histoire naturelle's centenary in 1893. By the time the emu arrived in the mail she had been dead some ninety years and Lesueur, the last keeper of her (unreliable) memory, at least forty.

[63] Other artists have, perhaps wisely, avoided staking their claim. In *A Gap in Nature*, the King Island emu is excluded from illustrator Peter Schouten's visual reconstructions of extinct species because their appearance is "insufficiently known" (Flannery and Schouten 178).

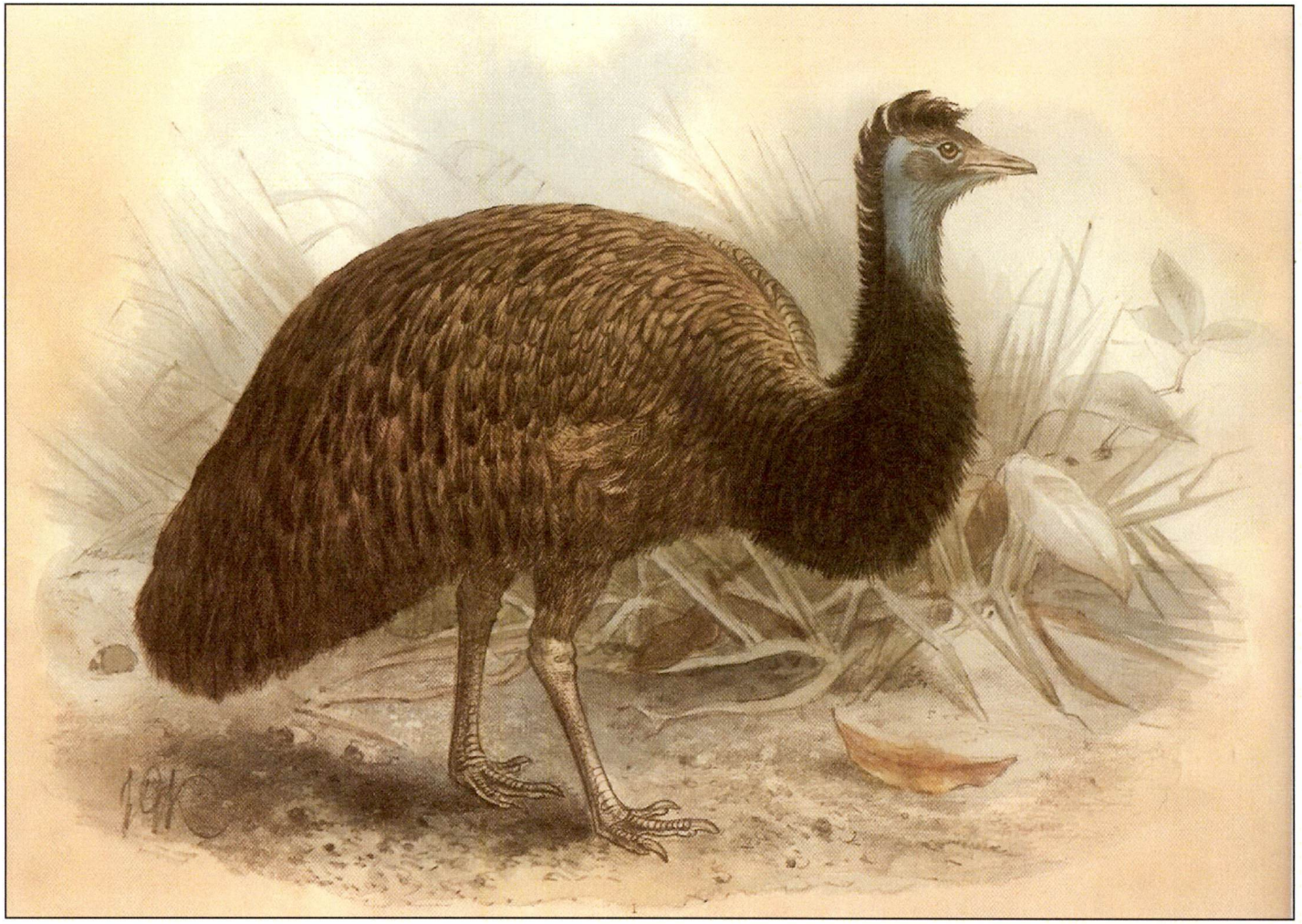


Fig. 3.11. John Gerrard Keulemans. "Casoar noir (Dromaius ater)." This illustration is based on the mounted skin of the female in Paris, now acknowledged as a King Island emu (see Figure 3.8 above) (Milne-Edwards and Oustalet, "Notice" Plate V; "Note" 207). Unlike Lesueur, Keulemans depicted her wing, but her neck colouration is either a vestige of Lesueur's work, an assumption based on knowledge of the mainland emu, or a figment of Keulemans' imagination. Peron's questionnaire makes no mention of any blue colouration, and the skin of the emu in Paris has long since faded.

Since Milne-Edwards and Oustalet, who later published Péron's questionnaire, co-ordinated the commemorative publication and Keulemans was a polyglot (Jackson 84), it is worth speculating whether the artist was familiar with Péron's record of a small, stocky bird adapted to life among the reeds and low scrub. It is also probable that Keulemans drew inspiration from Latham's 1823 account of the live, captive "Van Dieman's cassowary" in London—almost certainly a King Island emu—which Latham described as being

> different from the Common Emu in general gait, the head and neck being for the most part crouched and drawn backward, and the breast ... generally protruded, so as to lose much of its height; the back is also much rounded, and the hind parts depressed ... and rarely could any part of the joint of the leg be seen from beneath the feathers. (384)

Nevertheless the Muséum men, comparing this latest effort with Lesueur's preparatory sketches of live animals, were unimpressed by this new work. "[T]he colouring made the feathers on the neck a little too broad so that they appeared too thick," they complained, "and the sort of ruff, drawn at the base of the neck by the change in direction of the feathers, was not clearly enough indicated" (Milne-Edwards and Oustalet, "Note" 207, trans. von Bertouch). However, since the mounted specimen no longer resembled Lesueur's sketches—and since the authors were comparing an illustration of what is now known to be a King Island emu with sketches of what could have been a Kangaroo Island emu—such criticisms are meaningful only because they represent the Muséum's attempt to retain the imprimatur of authority. They also, inadvertently, document the specimen's ongoing decay.

Keulemans' second attempt at reimaging the emu first appeared in Rothchild's 1907 publication *Extinct Birds*. Interestingly, the artist had previously been engaged by Rothschild to illustrate his 1900 publication on cassowaries—the same project that had taken the collector to Florence, where Giglioli rediscovered the skeleton. Rather than copying his previous work, Keulemans created a completely new illustration, as indicated by the different signature in the bottom left-hand corner. However, this was not the only variation. Whereas Keulemans' first artwork depicted an emu with a

hooked upper mandible, this second emu has a straight upper mandible, a conspicuous outer ear and dark plumage on her throat and neck; indeed, she is darker altogether. Ironically this depiction, which was again based on the mounted specimen and which seems to depict more accurately the black bird described by the sealer Cooper, is labelled "Dromaius peroni" of Kangaroo Island (Rothschild 235). Furthermore, the illustration seems to have been influenced by Keuleman's work on the cassowaries (for example, Figure 3.12). It is again worth speculating whether this more confident depiction of the emu (Figure 3.13) is achieved not only as a result of the bird's colour and the austerity of the background, but perhaps a growing understanding of the ecological niche occupied by the species; an understanding Rothschild may have communicated to the artist. However, close analysis of the original artwork is not possible because, like the wings of the skeleton in Florence and like so much other evidence, it has disappeared (Harding).

Fig. 3.12. John Gerrard Keulemans. "*Casuarius picticollis hecki* (Heck's cassowary)." From Rothschild ("Monograph" Plate 16).

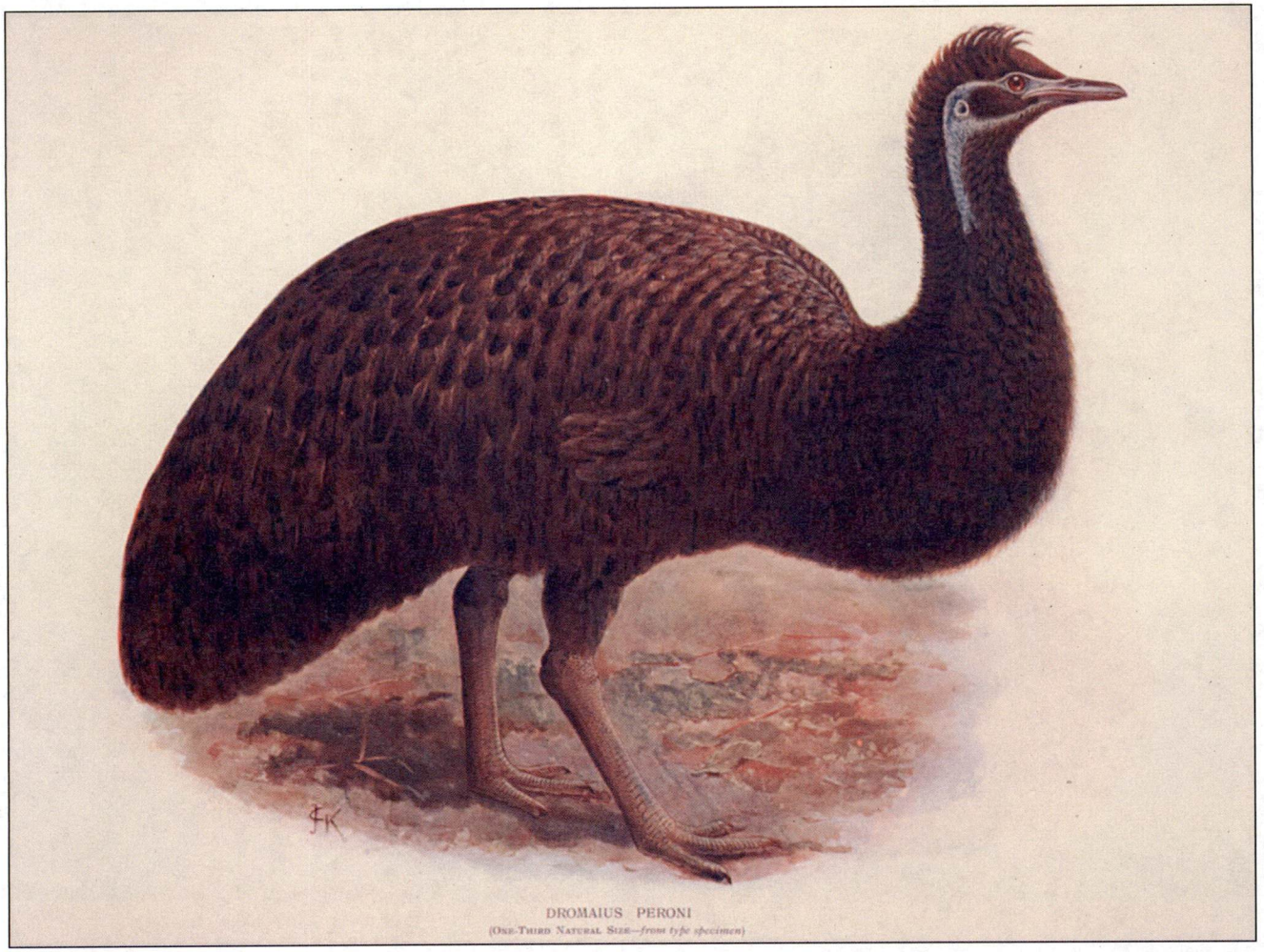


Fig. 3.13. John Gerrard Keulemans. "Dromaius peroni." From Rothschild (*Extinct Birds* Plate 40). Although this illustration was also based on the mounted skin in Paris (Rothschild, *Extinct Birds* 235), the emu's head is very different to that depicted in Figure 3.11, and bears a definite similarity to those of the cassowaries painted by Keulemans for Rothschild (for example, Figure 3.12).

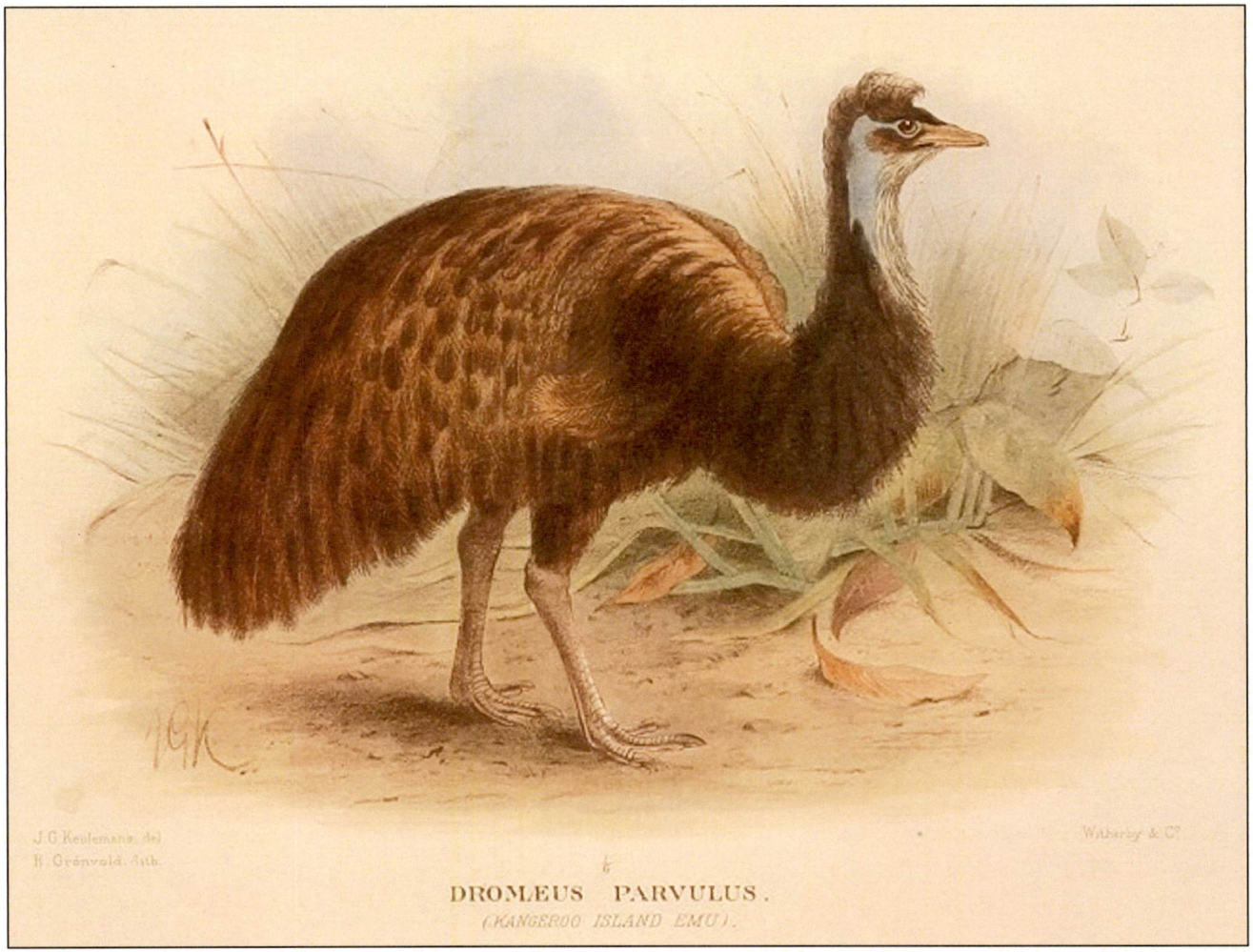


Fig. 3.14. Henrik Grönvold. "Dromæus parvulus (Kangeroo Island Emu)." Print of the original lithograph by John Gerrard Keulemans. From Mathews (*Birds* Plate 3).

Keulemans' first emu appeared for a second time in Volume 1 of Gregory Mathews' 12-volume *Birds of Australia* (Figure 3.14). Here the hand-colouring process is seen at its most erratic, for this supposedly stocky bird is now lithe, her skull and beak outline has a wobble and her neck sports new, white plumage. As was Mathews' custom, her new appearance was coupled with a new name. Called the "Casoar noir" in Milne-Edwards and Oustalet's 1893 commemorative volume (Figure 3.11), she became "Dromæus parvulus (Kangeroo Island Emu)" in Mathews'. Her identity is further confused by Mathews' accompanying text which, quoting from Milne-Edwards and Oustalet, declares "the front of the neck is almost entirely covered with hair-like, blackish feathers"—a description that belies the pictured white-bibbed bird. The disconnect is exacerbated by Mathews' description of the King Island emu, which he believed was "white-breasted" as opposed to the "black-breasted" Kangaroo Island bird (*Birds* 19, 25). In this case (to misquote David Knight) the artist's intentions are not illuminated by the text, if only because the illustrative and contextual deficiencies left the writer to his own devices.

Fig. 3.15. Julian Pender Hume/NHMPL (2003). *Dromaius ater, King Island emu*. Natural History Museum (UK) Picture Library, ref. 35890.

Julian Hume's 2003 reimagining of the King Island emu (Figure 3.15) evokes such deficiencies. It could even be considered an anti-illustration, since what it communicates is absence rather than presence; what is not known about the species, rather than what is. The odd flatness of the bird and the drop shadow suggest she is lying on the ground or else floating slightly above it, nebulous, unanchored neither to the past nor the present, her dead eye closed to the viewer's gaze. The parched and barren background, an anomalous choice for a bird from the shadows of chilly, rain-swept King Island, points to an environment eviscerated: unnatural aridity and light without warmth. With its weird angles and uneasy associations, it depicts the extinction of knowledge as well as of life itself.

Meanwhile, Lesueur's work has taken on a life of its own. Turning the British Library's copy of the *Atlas* to Plate XXXVI, one is struck not only by the enthusiasm of the colourist but also the strange transposition of the image onto the verso. It is coloured dark sepia, darker still where the inks have pooled in the corresponding image, lighter on the highlights. Whereas Lesueur's print is flat, this impression is, paradoxically, more suggestive of mass and volume; it rises in almost three dimensions from the page. Like the oil in the young emu, the oil in the ink has oxidised, acidified and migrated to the adjacent material. Conservators call this process "ghosting" (van Breda; McKay). Ironically, this ethereality conveys more substance than the manufactured reality it echoes, for tracing the King Island emu is like chasing so many ghosts.

Conclusion

Release

> And now I shall conclude this short contribution to the history of a highly interesting bird, which has so utterly disappeared through the ruthless agency of man, by expressing the hope that we may no longer be guilty of such barbaric vandalism.
>
> Henry Giglioli, "On a Specimen" (10)

In 2003 entrepreneur Hayden Bostock imported four hundred mainland emus to King Island to establish a new livestock industry. Once a site of the "harvesting" of elephant seal oil, the island was now to supply what Bostock called "a damn good product," emu oil (qtd. in "Emus Shipped" np). However, Bostock's enterprise—like that of certain French predecessors—faltered. Moreover, Bostock's introduced emus seized an opportunity denied their wild, endemic counterparts. Several escaped the farm and are now roaming, free and feral, and breeding with emus kept as pets by other local residents (King Island Natural Resource Management Group np; Burgess). In another twist in this increasingly ironic unnatural history, ABC Radio's *Country Hour* heralded Bostock's shipment with the headline "Emus Back on King Island" (Donovan and Ellis). Once again King Island's emus have been displaced, their extinction disparaged and their unique identity overshadowed, although not entirely appropriated: the feral emus do not appear to be shrinking, neither physically nor numerically.

Important, authentic and true

The search for the original King Island emu leads the *re*collector back to Paris, and to the Grande Galerie de l'Évolution of the Muséum national d'Histoire naturelle. Natural history museums are complicated places. Despite their commitment to the display of "the natural world" they are in fact the repositories and reflections of human culture, since Nature is a human construct and edifices designed to exhibit the glory of Nature cannot avoid instead exhibiting the glory of Man's ascendancy and

dominion over Nature. (After all, if this ascendancy did not exist, there would be no specimens and thus no natural history museums.) And since museums create, curate and communicate knowledge, they are a mix of reason and emotion that is (rather conveniently) encapsulated in the etymology. Museums are *shrines* to the Muses, but even when stripped of its deities the word retains a religious tinge: to *muse* is to meditate and recollect. To muse in a museum is to consider objects thought to be important, authentic and true, and which by virtue of their pedigree—their selection by an expert as representative of that which is important, authentic and true—are conserved and made permanent. Objects become icons because they are kept in a museum, and they are kept in a museum because they are icons. I use the word "icon" deliberately because as places designed to embody significance, stability and power over (and through) time, museums can be considered consecrated places of pilgrimage, containing relics for veneration. In this way a shrine can also be a tomb for, as Calum Storrie elegantly explains, "[a]s the word 'museum' hides within 'mausoleum', so the museum conceals the mausoleum and its occupants, the dead" (109).

But if natural history specimens are epitomes of human intervention and manipulation—of a reality reconstructed from a particular viewpoint—how can museum displays be considered authentic? What understanding of life can be gained from so much death? Perhaps the very presence of such specimens is enough to encourage the visitor to suspend any sense of uncertainty, for as Blom writes, "every collection is, to some extent, a reliquary preserving fragments of a realm beyond our reach." Since we are too often convinced that humanity is separate from the natural world, we seem willing to accept that this hollowed husk of what was once an animal will suffice. A relic, although dead, is very much alive to the believer, forming "a bridge between our limited world and an infinitely richer one … a world of ultimate authenticity and thus a profoundly romantic utopia" (Blom 142, 153). Natural history museums are perhaps, then, places that not only permanently fix the usual limits of our encounters with animals, but simultaneously enable us to go beyond them.

Possessing the emus

The Grande Galerie de l'Évolution itself evolved in 1994 from the original Galerie de Zoologie. First opened in 1889 for the Exposition Universale (just a few days after the

Eiffel Tower), the Muséum has a cast iron elegance typical of an increasingly industrial age. Indeed, although the building boasts a central nave, and butterflies illuminate their cabinets like so many stained glass windows, the result is more profane than sacred. The designers of the Galerie seem to have harnessed the reverence usually reserved for luxury consumer items to promote another dominant twenty-first century concern: environmentalism. Encouraging visitors to stroll amongst the exhibits, or to see their reflections superimposed on those of other species in the glass, the Muséum aims to instill the concept of the interdependence of Earth's teeming biodiversity (Figure C.1). The equality and fraternity (if not the liberty) of all species is promoted: birds eyeball the elevators as they fly past; a caracal swipes at a toddler; a giraffe on the second-storey balcony scans for a familiar face below. Nevertheless, despite exhibits decrying human impacts (such as the Pollution section of the "Man's Role in Evolution" gallery), vestiges of the old values remain.

Fig. C.1. "[T]axidermy enables intimate encounters with creatures that would not otherwise be possible" (Poliquin 8). African savannah exhibit in the Grande Galerie de l'Évolution, Muséum national d'Histoire naturelle. Personal photograph by author. 14 July 2008.

The Extinct and Endangered Species section is very dark. This is for conservation purposes as well as effect; some of the cabinets have no illumination and their contents glow weakly in the gloom. Ironically, one of the best-lit cabinets houses a

clock once belonging to Marie Antoinette, herself a member of an extinct kind, and its constant ticking and tolling is a perhaps too-deliberate, too-anthropocentric reminder of the passing of time and life. The faithful proceed up one aisle and down the other, stopping occasionally at a cabinet to pay their respects, but since many of the animals now exist in a time beyond the memory required for grief, the effect is not especially funereal. Unless, of course, the visitor recognises the body in the cabinet.

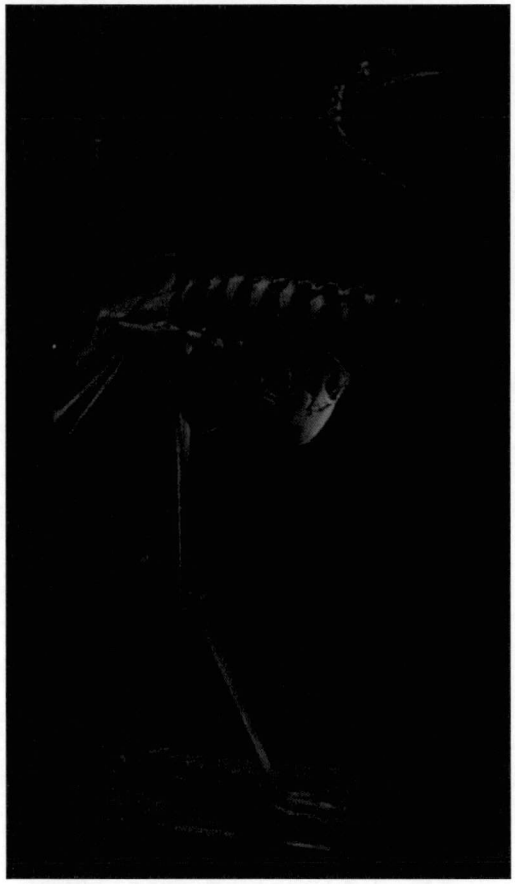


Fig. C.2. Shadowy figure: Kangaroo Island emu in the Extinct and Endangered Species section, Grande Galerie de l'Évolution. Personal photograph by author. 14 July 2008.

The Kangaroo Island emu who lived and died with the King Island bird in Paris now stands against a black backdrop, light and frail on a plain wooden base (Figure C.2). The visitor is encouraged to stare, like Henry Giglioli in Florence, "pondering … and contemplating the skeleton," seeking communion with the past. Giglioli noticed "his" (King Island) emu's right tarsometatarsus "had been fractured, and an irregular anchylosis had been formed during life" ("On a Specimen" 6, 9); indeed, this

damaged bone can been seen in Figure 3.2 in Chapter Three. Written on the body of Giglioli's emu are scenes from another, easily-imagined story: his leg perhaps broken in a defensive kick; his blundering run from the dogs; his painful rehabilitation; his capture, killing and exchange. Can similar scenarios be generated from the Kangaroo Island emu skeleton in the Grande Galerie? The bird's death date, "mai 1822," is inscribed on his ilium; his catalogue number, A.3524, is inked on his sternum. The interpretive panel mentions Baudin, and *baudinianus*, but does not explain why the bird was collected, nor what was thought and written about him. One visitor scans the interpretive panel, tut-tuts, and walks on. Others do not even pause. They could not be expected to recognise the quirk in the smooth chain of bones of the outside toe of the bird's right foot. The visitor who *does* recognise this subtle dislocation, this legacy of a captive life, is rewarded (if it can be called that) with the sad thrill of having the bird, Baudin, the artwork, the history, rush back to the present. His silence and stillness hide his story in plain sight. Despite every possible intervention, the emu's remains memorialise his life experience.

The emus still have their uses. Just outside the extinction gallery is a panel entitled "Why Conserve Biodiversity?" After

1) genetic diversity
2) economic reasons
3) source of medicines

are listed, the Kangaroo Island emu's skeleton is pictured and

4) an irreversible loss

—his annihilation by hunters—briefly explained (my trans.). He has become a poster specimen for the Muséum, an institution—of which the Baudin expedition, the *Voyage* and *Atlas* were tools—not entirely innocent of the extinction of his species in the first place. The hypocrisy of this hand-wringing extends to the panel inside the emu's case, which declares that "the mounted skin of the species *ater* [the King Island emu] is the most precious in the Muséum's ornithological collection. It cannot be displayed" (my trans.). Museums—even caring, sharing eco-museums—like to

have/hoard the first and last of everything. While the value and meaning of the Kangaroo Island emu are re-made by his display, those of the King Island bird are made by "her" (or his?) seclusion and "her" mis-placed, mis-timed protection.[64]

Fig. C.3. Level 3 of the vaults of the Muséum national d'Histoire naturelle, Paris. Personal photograph by author. 15 July 2008.

The Muséum's vaults are (a little disappointingly) not dank and dripping ossuaries. In keeping with the light industrial ambiance above, they exemplify form following function. Part underground car park, part fallout shelter, part morgue, their design befits their role as the repository of some 75 million specimens, one of the world's most important databases of life (and death) on Earth (Figure C.3). After many doors, stairs, swipe cards and security guards we arrive in the basement. The air is noticeably

[64] A similar argument could be made for the Tasmanian emu specimens sent to the British Museum in 1837 by Ronald Campbell Gunn, a colonial collector who foresaw their extinction (qtd. in Burns and Skemp 59, 62). They are now kept at the Natural History Museum's ornithological collection at Tring. In 2008 Tasmanian historian James Boyce wrote: "I believe it is time to rescue *our* emus from their lonely English vault, and bring [them] home" (16). However, besides numerous practical considerations, moving the birds to the Tasmanian Museum and Art Gallery could only decontextualise them further. As relics of a particular time, as well as a species, they may have more meaning in Hertfordshire than they ever would in Hobart.

cooler. A switch is flicked and a thousand beady eyes and pointy teeth instantly glitter with understandable yet unmoving aggression (Figure C.4). This is the mustelid section, where the King Island emu juvenile and adult are kept encased, defying classification once again. The curator, Jacques Cuisin, explains that the birds are here on a temporary basis; the Muséum is still under renovation. The door of their glass cabinet is opened (Figure C.5) and we stand back as the pent-up insecticide dissipates: a sweet smell, but with a chemical afterburn.

Fig. C.4. The King Island emus' neighbours. There are no mustelids native to Australia. Personal photograph by author. 15 July 2008.

Blom (153) writes of relics evoking romantic utopias, but the reality is somewhat dystopic. The emus are scruffy. Cuisin explains that they were displayed in the original Galerie de Zoologie between 1889 and 1964; there, in the Gallery of Mammals and Birds, they occupied "the place of honour in the centre of the room" (Jouanin, "Les Emeus" 169). But it is not sure what is to be done with them now, for they are too old (or, compared to the admittedly marvellous modern taxidermy above, too old-school, being so obviously dead), to be returned to the public gaze. And despite the two hundred years since their capture, it seems little has changed. With the (possibly) unrelated juvenile strolling beside the (possibly) female adult's flank, the

birds seem to echo the ambitions and errors encapsulated in Lesueur's drawing. And with her anklet of paper tags and business cards documenting the granting of her feather to the Tasmanian Museum and Art Gallery, Hobart, it appears the adult emu (Figure C.6) is still very much a biotic resource of a (post)imperial network. For after dwindling both physically and textually with every generation removed, the bird's likely ultimate destiny is to be reduced to the smallest measurement of all: her DNA. This most profound decontextualisation in the cause of science—breaking open her cells in order to expose and inscribe her very essence—will reveal everything, and yet nothing, of her life. Ricardo De Vos explains that genetic coding occurs "in a space

Fig C.5. The King Island emus in Paris, two of the three known mounted skins left on Earth. Personal photograph by author. 15 July 2008.

and time 'after' the object … while invoking a sense of presence spatially and temporarily anterior to the object" (189-90). The subject is absent, and so the basic facts of her life—why was she so small? Was her growth stunted by the confines of her cage? Did her *mal de mer* lead to malnourishment?—may go unanswered. As John Berger writes: "The more we know, the further away they are" (14).

Yet of course the emus are, simultaneously, *not* dead; their problematic existence in this multi-storey tomb, coupled with the juvenile's decay, are indicative of ongoing intellectual and physical processes. Neither meaning nor death is truly stagnant. Perhaps this is why the emus are no longer on public display. While it could be argued that the physical corruption and disintegration of a specimen, and thus a species, would be a more truthful exegesis of extinction than black-lined cabinets and a tolling bell, it would also undermine the primary motivations of collecting: preservation, authority, order, control. Allowing a natural process to reappropriate an unnatural history would be perhaps too real for a museum; too mundane for a mausoleum. But with these persistent traces of the birds-they-once-were resisting human attempts to contain them, the King Island emus remain, with unwitting defiance, elusive.

Fig C.6. Personal photograph by author. 15 July 2008.

Appendix A

Péron's Questionnaire

This document records an interview that François Péron, naturalist on board *Le Géographe*, conducted with the sealer Daniel Cooper (whom he called Cowper) on King Island in December 1802. This hand-written questionnaire was transcribed by Alphonse Milne-Edwards and Emile Oustalet of the Muséum national d'Histoire naturelle, Paris, and first published in its entirety in their "Note sur l'Émeu noir *(Dromaeus ater V.)* de l'île Decrès (Australie)." *Bulletin du Muséum d'Histoire naturelle* 5 (1899): 206-14. The questionnaire is given here in English translation but otherwise appears exactly as it did in the *Bulletin*; the occasional syntagmatical anomaly may be attributed to Péron. The footnotes are those of Milne-Edwards and Oustalet.

Péron's questionnaire was translated by Gillian von Bertouch, NAATI Level III (French–English) translator, in Hobart, June 2008. I am also grateful to Associate Professor Jean Fornasiero of the Discipline of French Studies, University of Adelaide, for her invaluable editorial assistance.

1. Nom anglais?
English name?

Hemeo.
Emu.

2. Nom des naturels de la Nouvelle-Hollande?
Name [given it] by the natives of New Holland?

Il ignore.
He does not know.

3. Vit-il solitaire ou bien vit-il par troupe?

Do they live by themselves or in flocks?

Ils vivent ordinairement seuls, mais, dans le temps de l'accouplement, ils se rassemblent en troupes de 10 à 20, et lorsque chaque mâle a choisi sa femelle, ils se séparent et vont deux à deux, mâle et femelle.

They normally live alone, but during the breeding season gather in flocks of 10 to 20, and when each male has chosen a female they split up and go off in pairs, a male with a female.

4. Le plumage varie-t-il pour la couleur suivant les âges?

Does the plumage vary in colour according to age?

Les jeunes ont un plumage grisâtre qui devient tout noir quand ils grossissent et que les grandes plumes poussent.

The young ones have a greyish plumage, which becomes quite black as they grow up, and when the big feathers come through.

Le plumage varie-t-il pour la couleur suivant les sexes?

Does the colour of the plumage vary according to sex?

Même couleur, celle du mâle est plus vive.

Same colour, the male's is brighter.

Le plumage varie-t-il pour la couleur suivant les saisons?

Does the plumage vary in colour according to the seasons?

Toujours la même.

Always the same.

5. Est-il sujet à la mue?

Does it moult?

Il mue.

It moults.

Dans quelle saison a-t-elle lieu?

At what time of year does this take place?

Pleine lune à la fin de mars. Ils commencent à muer en novembre, temps des petits, les plumes repoussent de suite.

Full moon at the end of March. They start to moult in November, when they have young, and the feathers grow back afterwards.

N'a-t-elle lieu qu'une seule fois par an?

Does this only take place once a year?

Qu'une mue par an.

Only one moult a year.

6. Quelle est la hauteur la plus grande à laquelle il parvient?

Which is the maximum height they grow to?

A l'île King, à peu près 4 pieds ½, plus petit qu'à Sydney.

In King Island, about 4 ½ feet; they are smaller than in Sydney.

Quel est alors son poids?

What is the weight of the bird then?

Le plus lourd de 45 à 50 livres.

The heaviest weighs from 45 to 50 pounds.

7. La femelle est-elle plus grosse ou plus petite que le mâle?

Is the female bigger or smaller then the male?

Le mâle est plus gros, mais la différence n'est pas considérable.

The male is bigger, but the difference is not great.

8. A-t-il des ennemis? Quels sont-ils?

Does it have any enemies? What are they?

In ne connaît pas les ennemis des gros, mais il suppose que les chats-tigres attrapent les petits lorsqu'ils le peuvent.

He does not know what predators the adults have, but he thinks that tiger cats catch the little ones when they can.

9. Les œufs sont-ils recherchés et détruits par quelques animaux?

Are the eggs sought out and destroyed by any animals?

Il croit que les serpents, les rats, les chats-tigres les mangent.

He believes that snakes, rats and tiger cats eat them.

10. Comment se défend-il contre ses ennemis?

How does it defend itself against its enemies?

Ils se défendent avec leurs pieds, comme les chevaux, et peuvent faire beaucoup de mal. Son chien a souvent été jeté comme mort à dix pas par un coup de leurs pieds.

They defend themselves with their feet, like horses do, and they can do a great deal of harm. His dog was often stunned, having been thrown ten feet by a kick.

11. Attaque-t-il lui-même quelques animaux? Et dans ce cas, quelles armes emploie-t-il contre eux?

Does it attack any other animals itself? And if so, what weapons does it use against them?

Les corbeaux, cherchant à tuer les petits, sont renvoyés à coups de bec par les mères.

Crows, which are trying to kill the young ones, are chased off with blows of the mothers' beaks.

12. Combien peut-il vivre longtemps?

How long can they live?

Ignore.

He does not know.

Son accroissement est-il rapide?

Do they grow quickly?

Ils pensent qu'en un an ils acquièrent leur entier accroissement.

They think that in a year they reach their full size.

13. Quelle est la nourriture ordinaire?

What is their usual food?

De baies de [mot illisible], de ficoïdes, du goémou rarement et différentes espèces d'herbes. L'odeur des aliments dans l'estomac est très agréable. On trouve du gravier dans l'estomac de tous. — Clou avalé.

They feed on the berries of the [word illegible], on ficoids, seaweeds, though rarely, and on different kinds of grass. The food in their bellies smells very pleasant. Gravel is to be found in all of them. — Swallowed nail.

Quels moyens emploie-t-il pour se la procurer?

How do they go about obtaining this food?

[no answer]

14. Court-il vite et longtemps?

Do they run quickly, and for a long time?

Ils courent très vite, mais ceux de l'île King, trop gras, courent dix fois moins vite que ceux de Port-Jackson.

They run very quickly, but those on King Island, being too fat, run ten times less quickly than those from Port Jackson.

En général, pas plus vite qu'un très bon chien, même ceux de Sydney.
Generally no faster than a very good dog, even those of Sydney.

Peut-il nager? Saute-t-il?
Can they swim? Do they jump?

Ils nagent bien, mais seulement lorsque cela leur est nécessaire, après quoi ils s'arrêtent et secouent l'eau. Il ne les a pas vu sauter.
They swim well, but only when it is necessary; afterwards they stop and shake off the water. He has not seem them jump.

15. Se sert-il de ses ailes pour précipiter sa course?
Do they make use of their wings to help them run faster?

Il ne les a jamais vu se servir de leurs ailes ni pour courir ni pour nager.
He has never seen them making use of their wings either to run or to swim.

16. Ces mêmes ailes ne lui servent-elles pas pour se défendre?
Do they not make use of these wings to defend themselves?

Ils ne s'en servent pas pour défense, mais l'ongle qui les termine leur sert à se gratter.
They do not use them to defend themselves, but they use the nail which is at the end of each wing to scratch themselves with.

17. Dans quels lieux plus particulièrement habite-t-il? Est-ce aux lieux humides et marécageux? couverts ou dépouillés d'arbres? arides ou élevés ou bas?
In which places in particular do they live in? Are they damp and swampy? Wooded or open? Dry or high or low-lying?

Ils habitent plus particulièrement près des lagons, plutôt à l'ombre qu'à découvert.
They prefer to live near lagoons, and in the shade rather than in the open.

Saison de l'accouplement, ils viennent au rivage et chaque mâle choisit là sa femelle.

In the breeding season, they come to the shore, and each male chooses a female.

18. Se tient-il constamment aux mêmes lieux, ou bien à des époques différentes se transporte-t-il dans divers cantons de l'île?

Do they always keep to the same places, or, at different times, do they go to other parts of the island?

Pas de transmigration.

There is no migration.

19. A quelle heure plus particulièrement paraît-il chercher sa nourriture?

At what time of the day in particular do they seem to look for food?

Les matins et les soirs seulement, ils viennent au rivage.

Mornings and evenings only; they come to the shore.

20. Paraît-il se rapprocher des endroits qui peuvent lui fournir de l'eau douce? Cette eau lui est-elle indispensable?

Do they seem to prefer places where fresh water can be obtained? Is this water indispensable to them?

Ils ne peuvent pas se passer d'eau douce.

They cannot do without fresh water.

21. Quelles sont les manières dont on peut le chasser avec plus d'avantage?

What would be the best ways of hunting them?

Lâcher un chien, que l'on doit dresser à les prendre par le col, parce que s'il s'attaquaít à leurs jambes, il risquerait d'être rejeté et blessé.

By releasing a dog, which one would have to train to take them by the neck, because if it attacked their legs it would risk being driven back and wounded.

22. Quels changements surviennent au mâle et à la femelle dans la saison des amours? C'est-à-dire, perdent-ils une partie de leurs plumes on bien leur plumage devient-il alors plus épais, plus pileux? Devient-il plus maigre, sa chair plus coriace?

What changes happen to the male and female during the mating season? That is to say, do they lose some of their feathers, or does their plumage become thicker or more downy? Do they get thinner, does their flesh become tougher?

Il les trouve meilleurs et plus gras dans le temps des amours, mais quand femelles pondent, elles sont plus grasses.

He finds them better and fatter in the mating season, but when the females are laying they are fatter.

23. Construit-il des nids? dans quels lieux? avec quelles substances? De quelle manière est-il fait? quelle est sa largeur? quelle est sa hauteur?

Do they build nests? Where? With what material? How are these nests made? How wide are they? How high are they?

Ils font des nids sur la terre, sous les buissons et près des lagons, avec des petites branches sèches garnies en dedans de feuilles mortes et la mousse qui se trouve au pied des arbres. Ils sont ovales, peu profonds en proportion de l'animal et de la forme de son ventre.

They build nests on the ground, under bushes and near lagoons, with small, dry branches lined with dead leaves and moss to be found at the foot of trees. They are oval in shape, and they are not very deep in proportion to the animal and the shape of its body.

24. Quelle est l'époque de la ponte? Combien d'œufs pond-il chaque fois?

When is laying season? How many eggs are laid at a time?

Du 25 au 26 juillet le [mot illisible] il tua une grande quantité d'émeus. Les femelles avaient toutes des œufs dans le ventre. Il a vu dans un nid 7 œufs, mais il a vu aussi 2 nids, l'un de 8 petits et l'autre de 9.

From 25 to 26 July the [word illegible] he killed a large number of emus. The females all had eggs in their bellies. He saw seven eggs in one nest, but he also saw two nests, one with eight emu chicks, and the other with nine.

De quelle grosseur sont-ils? Combien peuvent-ils peser?
How big are they? How much do they weigh?

Environ quatre fois comme ceux des oies.
About four times as much as goose eggs.

Sont-ils bons à manger?
Are they good to eat?

Ils sont très bons à manger.
They are very good to eat.

Le blanc de ces œufs se coagule-t-il?
Does the white of these eggs coagulate?

Le même effet que ceux de poules à cuire.
Cooking produces the same effect as it does on chicken eggs.

25. Combien dure l'incubation?
How long does the incubation last?

Il suppose cinq ou six semaines, à en juger par l'intervalle écoulé entre le moment où il a vu les premiers œufs et celui où il trouva les premiers petits.
He thinks five or six weeks, judging from the time lapsing between the moment when he saw the first eggs and when he found the first chicks.

La femelle seule y prend-elle part? ou bien est-elle secondée par le mâle dans cette fonction?
Does the female only perform the incubation, or is she helped by the male?

Il n'assure pas, mais a observé que le ventre de plusieurs mâles était déplumé dans le temps de l'incubation; il croit qu'ils couvent aussi.

He is not sure, but he observed that the bellies of several males were without feathers at the time of incubation; he believes they also take a share in the brooding.

Le mâle, pendant cette opération, la nourrit-il?

Does the male feed the female during this time?

Ils ne s'éloignent pas de leurs nids et sont toujours deux à chaque nid. Un d'eux dessus les œufs, l'autre près du nid.

They do not leave their nests, and are always two to a nest; one of them on the eggs, the other near the nest.

26. Quelle est la grosseur des petits au moment où ils éclosent? Peuvent-ils courir d'abord?

How big are the young birds when they are hatched? Can they run about at once?

Gros comme le poing d'un homme; leurs membres sont faibles et ils ne peuvent pas courir. Leur accroissement est plus rapide, à compter de quatre mois après leur naissance.

As large as a man's fist; their limbs are weak, and they cannot run. Their growth is more rapid from the fourth month after hatching.

Ont-ils un duvet épais ou bien ont-ils des plumes?

Have they a thick down or feathers?

Ils sont couverts comme les jeunes poules-dindes, mais sont tous rayés de noir suivant la longueur.

They are covered like young turkey-hens, but are all striped with black lines in the length of their bodies.

Au bout de quel temps abandonnent-ils le nid?

How long is it before they leave the nest?

Deux ou trois jours après la naissance, ils sortent du nid pour aller boire; les gros font tomber des baies que les petits mangent à terre, après quoi ils rentrent dans leur nid. Ils abandonnent le nid tout à fait lorsqu'ils sont assez forts pour se suffire.

Two or three days after hatching they leave the nest to go and drink; the big birds cause berries to fall to the ground, and the young ones eat them, after which they go back to the nest. They leave it for good when they are strong enough to fend for themselves.

27. Quelle est sa situation pendant le repos et la veille? Se tient-il habituellement debout? Se courbe-t-il sur ses genoux pour se reposer sur la terre? La nuit, se couche-t-il ou bien se tient-il debout sur ses pieds pour reposer?

What is their position when at resting and waking? Do they usually remain standing? Do they bend their knees to rest on the ground? At night do they lie down or do they stay on their feet to rest?

Ils courbent les pattes pour le repos et le sommeil en s'appuyant sur le sternum.

They bend their legs to rest and sleep, and support themselves on the sternum.

28. Est-il susceptible de s'apprivoiser facilement?

Are they likely to be easily tamed?

Ils s'apprivoisent facilement.

They are easily tamed.

Quelle nourritures lui conviennent plus particulièrement alors?

What foods would then suit them best?

Se nourrissent de blé, maïs, farine, baies et herbes.

They feed on wheat, maize, flour, berries and grasses.

Est-il susceptible de s'engraisser facilement et beaucoup?

Are they likely to be fattened easily and a great deal?

Ils engraissent au bout de quelque temps.

They fatten after a certain time.

La chair devient-elle plus délicate et plus tendre?

Does the flesh become more delicate and tender?

Ceux pris dans les buissons sont meilleurs et plus gras que l'on élève, mais il n'en ont jamais élevé de jeunes.

Those caught in the bush are better and fatter than those which are kept, but they have never raised young ones.

29. Peut-il multiplier dans l'état de domesticité, du moins a-t-on fait quelques tentatives pour s'en assurer?

Can they breed when domesticated, or at least has anybody made any attempt to see if they can?

Lorsqu'ils sont privés, on peut les laisser, ils ne s'échappent plus; ce qui lui fait croire qu'ils pourraient multiplier dans l'état de domesticité.

When they are tamed, you can let them be, and they no longer escape; this leads him to believe that they could breed when domesticated.

30. A-t-il la vue très bonne?

Do they have good eyesight?

Il dit qu'ils ont la vue bonne, ils ne voient pas la nuit.

He says they have good sight, they don't see at night.

Paraît-il avoir l'ouïe fine et délicate?

Does it seem to have a keen and sensitive sense of hearing?

Ils ne semblent avoir un bon ouïe [sic].

They don't seem to have good hearing.

L'odorat chez lui paraît-il bien exercé? Flaire-t-il quelques-unes des substances qu'on lui présente avant de les manger?

Does it seem to have a well-developed sense of smell? Does it smell any of the substances you offer it before eating them?

Ils ne paraissent pas avoir l'odorat fin.

They don't seem to have a keen sense of smell.

31. Quelle paraît être la meilleure manière d'accommoder sa chair?

What would seem to be the best way of preparing the flesh?

La meilleure manière est de rôtir, mais pour garder la viande, on la sale et l'expose. Il prétend qu'elle est très bonne ainsi fumée, elle se garde ainsi autant que de jambon.

The best way is roasting, but to preserve the meat, it is salted and dried. He claims that it is very good smoked in this way, and keeps as well as ham.

32. Quel usage peut-on faire de la graisse?

What use can be made of the fat?

Leur graisse est employée en friture et n'est pas indigeste.

Their fat is used in frying and is not indigestible.

L'emploie-t-on à quelque usage médical?

Is it used for any medical purposes?

Dans les temps froid, cette graisse fondue et figée se mange sur le pain; il dit qu'elle est ainsi très bonne.

In cold weather, this fat melted and left to set can be eaten on bread; he said that it's very good like this.

33. Paraît-il sujet à quelque maladie particulière?

Does the emu seem to suffer from any particular illness? [My note: There was no answer to this question.]

Les Émeus dont il s'agit ici pullulaient littéralement à l'île King, cela résulte de la note manuscrite suivante, jointe au questionnaire sous la rubrique:

"Descriptions zoologiques. — Oiseaux. — Rhea:

"Île King. Casoar. — N° 51."

Ce que je viens de dire de l'abondance des Kangooroos (50) doit s'appliquer encore aux Casoars. J'en ai déjà pris ou tué plus de 300 à ma part, m'a dit le même habitant dont j'ai parlé.

The Emus which we are talking about here are literally swarming on King Island, as indicated in the following manuscript note which is added to the questionnaire under the following heading:

"Zoological descriptions. —Birds. — Rhea:[65]

"King Island. Cassowary. — N° 51."

What I just said about the abundance of kangaroos (50) can also be applied to the cassowaries. I've already caught or killed more than 300 myself, said the same inhabitant of whom I was speaking.[66]

[65] **A cause de l'aspect de leur plumage, les Émeus sont ici placés dans le même genre que les Nandous *(Rhea).***
Because of the appearance of their plumage, the emus are here placed in the same genus as the Rheas *(Rhea)*.
[66] **Le pêcheur Cowper.**
The fisherman Cowper.

Works Cited

Allen, David Elliston. *The Naturalist in Britain: A Social History.* Harmondsworth: Penguin, 1978.

d'Arneville, Marie-Blanche, et al., eds. *L'Impératrice Joséphine et les sciences naturelles: Catalogue de l'exposition du Musée national des châteaux de Malmaison et Bois-Préau, 29 mai–6 octobre 1997.* Paris: Réunion des Musées nationaux, 1997.

Asma, Stephen T. *Stuffed Animals and Pickled Heads: The Culture and Evolution of Natural History Museums.* Oxford: Oxford UP, 2001.

Austin, Jeremy. ARC Senior Research Associate, Ecology and Evolutionary Biology, School of Earth and Environmental Sciences, University of Adelaide. Telephone conversation with author. 5 Aug. 2008.

Badino, G. and C. Vellano. "Franco Andrea Bonelli." *www.torinoscienza.it.* Provicia di Torino/Progetto Science Centre. 29 Apr. 2008. <http://www.torinoscienza.it/accademia/personaggi/apri?obj_id=413>.

Baigrie, Brian S. Introduction. *Picturing Knowledge: Historical and Philosophical Problems Concerning the Use of Art in Science.* Ed. Brian S. Baigrie. Toronto: U of Toronto P, 1996. xvii-xxiv.

Baker, Steve. "Animals, Representation and Reality." *Society and Animals* 9.3 (2001): 189-201.

---. *Picturing the Beast: Animals, Identity and Representation.* Manchester: Manchester UP, 1993.

Balouet, Jean-Christophe and Christian Jouanin. "Systematique et Origine Geographique des Emeus Recoltés par l'Expedition Baudin." *L'Oiseau et la*

Revue française d'ornithologie 60 (1990): 314-18.

Barber, Lynn. *The Heyday of Natural History 1820–1870*. London: Jonathan Cape, 1980.

Baudin, Nicolas-Thomas. *The Journal of Post Captain Nicolas Baudin, Commander-in-Chief of the Corvettes* Géographe *and* Naturaliste *Assigned by Order of the Government to a Voyage of Discovery*. Trans. Christine Cornell. Adelaide: Friends of the State Library of South Australia, 1974.

---. Letter to Minister of Marine. 9 Prairial XI (29 May 1803). Ms BB4 995(5), Archives Centrales de la Marine, Paris.

Benjamin, Walter. "Unpacking My Library: A Talk about Book Collecting." *Illuminations*. Ed. Hannah Arendt. Trans. Harry Zorn. London: Pimlico, 1999. 61-69.

Berger, John. "Why Look at Animals?" *About Looking*. New York: Pantheon, 1980. 1-26.

Berta, Annalise, James L. Sumich and Kit M. Kovacs. *Marine Mammals: Evolutionary Biology*. 2nd ed. Amsterdam: Elsevier/Academic, 2006.

Blom, Philipp. *To Have and to Hold: An Intimate History of Collectors and Collecting*. London: Penguin, 2002.

Bonnemains, Jacqueline, ed. *Les velins de Charles-Alexandre Lesueur: exposition du 4 mai au 2 juin 1996*. Le Havre: Muséum d'Histoire Naturelle du Havre, 1996.

Bonnemains, Jacqueline, Elliott Forsyth and Bernard Smith. *Baudin in Australian Waters: The Artwork of the French Voyage of Discovery to the Southern Lands, 1800–1804*. Melbourne: Oxford UP in association with the Australian Academy of the Humanities, 1988.

Bonyhady, Tim. *The Colonial Earth*. Carlton, Vic.: Melbourne UP, 2000.

Boyce, James. "The Lost Tasmanian Emu—Can We Bring it Home?" *Tasmanian 40° South* 51 (2008-2009): 14-16.

Brasil, L. "The Emu of King Island." *Emu* 14 (1914): 88-97.

Breda, Cobus van. Senior Paper Conservator, Tasmanian Museum and Art Gallery. "RE: AICCM, The Australian Institute for the Conservation of Cultural Material Inc.: Question re. 19th/20th century lithographs." Email to author. 1 Dec. 2008.

Broderip, William. "Australian and New Zealand Struthionidæ." *The Penny Cyclopaedia of the Society for the Diffusion of Useful Knowledge*. Vol. XXIII. London: Charles Knight, 1842. 145-147.

Brooks, Lynda. Librarian, Linnean Society of London. "RE: Query re Bullock Museum auction." Email to the author, 24 Apr. 2008.

Brown, Anthony J. *Ill-Starred Captains: Flinders and Baudin*. Adelaide: Crawford House, 2000.

---. "François Péron—A Life for Science." Introduction. *Voyage of Discovery to the Southern Lands: Continued by Louis de Freycinet.* By François Péron. 2nd ed. 1824. Vol. I: Books I to III comprising Chapters I to XXI. Trans. Christine Cornell. Adelaide: Friends of the State Library of South Australia, 2006. xiii-xl.

Bullock, William. *Catalogue ... of the Roman Gallery and Antiquities and Works of Art, and the London Museum of Natural History (Unquestionably the Most Extensive and Valuable in Europe) at the Egyptian Hall in Piccadilly; which will be Sold by Auction, Positively Without the Least Reserve, by Mr. Bullock, on the Premises....* London: William Bullock, 1819.

---. *A Companion to Mr Bullock's London Museum and Pantherion... Now Open for Public Inspection in the Egyptian Temple ... in Piccadilly* .... 12th ed. London: William Bullock, 1812.

---. "Companion to the London Museum." *A Companion to Mr Bullock's London Museum and Pantherion... Now Open for Public Inspection in the Egyptian Temple ... in Piccadilly* .... 12th ed. London: William Bullock, 1812.

Burgess, Nigel. Ranger, Tasmanian Parks and Wildlife Service, King Island. Telephone conversation with author, 5 May 2009.

Burkhardt, Richard W., Jr. "The Leopard in the Garden: Life in Close Quarters at the Muséum d'Histoire Naturelle." *Isis* 98 (2007): 675-94.

---. "Unpacking Baudin: Models of Scientific Practice in the Age of Lamarck." *Jean-Baptiste Lamarck 1744–1829*. Ed. G. Laurent. Paris: CTHS, 1997. 497-514.

Burns, T. E. and John Rowland Skemp, eds. *Van Diemen's Land Correspondents 1827–1849*. Launceston: Queen Victoria Museum, 1961.

Campbell, William. "Captain Campbell to Governor King. " 4 June 1802. *Historical Records of Australia. Series I: Governors' Despatches to and from England.* Vol. III. Sydney: Commonwealth of Australia, 1915. 523-24.

Children, John George. December 1835–July 1837. Ms. *Report Book: Zoological Branch of the Department of Natural History (British Museum)*. Natural History Museum, London.

Christidis, Les and Walter E. Boles. *Systematics and Taxonomy of Australian Birds.* Collingwood, Vic.: CSIRO, 2008.

Cibois, Alice. Department of Mammalogy and Ornithology, Natural History Museum of Geneva. "RE Kangaroo Island emu specimen." Email to author. 24 Sept. 2008.

Clarke, Stephanie. Archivist and Records Manager, British Museum. "Re. Museum archive enquiry." Email to the author, 22 May 2008.

Clode, Danielle. *Voyages to the South Seas: In Search of Terres Australes.* Carlton, Vic.: Miegunyah, 2007.

Cook, Katrina. Curator, Bird Group, Zoology Department, the Natural History Museum at Tring. Meeting with author, 10 July 2008.

Crosland, Maurice P. *The Society of Arcueil: A View of French Science in the Time of Napoleon.* London: Heinemann, 1967.

Cuisin, Jacques. Ingénieur-Gestionnaire des Collections de Mammifères et d'Oiseaux, Muséum national d'Histoire naturelle, Paris. Meeting with author, 15 July 2008.

Cumpston, John S. *First Visitors to Bass Strait.* Canberra: Roebuck Society, 1973.

Cuvier, Georges, Edward Griffith, Edward Pidgeon and John Edward Gray. *The Class Aves Arranged by the Baron Cuvier, with Specific Descriptions by Edward Griffith and Edward Pidgeon.* Vol. 3. London: Whittaker, Treacher, 1829.

Deleuze, Joseph P. F. *Histoire et description du Muséum Royal d'histoire naturelle.* Paris: L. F. Cellot, 1823.

"Directions for Collecting and Preserving Birds." *Sydney Gazette and NSW Advertiser* 19 June 1803: 3.

Donovan, Samantha and Merian Ellis. "Emus Back on King Island." *ABC Rural Radio: Tasmanian Country Hour.* 2003. Australian Broadcasting Commission. 5 May 2009 <http://www.abc.net.au/rural/tas/stories/s877367.htm>.

Douglas-Hamilton, Jill (Jill, Duchess of Hamilton). *Napoleon, the Empress and the Artist: The Story of Napoleon, Josephine's Garden at Malmaison, Redoubté and the Australian Plants.* East Roseville, NSW: Simon and Schuster, 1999.

Dunlap, Thomas R. *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand.* Cambridge: Cambridge UP, 1999.

Dunmore, John. *French Explorers in the Pacific.* Vol. I. Oxford: Clarendon, 1965.

Duyker, Edward. *François Péron: An Impetuous Life: Naturalist and Voyager* Carlton, Vic.: Miegunyah, 2006.

Ecological Humanities. "About Us." Fenner School of Environment and Society, Australian National University. 18 August 2009. <http://ecologicalhumanities.org/about.html>

Edwards, Edward. *Lives of the Founders of the British Museum.* London: Trübner, 1870.

Elphick, Jonathan. *Birds: The Art of Ornithology.* London: Scriptum Editions in association with the Natural History Museum, 2004.

Elsner, John and Roger Cardinal. Introduction. *The Cultures of Collecting.* Ed. Elsner, John and Roger Cardinal. Melbourne: Melbourne UP, 1994. 1-6.

Elter, O. *Cataloghi: VIII—La Collezione Ornitologica del Museo di Zoologia dell'Università di Torino.* Torino: Museo Regionale de Scienze Naturali, 1986.

"Emus Shipped to King Island." *ABC Rural News.* 2003. Australian Broadcasting Commission. 2 May 2009 <http://www.abc.net.au/rural/news/stories/s878335.htm>.

Fairchilds, Cissie C. Rev. of *Elephant Slaves and Pampered Parrots: Exotic Animals in Eighteenth-Century Paris*, by Louise E. Robbins. *Journal of Social History* 37.4 (2004): 1069-71.

Fanning, Edmund. *Voyages and Discoveries in the South Seas 1792–1832.* Salem, MA: Marine Research Society, 1924.

Farber, Peter L. "The Development of Taxidermy and the History of Ornithology." *Isis* 68.4 (Dec. 1977): 550-66.

Finney, Colin M. *To Sail Beyond the Sunset: Natural History in Australia 1699–1829.* Adelaide: Rigby, 1984.

Fisher, Clemency. Curator of Vertebrate Zoology, National Museums Liverpool. "Re: Contact from the Web: Clem Fisher." Email to author. 17 Apr. 2008.

Flannery, Tim F. and Peter Schouten. *A Gap in Nature: Discovering the World's Extinct Animals*. Melbourne: Text, 2001.

Fleming, Donald. "Science in Australia, Canada, and the United States: Some Comparative Remarks." *Actes du Dixième Congress International d'Histoire des Sciences.* Paris: Hermann, 1962.

Flinders, Matthew. *A Voyage to Terra Australis, Undertaken for the Purpose of Completing the Discovery of that Vast Country, and Prosecuted in the Years, 1801, 1802 and 1803, in His Majesty's Ship the* Investigator, *and Subsequently in the Armed Vessel* Porpoise *and* Cumberland *Schooner: with an Account of the Shipwreck of the* Porpoise, *Arrival of the* Cumberland *at Mauritius, and Imprisonment of the Commander during Six Years and a Half in that Island.* Vol. I. Adelaide: Libraries Board of South Australia, 1966.

Fornasiero, Jean and John West-Sooby. "Baudin's Books." *Australian Journal of French Studies* 41.2 (2004): 215-249.

---. "Taming the Unknown: The Representation of Terra Australis by the Baudin Expedition 1801–03." *Alas, For the Pelicans! Flinders, Baudin and Beyond: Essays and Poems.* Ed. Anne Chittleborough, et al. Kent Town, SA: Wakefield, 2002. 59-80.

Fornasiero, Jean, Peter Monteath and John West-Sooby. *Encountering Terra Australis: The Australian Voyages of Nicolas Baudin and Mathew Flinders.* Adelaide: Wakefield, 2004.

Frères Lambert. *Nouvelle-Hollande: Ile Decrès. CASOAR de la N^elle. Hollande.* (Engraving from watercolour by Charles-Alexandre Lesueur.) National Library of Australia Digital Collection: Pictures. 26 Jan. 2009 <http://www.nla.gov.au/apps/cdview?pi=nla.pic-an7568611>.

Freycinet, Louis de. *Voyage de découvertes aux Terres Australes, exécuté par ordre de Sa Majesté l'Empereur et Roi, sur les corvettes le* Géographe, *le* Naturaliste, *et la goëlette le* Casuarina, *pendant les années 1800, 1801, 1802, 1803 et 1804. Atlas Historique* (2^e partie). Paris: Imprimerie impériale, 1811.

Fudge, Erica. "A Left-Handed Blow: Writing the History of Animals." *Representing Animals.* Ed. Nigel Rothfels. Bloomington, IN: Indiana UP, 2002. 3-18.

Fuller, Errol. *Extinct Birds.* 1987. Ithaca: Cornell UP, 2001.

Giblin, R. W. *The Early History of Tasmania: The Geographical Era 1642–1804.* London: Methuen, 1928.

Giglioli, Henry H. "A Third Specimen of the Extinct "Dromaius ater," Vieillot; found in the R. Zoological Museum, Florence." *Nature* 62.1596 (1900): 102.

---. "On a Specimen of the Extinct *Dromœus ater* Discovered in the Royal Zoological Museum, Florence." *Ibis* 1 (1901): 1-10.

---. "On the Extinct Emeu of the Small Islands off the South Coast of Australia and

Probably Tasmania." *Nature* 75.1953 (1907): 534.

Green, R. H. *Birds of Tasmania.* Launceston: Potoroo, 1989.

Green, R. H. and A. M. McGarvie. "The Birds of King Island with Reference to Other Western Bass Strait Islands with Annotated Lists of the Vertebrate Fauna." *Records Queen Victoria Museum* 40 (1971): 1-35.

Greenway, James C., Jr. *Extinct and Vanishing Birds of the World.* New York: Dover, 1967.

Günther, Albert E. *A Century of Zoology at the British Museum: Through the Lives of Two Keepers, 1815-1914.* London: Dawsons, 1975.

Harding, Alison. Assistant Librarian, Ornithology and Rothschild Libraries, the Natural History Museum at Tring. Meeting with author, 10 July 2008.

Hoage, R. J. and William A. Deiss, edd. *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century.* Baltimore: Johns Hopkins UP, 1996.

Holmes, George, ed. *The Oxford Illustrated History of Italy.* Oxford: Oxford UP, 1997.

Hooper, Richard H. *The King Island Story.* Ed. Mark Richmond. Sydney: Peko-Wallsend, 1973.

Horner, Frank B. *The French Reconnaissance: Baudin in Australia, 1801–1803.* Carlton, Vic.: Melbourne UP, 1987.

Howchin, Walter. "Some References to the Literature Concerning the Extinct Emus of Kangaroo Island and Elsewhere." *South Australian Ornithologist* 8.7 (1926): 244-53.

Hume, Julian Pender. *Dromaius ater, King Island emu*. (2003). Natural History Museum (UK) Picture Library, Image 35890. 9 Dec. 2008 <http://piclib.nhm.ac.uk/piclib/www/image.php?img=81650&frm=ser&search=hume,%20julian%20pender>.

Hunt, Susan. "Paris Le Havre Sydney." *Terre Napoléon: Australia through French Eyes 1800–1804.* Ed. Susan Hunt and Paul Carter. Sydney: Historic Houses Trust of New South Wales, 1999. 7-12.

Hunt, Susan and Paul Carter, eds. *Terre Napoléon: Australia through French Eyes 1800–1804.* Sydney: Historic Houses Trust of New South Wales, 1999.

Iredale, Tom. "Bullock's Museum." *The Australian Zoologist.* 2.3 (1948): 233-37.

Jackson, Christine E. *Bird Illustrators: Some Artists in Early Lithography*. London: Witherby, 1975.

Jennings, James. *Ornithologia, Or, the Birds: A Poem, in Two Parts; with an Introduction to Their Natural History and Copious Notes*. London: Poole and Edwards, 1828.

Johnson, Clare. "François Péron and the Passion for Objects." *Alas, For the Pelicans! Flinders, Baudin and Beyond: Essays and Poems.* Ed. Anne Chittleborough, et al. Kent Town, SA: Wakefield, 2002. 31-44.

Johnson, Harmer and John Hewett, eds. *Bullock Museum: Sale Catalogue of the Bullock Museum 1819: A Facsimile Reprint with Manuscript Prices and Buyers' Names.* London: Harmer Johnson & John Hewett, 1979.

Jordanova, Ludmilla J. "Naturalizing the Family: Literature and the Bio-medical Sciences in the Late Eighteenth Century." *Languages of Nature: Critical Essays on Science and Literature.* Ed. Ludmilla J. Jordanova. New Brunswick, NJ: Rutgers UP, 1986. 86-116.

Jouanin, Christian. "Les Emeus de l'expédition Baudin." *L'Oiseau et la Revue française d'ornithologie* 29.3 (1959): 168-201.

---. "L'Impératrice Joséphine et les sciences naturelles." *L'Impératrice Joséphine et les sciences naturelles: Catalogue de l'exposition du Musée national des châteaux de Malmaison et Bois-Préau, 29 mai–6 octobre 1997.* Ed. Marie-Blanche d'Arneville, et al. Paris: Réunion des Musées nationaux, 1997. 20-72, 112-60.

---. "Live Animals of the Baudin Expedition." Trans. Steven Smith. *Tasmania's French Connections: Report on the Goddard Sapin-Jaloustre Scholarship 2002.* By Steven Smith. Hobart: S. J. Smith, 2003. 63-67.

---. "Nicolas Baudin Chargé de Réunir une Collection pour la Future Impératrice Joséphine." *Australian Journal of French Studies* 41.2 (2004): 43-54.

Jussieu, Antoine-Laurent de. "Notice sur l'expédition à Nouvelle-Hollande. Entreprise pour des recherches de Géographie et d'Histoire naturelle." *Annales du Muséum national d'Histoire naturelle* 5 (An XIII [1804]): 1-11.

Kemp, Martin. "Taking it on Trust: Form and Meaning in Naturalistic Representation." *Archives of Natural History* 17.2 (1990): 127-88.

Keulemans, Tony and C. Jan Coldewey. *Feathers to Brush: The Victorian Bird Artist John Gerrard Keulemans 1842–1912.* Epse: Privately published by the authors, 1982.

King, Philip G. "Governor King to Lord Hobart." 9 November 1802. *Historical Records of Australia. Series I: Governors' Despatches to and from England.* Vol. III. Sydney: Commonwealth of Australia, 1915. 635-42.

King Island Natural Resource Management Group. *Birds of King Island Checklist.* (nd). King Island Tourism. 2 May 2009 <www.kingisland.org.au/ClientFiles/KI%20Birds%20checklist.pdf>.

Knight, David. "Scientific Theory and Visual Language." *The Natural Sciences and the Arts: Aspects of Interaction from the Renaissance to the Twentieth Century.* Ed. Allan Ellenius. Stockholm: Almqvist and Wiksell International, 1985. 106-24.

---. *Zoological Illustration: An Essay Towards a History of Printed Zoological Pictures.* Folkstone: Archon, 1977.

Lack, H. Walter. *Jardin de la Malmaison: Empress Josephine's Garden.* Munich: Prestel, 2004.

Laseron, Charles F. *South with Mawson: Reminiscences of the Australasian Antarctic Expedition, 1911–1914.* Sydney: Australasian Publishing/George Harrap, 1947.

Latham, John. *General History of Birds.* Vol. 8. Winchester: Jacob and Johnson for the author, 1823.

Lau, Deborah. Analytical and Conservation Scientist, CSIRO Manufacturing and Materials Technology. "RE: AICCM, The Australian Institute for the Conservation of Cultural Material Inc.: Question re. 19th century taxidermy." Email to author. 3 Dec. 2008.

Lee, Ida. *The Logbooks of the 'Lady Nelson' with the Journal of Her First Commander Lieutenant James Grant, R. N.* London: Grafton, 1915.

Legge, W. V. "The Emus of Tasmania and King Island." *Emu* 6.3 (1907): 116-19.

Lesueur, Charles-Alexandre and Nicolas-Martin Petit. *Voyage de découvertes aux Terres Australes, exécuté par ordre de Sa Majesté l'Empereur et Roi, sur les corvettes le* Géographe, *le* Naturaliste, *et la goëlette le* Casuarina, *pendant les années 1800, 1801, 1802, 1803 et 1804. Atlas Historique.* Paris: Imprimerie impériale, 1807.

Lichtenberg, Georg Christoph. *The Waste Books*. Trans. R. J. Hollingdale. New York: New York Review Books, 1990.

Linnean Society. *Catalogue of a Portion of the Natural History Collections of the Linnean Society of London ... which will be Sold at Auction ... on Tuesday, the 10th Day of November, 1863* .... London: Linnean Society, 1863.

MacKenzie, John M. *The Empire of Nature: Hunting, Conservation and British Imperialism*. Manchester: Manchester UP, 1988.

McKay, Prue. Conservator, Library Section, Australian Institute of Aboriginal and Torres Strait Islander Studies. "RE: AICCM, The Australian Institute for the Conservation of Cultural Material Inc.: Question re. 19th/20th century lithographs." Email to author. 4 Dec. 2008.

Martin, Robert Montgomery. *The British Colonies: Their History, Extent, Condition, and Resources.* Vol. I. Book I. London: London Printing and Publishing, 1855.

Mathews, Gregory M. *A List of the Birds of Australia.* London: Witherby, 1913.

---. "A Reference List to the Birds of Australia." *Novitates Zoologicae* 18 (1912): 175-76.

---. *The Birds of Australia.* Vol. I. London: Witherby, 1910.

Milius, Pierre-Bernard. *Recit du voyage aux Terres Australes*. Transcr. Jacqueline Bonnemains and Pascale Hauguel. Le Havre: Sociéte havraise d'études diverses, Muséum d'Histoire naturelle du Havre, 1987.

Milne-Edwards, Alphonse and Emile Oustalet. "Note sur l'Émeu noir *(Dromaeus ater V.)* de l'île Decrès (Australie)." *Bulletin du Muséum d'Histoire naturelle* 5 (1899): 206-14.

---. "Notice sur quelques espèces d'Oiseaux actuallement eteintes qui se trouvent représentées dans les collections du Muséum d'historie naturelle." *Volume commémoratif du Centenaire de la fondation du Muséum d'histoire naturelle.* Paris: Imprimerie nationale, 1893.

"Miscellaneous Occurrences." *Sydney Gazette and NSW Advertiser* 11 Sept. 1803: 3.

Morcombe, Michael. *Field Guide to Australian Birds.* Archerfield, Qld.: Steve Parish, 2000.

Morgan, Alexander Matheson and John Sutton. "A Critical Description of Some Recently Discovered Bones of the Extinct Kangaroo Island Emu (*Dromaius diemenianus*)." *Emu* 28.1 (1928): 1-19.

Mullens, William H. "Some Museums of Old London, II. William Bullock's London Museum." *Museums Journal* 17 (1917-1918): 51-56, 132-37, 180-87.

Museo Zoologico e di Storia Naturale della Specola. Postcard of *"Scheletro di emù nano* (Dromaius ater) *dell'isola King, Australia."* Florence: Museum of Natural History/University of Florence, c. 2003.

Newton, Alfred. "Specimens of 'Dromæus ater'." *Nature* 62.1598 (1900): 151.

Norman, Janette. Senior Curator, Molecular Biology, Museum Victoria. "RE: King Island emu specimens." Email to the author. 5 Aug. 2008.

O'Brien, R. M. "Family CASUARIIDAE Cassowaries." *Handbook of Australian, New Zealand and Antarctic Birds. Vol. I: Ratites to Ducks.* Co-ord. Stephen Marchant and Peter Jeffrey Higgins. Melbourne: Oxford UP, 1990. 60-67.

---. "Family DROMAIIDAE Emus." *Handbook of Australian, New Zealand and Antarctic Birds. Vol. I: Ratites to Ducks.* Co-ord. Stephen Marchant and Peter Jeffrey Higgins. Melbourne: Oxford UP, 1990. 47-59.

Olsen, Penny. *Feather and Brush: Three Centuries of Australian Bird Art.* Collingwood, Vic.: CSIRO, 2001.

Ord, George. "A Memoir of Charles Alexandre Lesueur." *The American Journal of Science and Arts* Ser. 2 VIII. 23 (1849): 189-216.

Osborne, Michael A. "Applied Natural History and Utilitarian Ideals: 'Jacobin Science' at the Museum d'Histoire Naturelle, 1789–1870." *Re-Creating Authority in Revolutionary France.* Ed. Bryant T. Ragan and Elizabeth A. Williams. New Brunswick, NJ: Rutgers UP, 1992. 125-43.

Oustalet, Emile. "Émeu." *Dictionnaire encyclopédique des sciences médicales.* Première série, A-E. Tome 34, EMB-ÉPI. Paris: Masson/Asselin et Houzeau, 1887. 36-37.

Outram, Dorinda. "New Spaces in Natural History." *Cultures of Natural History.* Ed. Nicholas Jardine, James A. Secord and Emma C. Spary. Cambridge: Cambridge UP, 1996. 249-65.

---. *Georges Cuvier: Vocation, Science and Authority in Post-Revolutionary France.* Manchester: Manchester UP, 1984.

Oxley, John. "Remarks on Settlement of Port Dalrymple: Islands Adjacent to Port Dalrymple, Bass's Straits." 1810. *Historical Records of Australia. Series III: Despatches and Papers Relating to the Settlement of the States.* Vol. I. Sydney: Commonwealth of Australia, 1921. 758-777.

Parker, Shane A. "The Extinct Kangaroo Island Emu, a Hitherto Unrecognised Species." *Bulletin of the British Ornithologists' Club* 104.1 (1984): 19-22.

Pearce, Susan M. *On Collecting: An Investigation into Collecting in the European Tradition.* London: Routledge, 1995.

Péron, François. *Diarium zoographicum—N° XV—Ans XI et XII—Observationes generales de collectionibus factis in Zoologia ex profectura nostra de Portu Jackson (27 Brum an XI) adusque Promontorium Bonae Spei inclusive (30 Pluviôse an XII)*. Collection Lesueur, Muséum d'Histoire naturelle du Havre, (Dossier 21: Observations et travaux, échantillons rapportés par l'expédition), No. 21001.

---. "Liste des animaux vivants qui se trouvaient à bord du *Géographe* Pluviôse an XIII." Collection Lesueur, Muséum d'Histoire naturelle du Havre, (Dossier 21: Observations et travaux, échantillons rapportés par l'expédition), No. 21012.

---. *Voyage of Discovery to the Southern Lands: Continued by Louis de Freycinet.* 2nd ed. 1824. Vol. I: Books I to III comprising Chapters I to XXI. Trans. Christine Cornell. Adelaide: Friends of the State Library of South Australia, 2006.

---. *Voyage of Discovery to the Southern Lands: Continued by Louis de Freycinet.* 2nd ed. 1824. Vol. II: Book IV comprising Chapters XXII to XXXIV. Trans. Christine Cornell. Adelaide: Friends of the State Library of South Australia, 2003.

Péron, François, et al. *Voyage de découvertes aux Terres Australes, exécuté par ordre de Sa Majesté l'Empereur et Roi, sur les corvettes le* Géographe, *le* Naturaliste, *et la goëlette le* Casuarina, *pendant les années 1800, 1801, 1802, 1803 et 1804. Atlas Historique* (2^{e} ed). Vol. II. Paris: Arthus Bertrand, 1824.

Pessoa, Fernando. *Poems of Fernando Pessoa.* Trans. Edwin Honig and Susan M. Brown 1986. Trans. and ed. Edwin Honig and Susan M. Brown. San Francisco: City Lights Books, 1998.

Poliquin, Rachel. "Ravishing Beasts." Interview with Eric Frank. *Antennae* 6 (2008): 7-12.

Preston, Pat. Curator, Natural History Collections, University of Edinburgh. "RE: Enquiry about emu in bird collection." Email to the author. 10 May 2008.

Purcell, Rosamond Wolff and Stephen Jay Gould. *Finders, Keepers: Eight Collectors.* London: Hutchinson Radius, 1992.

Rasmussen, Pamela C. and Robert P. Prŷs-Jones. "History vs Mystery: The Reliability of Museum Specimen Data." *Why Museums Matter: Avian Archives in an Age of Extinction.* Ed. Nigel J. Collar, Clemency T. Fisher and Chris J. Feare. *Bulletin of the British Ornithologists' Club* Vol. 123(A) (2003): 66-94.

Ritvo, Harriet. "Animals in Nineteenth-Century Britain: Complicated Attitudes and Competing Categories." *Animals and Human Society: Changing Perspectives.* Ed. Aubrey Manning and James Serpell. London: Routledge, 1994. 106-26.

---. *The Animal Estate: The English and Other Creatures in the Victorian Age.* Cambridge, MA: Harvard UP, 1987.

---. *The Platypus and the Mermaid, and Other Figments of the Classifying Imagination.* Cambridge, MA: Harvard UP, 1997.

---. "Zoological Nomenclature and the Empire of Victorian Science." *Victorian Science in Context.* Ed. Bernard Lightman. Chicago: U of Chicago P, 1997. 334-353.

Rothfels, Nigel. "Immersed with Animals." *Representing Animals.* Ed. Nigel Rothfels. Bloomington, IN: Indiana UP, 2002. 199-223.

---. *Savages and Beasts: The Birth of the Modern Zoo.* Baltimore: Johns Hopkins UP, 2002.

Rothschild, Lionel Walter. *Extinct Birds.* London: Hutchinson, 1907.

---. "A Monograph of the Genus *Casuarius*." *Transactions of the Zoological Society of London.* Vol. 15. London: Zoological Society of London, 1900. 109-290.

Royal Australasian Ornithologists Union. "Recommended English Names for Australian Birds." *Emu* 77 Supplement (1978): 245-307.

Salaman, Kristin R. "The Bird Type-Specimens in the British Museum of Natural History and the History of Ornithology in 19th-Century England." Diss. U of Washington, 1997.

Salvadori, Tommaso. *Notizie Storiche Intorno alla Collezione Ornitologica del Museo di Torino.* Torino: Museo di Torino, 1914.

---. *Catalogue of the Birds in the British Museum*: *Chenomorphœ (Palamedeœ, Phœnicopteri, Anseres), Crypturi, and Ratitœ.* Vol. 27. London: Trustees of the British Museum (Natural History), 1895.

Scott, Ernest. *Terre Napoléon: A History of French Explorations and Projects in Australia.* London: Methuen, 1911.

Scott, John. *A Visit to Paris in 1814; Being a Review of the Moral, Political, Intellectual, and Social Condition of the French Capital.* 4th ed. London: Longman, Hurst, Rees, Orme, and Brown, 1816.

Sermonti, Guiseppe. "How Evolution Came to Italy—The Turin Connection." Trans. Brendan White. *Rivista del Biologica* 94.1 (2001): 5-11.

Serventy, Dominic L. "Taxonomic Trends in Australian Ornithology—with Special Reference to the Work of Gregory Mathews." *Emu* 49.4 (1950): 257-67.

Shapiro, Kenneth J. "Human-Animal Studies: Growing the Field, Applying the Field." Policy Paper. Ann Arbor MI: Animals and Society Institute, 2008.

Sharpe, Jim. "History from Below." *New Perspectives on Historical Writing*. Ed. Peter Burke. Oxford: Polity/Basil Blackwell, 1991. 24-41.

Sharpe, Robert Bowdler. "Birds." *The History of the Collections Contained in the Natural History Departments of the British Museum*. Vol. II. Ed. E. Ray Lankester. London: Trustees of the British Museum, 1906. 79-515.

"Ship News." *Sydney Gazette and NSW Advertiser* 28 Aug. 1803: 2.

"Ship News." *Sydney Gazette and NSW Advertiser* 15 May 1803: 4.

Skipwith, Peyton. *The Great Bird Illustrators and Their Art 1730–1930.* New York: A & W, 1979.

Spary, Emma C. *Utopia's Garden: French Natural History from Old Regime to Revolution.* Chicago: U of Chicago P, 2000.

Spencer, Baldwin. "The King Island Emu." *The Victorian Naturalist* 23.7 (1906): 139-40.

Steinheimer, Frank D. "Martin Hinrich Carl Lichtenstein and his Ornithological Purchases at the Auction of William Bullock's Museum in 1819." *Archives of Natural History* 35.1 (2008): 88-99.

---. "The Whereabouts of Pre-Nineteenth Century Bird Specimens." *Zoologische Mededelingen Leiden* 79 (2005): 45-67.

Storrie, Calum. *The Delirious Museum: Journey from the Louvre to Las Vegas.* London: I. B. Tauris, 2006.

Stuart, Andrea. *The Rose of Martinique: A Life of Napoleon's Josephine.* London: Macmillan, 2003.

Sweet, Jesse M. "William Bullock's Collection and the University of Edinburgh, 1819." *Annals of Science* 26.1 (1970): 23-32.

"Sydney." *Sydney Gazette and NSW Advertiser* 26 June 1803: 2-3.

Tasmanian Government. Dept. of Justice. Resource Planning and Development Commission. *State of the Environment Tasmania 2003: Biodiversity: Threatening Processes: Native Fauna Harvesting* 3 Sept. 2008. <http://soer.justice.tas.gov.au/2003/bio/4/issue/59/index.php>.

Tasmanian Museum and Art Gallery. *Collections.* Hobart: Tasmanian Museum and Art Gallery, 2007.

Thomas, Keith. *Man and the Natural World: Changing Attitudes in England 1500-1800.* London: Penguin, 1984.

Thomas, Nicholas. "Licensed Curiosity: Cook's Pacific Voyages." *The Cultures of Collecting.* Ed. Elsner, John and Roger Cardinal. Melbourne: Melbourne UP, 1994. 116-36.

Thomas, Sarah. *The Encounter, 1802: Art of the Flinders and Baudin Voyages.* Adelaide: Art Gallery of South Australia, 2002

Tiffin, Helen. "Unjust Relations: Animals, the Species Boundary and Postcolonialism." *Compr(om)ising Postcolonialisms.* Ed. Greg Ratcliffe and Gerry Turcotte. Sydney: Dangaroo, 2001. 30-44.

Tiley, Robert. *Australian Navigators: Picking up Shells and Catching Butterflies in an Age of Revolution.* East Roseville, NSW: Kangaroo Press, 2002.

[Trustee of the British Museum]. "Art. V. 2. Synopsis of the Contents of the British Museum. 1820." *Edinburgh Review* VXXVI (May 1823): 379-98.

Turvey, Samuel T. and Anthony S. Cheke. "Dead as a Dodo: The Fortuitous Rise to Fame of an Extinction Icon." *Historical Biology* 20.2 (2008): 149-63.

Università di Torino. *Emu' Nero* (Dromaius ater). n.d. Museo di Zoologiae Anatomia Comparata: La Visita Virtuale: La Parte Visibile del Museo. 15 Jan. 2009 <http://www.museounito.it/zoologia/visita/parte_visibile_1.html>.

Vallance, Thomas G., David T. Moore and Eric W. Groves, comp. *Nature's Investigator: The Diary of Robert Brown in Australia, 1801–1805*. Canberra: Commonwealth of Australia/Australian Biological Resources Study, 2001.

Vallotton, Laurent. Adjoint scientifique, Département de Mammalogie et d'Ornithologie, Muséum d'Histoire naturelle de Genève. "RE: d'Émeu d'Ile de Kangourou." Email to the author. 24 July 2009.

Vieillot, Louis Jean Pierre. *Galérie des Oiseaux.* Paris: Constant-Chantpie, 1825. Plate 226.

---. *Nouveau dictionnaire d'Histoire naturelle appliquée aux arts, à l'Agriculture, à l'Écomomie rurale et domestique, à la Médecine, etc. Par une Société de naturalistes et d'agriculteurs.* Nouvelle éd. Tome X (21 June). Paris: Déterville, 1817. 212.

de Vos, Ricardo. "Extinction Stories: Performing Absence(s)." *Knowing Animals*. Ed. Laurence Simmons and Philip Armstrong. Leiden: Brill, 2007. 183-195.

Wasserman, Renata R. Mautner. "Re-Inventing the New World: Cooper and Alencar." *Comparative Literature* 36.2 (1984): 130-45.

Whitehead, P. J. P. "Zoological Specimens from Captain Cook's Voyages." *Society for the Bibliography of Natural History* 5.3 (1969): 161-201.

Woodcock, Martin W. "Some Reflections on the Use of Skins in Bird Illustration." *Why Museums Matter: Avian Archives in an Age of Extinction.* Ed. Nigel J. Collar, Clemency T. Fisher and Chris J. Feare. *Bulletin of the British Ornithologists' Club* Vol. 123(A) (2003): 249-52.