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British Anatomists, Phrenologists and the Construction of the Aboriginal Race, *c.*1790–1830

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Abstract

This article considers how Aboriginal Australian bodily remains were procured and understood in British anatomical and phrenological circles from the beginning of Australian colonization in 1788 to the early 1830s. These years saw an important shift in European thinking about race. The idea that racial differences were the result of humanity's diversification from one ancestral type through environmental modification came to be challenged by "transmutationist" theories that conceptualized racial characteristics as markers of biological peculiarities between different human-like beings, quite possibly of primordial origin. The article shows how comparative anatomical analysis of Aboriginal Australian remains – often procured in violent circumstances – served to reinforce received environmentalist explanations of the nature and origins of human variation. However, the article also shows how in what they made of Aboriginal remains, subscribers to the concept of environmental degradation could be as fatalistic in their prognosis of the natural capacity of Aboriginal Australians to be progressively brought to embrace civilization as the transmutationist critics they began to encounter in earnest from the mid-1830s. In the hands of metropolitan British anatomists and phrenologists, Aboriginal bones were used so as to generate knowledge that had a pernicious impact on Australia's Indigenous inhabitants.

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The podcast is a discussion between Professor Stuart Ward, *History Compass'* Australasian/Pacific editor, and Professor Paul Turnbull, a published *History Compass* author and editor. They examine Professor Turnbull's published essay, entitled 'British Anatomists, Phrenologists and the Construction of the Aboriginal Race, *c.*1790–1830', and discuss the cognitive evolution of racial science in Europe, the theft of Indigenous cultural property from the colonial Pacific, and the repatriation of skeletal remains in Australian and European museums. Click here to launch the podcast: http://www.gabcast.com/casts/1696/episodes/1176813759.mp3 (mp3 file, 13.8MB, 28 minutes 44 seconds).

Over the past two decades, a growing number of historians, anthropologists, and literary scholars have sought to explain how the concept of race acquired such existential concreteness in Europe scientific and wider intellectual circles from the late eighteenth century to the Darwinian era. A number of recent studies have shown how inquiries into the nature and causes of human variation became a significant and influential aspect of comparative anatomy teaching within European medical curricula from the 1780s.

Much of this scholarship has been exemplary in elucidating how inquiries by leading anatomists into human variation not only had little cognitive autonomy from wider cultural concerns, but also often reflected personal beliefs and communal assumptions prevailing amongst investigators located within specific institutional and social contexts. Even so, the consensus has been that between 1780 and the 1830s an important intellectual shift occurred. The idea that human natural history was essentially the story of humanity's diversification from one ancestral type into a number of distinct races through environmental modification of the bodily economy came to be challenged, and displaced in numerous instances, by new explanations of human origins and difference. These new explanations, originating in Parisian biomedical circles, conceptualized life and reproduction as processes characterized by progressive transmutation.[1] Conceptions of human difference were thus transformed. Enlightenment humanist ideas of a common humanity comprised of unstable varieties were recast, giving existential concreteness to the idea that races were natural, tangible signs of the emergence within differing kinds of human-like beings of characteristic corporeal and mental differences, quite possibly existing from the earliest stages of their organic development.

Today late eighteenth-century taxonomies of human difference appear disturbingly chauvinist, ethnocentric, and noteworthy for their racially contemptuous judgments of non-European peoples. But what is also apparent is that in their day they were consciously understood as artificial constructs.[2] Their value was seen to lay in making sense of an accelerating flow of information from various spheres of European colonial ambition attesting to differences and similarities between various "nations" or varieties of humanity. Leading Enlightenment observers of man regarded all human beings as possessing an innate if enervated capacity for social and moral progress. By way of contrast, nineteenth-century discourses of race naturalized taxonomic differences, reified notions of gradation and hierarchy between racial types and generally construed so-called savage races as naturally incapable of embracing few or any elements of civilization.

In examining in this article the hitherto neglected history of how Aboriginal Australian bodily remains were interpreted in British anatomical and phrenological circles from the beginning of Australian colonization in 1788 to the early 1830s, my concern is not to dissent from, or significantly query, how the conceptual evolution of inquiries into human variation has generally been understood. Much of the evidence to be considered shows that comparative anatomical analysis of Aboriginal remains overwhelmingly

reinforced well-entrenched environmentalist explanations of human variation. However, while this was so, we would do well to see that the meanings that Aboriginal remains acquired in anatomical discourse during the first half-century or so of European colonial ambition suggest that subscribers to the concept of environmental degradation could be as fatalistic in their prognosis of the natural capacity of Aboriginal Australians to be progressively brought to embrace civilization as the transmutationist critics they began to encounter in earnest from the mid-1830s.

Thanks, initially, to the agency of Joseph Banks, the most influential British naturalist between 1770 and the early 1820s, a small but steady flow of Aboriginal heads, crania, and skeletons were acquired by metropolitan anatomists. More often than not, these remains came into scientific hands in the aftermath of violent clashes between Aboriginal people and colonial personnel. The production of anatomical knowledge saw what were taken to be typical peculiarities of bodily form and structure correlated either with these accounts, or other contemporary reportage of Aboriginal life-ways and culture, in ways that gave epistemological weight to colonialist perceptions of Aboriginal people as reduced to an especially degraded level of savagery. So much so that the value of Aboriginal remains in anatomical eyes was less what they appeared to disclose about humanity's past than what they suggested in respect of the destiny of native peoples within Britain's new Australian sphere of colonial ambition.

Perceptions of Aboriginal organic incapacity for civilization gained additional weight during the 1820s due to phrenology – the radical science of mind given credence by many middle-class Britons. In seeking to demonstrate that the relative strengths of intellectual qualities and emotions could be gauged by analysis of skull shape, phrenologists similarly viewed Aboriginal bodily remains as illustrative of organic degradation, though were arguably more skeptical as to whether the social and religious inheritance of Britons transplanted to New South Wales could ameliorate the effects of Aboriginal people's exposure over successive generations to what were deemed to be the unfavorable climatic and dietary conditions prevailing in Australia.

In short, by the early 1830s the environmentalist reasoning of anatomists and phrenologists differed little in its implications for indigenous Australians from the innate physicalism championed by British exponents of transcendental morphology, such as Robert Knox, in that the bodily form and structures of native Australians were likewise seen as symptomatic of biological inferiority.[3] Race had become the dominant cognitive foundation for envisaging and managing the destiny of Aboriginal Australians a generation or so before Darwin.[4]

Joseph Banks and the Procurement of Aboriginal Australian Remains

Contrary to popular belief, the history of scientific trafficking in the bodily remains of indigenous Pacific peoples predates the Darwinian era by almost

a century. Indeed, like numerous other strands in the post-contact history of Oceania it can be traced back to Cook's momentous voyages of discovery. As is well known, Cook carried a party of "scientific gentlemen" financed and led by Joseph Banks on his first voyage of 1768–71 aboard the *Endeavour*. Successive biographers of Banks have discussed his scientific ambitions, drawing attention to his classifying the wealth of new plant and animal species encountered on the voyage according to the taxonomic principles of the Swedish physician and naturalist Carl von Linné (1707–78), or Linnaeus, as he was admiringly known in European scientific circles. Banks followed "our Master Linnaeus" – as he described von Linné to fellow naturalist Thomas Pennant in 1767[5] – to the extent of also documenting what were generally assumed to be typical peculiarities of bodily form, custom, and clothing amongst the various non-European peoples encountered during the voyage, much as Linnaeus had prescribed in the wake of his own Scandinavian and Baltic travels.

Banks's ethnological observations in his journals go beyond recording typicalities of physical appearance and behavior. They suggest a close acquaintance with and concern to strengthen the factual basis of contemporary endeavors in British intellectual circles to delineate empirically the causes of societal development. Particularly influential in this regard during the second half of the eighteenth-century were the writings of Scots historians and moral philosophers, notably David Hume (1711–76), William Robertson (1721–93), Adam Smith (1723–90), and Adam Ferguson (1723–1815), whose influential *Essay on the History of Civil Society* was published to widespread acclaim in 1767, the year before Cook and Banks sailed for the Pacific. Critical of conjectural accounts based in *a priori* or in other ways speculative reasoning as to how humans had first formed social institutions, these authorities looked to surviving ancient historical texts and what, since the early seventeenth century, had become a wealth of testimony in voyaging and exploration journals, arguing that the origins of human society were incapable of being reliably determined. The task of the philosophic observer of humanity, they maintained, was rather to appraise surviving historical evidence and testimony deriving from exploration for what might be disclosed concerning general principles determining the course of societal evolution.

By the 1760s it was widely accepted in British intellectual circles that all "nations" possessed the capacity to develop similar, increasingly sophisticated and beneficial forms of social organization, provided they were able to exploit natural resources and other environmental advantages. The natural history of humanity was envisaged as the story of the dispersal of tribes with a common ancestry whose experiences were to be found partially recorded in Scripture and other equally ancient historical sources. Social and environmental factors had led to the descendants of these peoples migrating to find new grazing lands. Some eventually came to adopt agriculture, while the fate of others was to inhabit country so inhospitable that they were

forced to abandon pastoralism for hunting and gathering. The savage "life of the chase" was presumed to have left these peoples neither time nor resources to preserve other than the barest rudiments of religious sensibilities or civilization.[6] They became peoples without history until their encounter with European voyagers and travelers.

In the course of the cross-cultural transactions occurring during the *Endeavour* voyage, Banks understandably became intrigued as to the origins and histories of the peoples encountered, working through, for example, the contradictory implications of Tahitian navigational techniques, prevailing winds and apparent similarities of language between the peoples of island Southeast Asia and the Society Islands. However, his skepticism about the worth of hypothetically reconstructing the deep past of peoples such as the Society Islanders in the absence of reliable historical evidence came to echo thinkers such as Adam Ferguson, who while conceding that ancestral traditions amongst nations living as shepherds or simple agriculturalists might contain "some resemblance of truth," argued that traditions would "vary with the imagination of those by whom they are transmitted, and in every generation receive a different form." The value of tradition was thus what it might provide by way of insight into "national character," particularly when it had become the subject of popular poetry.[7] Banks similarly preferred the experiential certainties to be established by taxonomic investigation of relations and continuities between various types of organisms, but on various occasions his curiosity about how Tahitians understood themselves and the world they inhabited led him to immerse himself in Tahitian cultural practices and ritual.[8]

While they agreed on humanity's common ancestry and capacity for societal development, Ferguson and other British intellectuals readily conceded that climate and associated environmental factors had over time resulted in peoples in different parts of the earth coming to exhibit a marked "gradation of temperament and spirit." Yet, they doubted whether the organic basis of humanity exhibiting diversity in "national character" would ever be understood. As Ferguson wrote:

> That the temper of the heart, and the intellectual operations of the mind, are, in some measure, dependent on the state of animal organs, is well known from experience. Men differ from themselves in sickness and in health; under a change of diet, of air, and of exercise: but we are, even in these familiar instances, at a loss to connect the cause with its supposed effect: and though climate, by including a variety of such causes, may, by some regular influence, affect the characters of men, we can never hope to explain the manner of those influences till we have understood what probably we shall never understand, the structure of those finer organs with which the operations of the soul are connected.[9]

Various entries in the journals Banks kept during the course of the *Endeavour* voyage attest to his curiosity about how the play of environmental factors might have caused the differences in physical form and behavior he observed between the peoples of Tierra del Fuego, Polynesia, and the east coast of

Australia. Moreover, after his return to England in mid-1771, Banks developed what became a life-long interest in human anatomy and physiology. This was due, at least in part, to his appreciating that the protection of Britain's expanding colonies and maritime trade in an age of growing international rivalry required heavy investment in naval power, which in turn necessitated ensuring the fitness of seamen. As sailing with Cook underscored, much of what was then scientifically established about the effects of climate and diet on human bodily structures derived from the experiences and observations of naval surgeons.[10] Nor was it unusual amongst men of his social standing and intellectual interests to be generally interested in the work of leading anatomists and surgeons. During the course of the eighteenth century demand for medical services had markedly increased in Britain's expanding urban environment. The first half of the century had seen the reform of hospices, many of which had been founded before the Reformation, and the creation of new hospitals in London and leading provincial centers. Within this reformed medical economy the control of medical education traditionally enjoyed by physicians in Britain's universities and long established guilds, such as the Company of Barber-Surgeons, had passed to leading surgeons holding hospital appointments, and a growing number of independent teachers of anatomy and surgery. Through the second half of the eighteenth century these men and their pupils sought to transform the practice of surgery into a "science and art" worthy of the esteem enjoyed by more established scientific circles such as the Royal Society.[11] Practical knowledge of how to alleviate common injuries and diseases remained the core of surgical practice, but leading practitioners saw themselves as natural philosophers whose monopoly over the body was a means of generating new insights into the laws underlying the growth and reproduction of organic life.

Banks was sympathetic to these philosophical aspirations, but proved especially willing to exploit the authority and connections he enjoyed on the strength of his voyaging with Cook within the Royal Society and other European scientific circles to aid anatomists concerned to disclose the physical basis of diversity amongst the peoples of the earth. Among the beneficiaries of his patronage were three of the most important figures in the cognitive evolution of European racial thought: Pieter Camper (1722–89), Johann Friedrich Blumenbach (1752–1840), and John Hunter (1728–93).

As is well known, the Dutch anatomist Pieter Camper's contribution to eighteenth-century thinking about human difference was the development of an ingenious system of anatomical representation based on the insight that geometrical regularities were discernable in the structure of all organic forms, and especially the heads and faces of animals and men.[12] When Camper visited England in 1785 Banks presided over his induction as a Fellow of the Royal Society, drawing the anatomist's representational system to the attention of leading fellows of the institution. Moreover, Banks also helped Camper gain access to "exotic crania" in several British anatomical collections.[13]

By the late 1780s, Banks was also actively supporting the research of two other influential figures in the conceptual evolution of comparative human anatomy: the Göttingen anatomist Johan Friedrich Blumenbach, and John Hunter, the London based Scottish surgeon and anatomy teacher. We cannot tell when Banks became acquainted with Blumenbach's writings on the causes of variation in humanity, but by 1789 he was in correspondence with the anatomist, lamenting that the high value "South Seas" crania had acquired through the work of Camper and Hunter made it difficult for him to procure them except by using his influence to have new specimens secured in Tahiti and New Holland.[14]

For two decades after publishing his initial thoughts on the causes of human variation, in his 1775 thesis *De generis varietate humani nativa*, Blumenbach increasingly came to explain characteristic morphological differences between geographically distinct human populations as owing to the hereditary transmission of changes in bodily structures caused by the modification within the body of a life-force, so subtle in its operation as possibly to remain ever beyond empirical detection. This subtle force, Blumenbach reasoned, was nonetheless susceptible to change in how it governed processes of growth and reproduction through agonistic interplay with environmental phenomena in the region of the earth where the people in question were typically to be found. Consequently, while anatomical investigation overwhelmingly suggested that humanity was descended from one ancestral type – that Blumenbach believed was created by a single divinely willed act of creation – migration had over time led climate, nutrition, disease and also cultural practices to affect "bodily constitution, stature and colour" to the extent that humanity could be classified as comprised of five distinct varieties.

In the course of his inquiries into the nature and origins of human variation, Blumenbach came to believe that head and facial bones were not only especially susceptible to environmental modification, but also exhibited uniquely typical forms in specific human populations. They seemed stable indicators that could be used as the foundation on which comparative documentation of "national" differences in human physical and intellectual make-up could be built.

Banks's procurement of Indigenous Australian crania for Blumenbach was particularly significant in the evolution of the anatomist's craniometrically based thinking about the causes of human diversification. Examining one Australian skull he received courtesy of Banks in 1793 was greatly to strengthen Blumenbach's belief in bone being a more plastic substance than generally appreciated in contemporary anatomical circles. Indeed, he took it to provide a particularly striking example of how "national custom" – perforation of the nasal septum in this case – could radically alter the typical facial appearance of a people.[15]

By the mid-1790s, Blumenbach had won numerous converts in both anatomical and wider intellectual circles to the idea that the nature and

extent human diversity could be analyzed by comparative examination of skull shape. As Thomas Cogan (1736–1818), a surgeon and author of several popular works exploring the physiological basis of human emotions, observed in 1794, the determination of national differences in human crania,

> may justly be considered as a new and interesting study in the natural history of man, which requires the joint labours of physiologists to surmount all the difficulties attending it. It is alone by forming a very large collection of the craniums of different people, that a discrimination [*sic*] can be made between what is general, from what is merely accidental; what is personal and to be ascribed to the diversities observable in individuals, from that which is national and characteristic of a particular people.[16]

Blumenbach impressed upon Banks the necessity of procuring sufficient skulls to determine what was "truly national & characteristical" in the varieties of man.[17] Banks took little convincing. Until the years just prior to his death in 1820, he encouraged those amongst the many naval and military officers, government officials, surveyors and naturalists in virtually every sphere of British colonial ambition who owed their position or prospects of advancement to him to secure racially typical crania.

The main beneficiary of Banks's encouraging the procurement of skulls was London's Royal College of Surgeons, established in 1800 as a result of the capital's leading hospital surgeons' desire to institutionalize the control they had gradually gained over the teaching of anatomy and surgery. One way in which the governing council of the College sought to command authority in contemporary eyes was by representing themselves as the intellectual heirs of John Hunter, whom they memorialized in annual lectures and by building upon his extensive anatomical collections as the founder of the modern "science and art" of surgery. Despite concerns voiced by some prominent figures within the College, a substantial proportion of the institution's revenue in its first decades was spent on housing and expanding Hunter's collections.

Hunter had also been a beneficiary of Banks's patronage. In 1792, Banks divided the zoological specimens collected during the *Endeavour* voyage between Hunter and the British Museum. He also enriched the anatomist's collection of human cranial material, with skulls including one taken from a burial place on Bruny Island, off the south east coast of Tasmania, most likely during Cook's second expedition of 1772–75. Among the Australian specimens that Banks subsequently secured for the Hunterian Museum through his extensive patronage network were the remains of two Aboriginal men who had died in violent circumstances during the early years of white settlement and exploration of New South Wales. One was the head of Pemulwye, a man of the Darug people, whose ancestral lands lie in what are now the western suburbs of the city of Sydney. Pemulwye's campaign of resistance was so effective that it led the colony's governor, Philip Gidley King (1758–1808), to issue instructions "for every person doing their utmost,

to bring Pemulwye in either dead or alive."[18] Within several months of King's outlawing the warrior he was presented with his head, Pemulwye having been ambushed and killed in circumstances suggesting that he had lost support beyond his immediate clan, and neighboring Aboriginal communities saw his death as the only means of stopping military parties indiscriminately killing whomever they encountered when searching for Pemulwye and his supporters.[19]

As a military man King was not without admiration for the "brave and independent character" of Pemulwye, but what was uppermost in his mind was strengthening his entitlement to Banks's continuing patronage.[20]

Banks also sought to enlist Captain Arthur Philip (1738–1814) the penal colony's first governor in procuring skulls for Johann Friedrich Blumenbach, but this had proved unsuccessful partly because Philip and his officers were reluctant to jeopardize the good relations they were under orders to establish with local indigenous clans, but also because of the mortuary practices Darug, Dharawal, and other peoples of the Sydney region practised. As William Bradley, a naval lieutenant under Philip's command observed,

> We have every reason to suppose that they burn the dead, from the number of graves we have open'd . . . & seen in those which were opened . . . ashes with many pieces of bone not quite consumed.[21]

Some of Philip's men moreover objected to anatomical collecting on religious grounds. Ralph Clark, for example, lieutenant of the settlement's marine's detachment, recorded in his journal having encountered a skeleton in the upper reaches of Sydney Harbor in February 1790. Returning with the skull, he had it sent to the settlement's hospital to determine whether it was that of a convict or Aboriginal person. "The Surgeons" he wrote, "wanted for me to give them the Skull but I would not – I told them that I should carry it back and collect the rest of the Bons [sic] and Bury them and the Head."[22]

The head of Pemulwye was dispatched to Banks aboard a returning supply ship, together with specimens of dye yielding wood from the Hunter River to the north of the penal settlement. Banks was delighted to receive the head, writing effusively to King in April 1803:

> The manifold packages you have had the goodness to forward to me have always, owing to your friendly care in addressing and invoicing them, come safe and in good condition to my hands. Among the last was the head of one of your subjects, which is said to have caused some comical consequences when opened at the Customs House, but when brought home was very acceptable to our anthropological collectors, and makes a figure in the museum of the late Mr Hunter.[23]

In recent years descendants of the Darug and Dharawal peoples have sought unsuccessfully to locate the head of Pemulwye for reburial in his ancestral country. How long it remained on display at the College of Surgeons is unknown. Nor do the archives of the College provide any clues as to its

fate beyond two entries in William Clift's diary for 1818 recording the painter James Ward (1769–1859) having sketched "two Human heads from New South Wales."[24] This suggests the possibility that the heads may have deteriorated and a visual record was commissioned lest it prove impossible to arrest their decay before the point that their value lay in being boiled down to skulls. William Clift was exceptionally skilled in preserving soft tissue structures, which at this time involved their partial dissection and immersion in spirits of wine. But it was an imprecise procedure requiring the spirit used to be sufficiently strong to halt putrefaction, but weak enough to prevent tissues greatly changing in shape and texture.[25]

Assuming that one of the two heads of Indigenous Australians sketched by Ward was indeed Pemulwye's, the question remains whether sources survive from which we can reconstruct the circumstances in which the other came into the College's possession. Here, the evidence is inconclusive, but nonetheless valuable for what it reveals about two further occasions on which early nineteenth British anatomists were the beneficiaries of violent encounters between indigenous people and Europeans in the early years of Australian colonization.

In September 1803 the British government moved to protect its claim to sovereignty over the island of Tasmania against possible French occupation by establishing a settlement on the upper estuary of the Derwent River. The site initially chosen at Risdon Cove proved inferior to the country some ten kilometers further south across the river to which the settlement – destined to become the city of Hobart – was gradually relocated through 1804.

Among the complement of officers assigned to the Derwent settlement was Jacob Mountgarret, who had joined the Royal Navy as a third rate surgeon in 1798 on being admitted to the Company of Surgeons of London, as the College of Surgeons was known before receiving its Royal Charter.[26] In May 1804, Mountgarret was to become involved in a violent incident at Risdon Cove that continues to be a source of debate and controversy.[27]

What actually happened at Risdon is unclear. What we do know is that in the aftermath of a violent encounter between the settlement's guard and local indigenous people, surgeon Mountgarret dissected the body of one Tasmanian man, and dispatched his remains and possibly bones from several other men and women killed at Risdon to Sydney, almost certainly for shipment to the College of Surgeons.[28]

The other way one of the two heads the College held by 1818 was acquired may also have been through the agency of Joseph Banks. In early 1801, Banks met with Matthew Flinders, a naval lieutenant who had returned to England having distinguished himself by exploring the southern coast of New South Wales, the Bass Strait, and the Tasmanian coast. Flinders sought to enlist Banks's influence with the leadership of the Admiralty to provide a vessel to survey the whole of the Australian coastline under his command.[29] Impressed by Flinders' ambition and cartographic skills, Banks approached

George Spencer, the First Lord of the Admiralty, who together with the Directors of the East India Company needed little persuading of the merits of the expedition due to increasing fear of French ambitions in respect of the southern coast of Australia.[30] Banks funded the scientific equipment and personnel required by the expedition, which arrived in southern Australian waters late in 1801.

On the strength of their previous voyaging, both Flinders and Banks knew that circumnavigation of the Australian continent would invariably involve unpredictable encounters with Indigenous coastal communities. So it was that Flinders' vessel, the *Investigator*, was not only equipped with a detachment of marines and suitable weaponry but also carried a large store of trade goods, including several hundred pocket knives, hatchets, beads, and mirrors.[31] Relations between the voyagers and the various peoples they met were generally peaceful, until an incident at Blue Mud Bay in Arnhem Land early in 1803. There, a meeting with a small group of Yithuwa Madarrpa men ended violently with one being shot trying to escape to a canoe after stabbing the master's mate. Back aboard ship, Flinders was told that the encounter had been peaceful until the master's mate had reached out to take one man's spear "which he supposed was offered" and the man had repeatedly stabbed the mate, probably fearing he was being disarmed. The seaman had then briefly fought with the Yithuwa Madarrpa men before a boat from the *Investigator* arriving caused them to flee to their canoes nearby. During their retreat one man had been hit in the chest by a musket ball and died shortly after launching his canoe. Flinders, however, suspected "that our people must have been the aggressors," but had no evidence to contradict the testimony of those involved in the incident.[32]

Angry yet resigned to what had occurred, Flinders agreed to a boat being launched early the following day to search for the body of the man, William Westall, the artist aboard the *Investigator*, wanting to sketch the corpse and Robert Brown, the expedition's naturalist and surgeon wanting to dissect it. The body was soon found lying at the water's edge, in an attitude suggesting the man had dragged himself from the sea before dying.[33] Turned over, the body was sketched by Westfall.[34] Brown then dissected it, returning to the ship with the head,[35] the internal cavities of which he carefully opened before suspending the head by chords in an airtight container and submerging it in spirits of wine.

No conclusive evidence survives that the head of this Yithuwa Madarrpa man became another of Banks's gifts to the Hunterian Museum. However, Brown had left England greatly indebted to Banks and was to become more so after his return.[36] Most likely he brought the head with him when he returned to London in October 1805 with twenty-five cases of animal and mineral specimens collected during the *Investigator*'s voyaging.[37] Even so, it is curious that neither the head nor skeletal material the expedition also procured from coastal burials places that the voyagers came across when surveying northern Australian waters are mentioned by Brown in the account

of northern plant and zoological specimens he provided Banks in a letter of March 1803 after the *Investigator* arriving back at Port Jackson.[38] Nor can we rule out the possibility that the head may have been amongst the specimens that accompanied Flinders when he left Port Jackson for England aboard the *Porpoise* in August 1803, only to be lost when that ship was wrecked off the Queensland coast several days later. Moreover, Brown or Banks may have presented the head to another leading British anatomist or medical institution – one possible candidate being Edinburgh University, where Brown had studied medicine between 1790 and 1793.[39]

Aboriginal Remains in Anatomy Teaching, c.1805–1830

By the time Robert Brown returned to London, the College of Surgeons was not alone in wanting to procure Aboriginal bodily remains. The College sought to preside over and regulate a growing market for medical education provided by extra-mural anatomy teachers, who offered their pupils courses of tuition aimed not only at equipping them with practical knowledge of human anatomy and the treatment of commonly encountered injuries, but encouraging to see themselves as natural philosophers privileged to explore the organic processes responsible for the diversity of earth's myriad life-forms. Many of these teachers, such as John Barclay (1758–1826), Edinburgh's most successful private anatomy teacher taught comparative human anatomy with the aid of a "museum, the great part . . . formed by his own design and industry, and at considerable expense."[40] Barclay was also typical in encouraging his former pupils to provide him with specimens of comparative human anatomy. As a result his lectures were enlivened by allowing students to handle specimens such as cast of a skull of a "chief of New South Wales" and the cranium of a man from the upper Brisbane River procured by a past pupil assigned as a surgeon to the Moreton Bay Penal Settlement soon after its establishment in 1824. The cranium had been fractured in the right frontal region by a pistol shot. Barclay shared his being told that the man suffered intense pain for a fortnight, but survived the injury experiencing severe headaches for the next three years. He lived a further seven years, during which time he served the garrison as a shepherd – proving "very intelligent for a native" – until allegedly being killed by another indigenous man in a camp brawl.[41]

Similarly, one of London's most successful anatomical teachers by the early 1820s was Joshua Brookes (1761–1833), who was estimated to have had between five and seven thousand pupils over forty years of teaching anatomy.[42] During his long career, Brookes built up collections of pathology and comparative anatomy that on their sale in the late 1820s were said to be second in size and diversity only to those of the Hunterian Museum. Enjoying a prominent place in the saloon of Brooke's Blenheim Street School was a collection of rare "Human crania of various nations," which by the late 1820s included three skulls from New South Wales and possibly

four from Tasmania. One of the three New South Wales skulls, which Brookes regarded as a particularly "fine and remarkable" specimen,[43] had allegedly come from a past pupil named Hurst. Brookes claimed that when traveling in the interior of New South Wales, two Aboriginal men had ambushed Hurst. In self-defense, the surgeon had shot one man dead, and, on his companion escaping into the bush, had taken out his surgical kit, "decapitated his victim, and subsequently presented the cranium to his professor."[44]

One of Brookes's students in the mid-1820s was Joseph Barnard Davis, who was to become nineteenth-century Britain's most energetic private cranial collector and a prominent figure in anti-Darwinian circles during the 1860s. Davis especially remembered the anatomist enlivening his demonstrating peculiarities in "national crania" with "little histories" of how they had been procured. What now seems significant about the history Brookes gave concerning the acquisition of his most prized Aboriginal crania was how it epitomized Australian colonization as a process of violent encounter with savages.

Brookes was not alone in using theatrically infusing anatomical knowledge with colonial testimony of Aboriginal savagery. One of the most detailed and illuminating examples of how colonial reportage was discursively blended into the production of anatomical knowledge appears in the published version of the lectures given in the mid-1820s by Alexander Monro, who held the University of Edinburgh's Chair of Anatomy and Surgery from 1808 to 1846.[45] Monro believed as Camper, Blumenbach, and Hunter did that organic structures were sustained and coordinated by a vital principal, a life force possibly destined to remain beyond empirical detection. While governing the bodily economy, this subtle force was nonetheless susceptible to change in how it regulated processes of growth and reproduction through the influence of external factors prevailing within the environment wherein the plant, animal, or man in question was typically to be found. Monro likewise agreed with Blumenbach that comparison of the shape and texture of bones – especially those comprising the skull – demonstrated with particular clarity that the interplay between the life force within an organism and environmental factors could result in modifications to bodily forms being transmitted to offspring, so that over time the typical morphology of a being could come to differ markedly from that of its ancestors.

In enlightening his students as to the causes of human variation, Monro was especially fond of using Australian crania and the articulated skeleton of a young Dharug man to illustrate the "osseous peculiarities" resulting from life over successive generations in the Australian environment.[46] Monro impressed upon his students that the skulls of the native peoples encountered in the region of the Port Jackson settlement were typically "thicker than in most Europeans" and, in contrast to the bones of the trunk and extremities, "composed of hard, compact, dense and heavy materials." The uneven surface of the skulls he attributed to the impact of "their clubs, or *waddeis*

[*sic*], with which they often fight each other."[47] Monro was also struck by various other unusual features, such as the large size of the frontal sinuses, nasal cavity, and the size of jaws and teeth. All in all, head form and the skeleton led him to conclude that the "New Hollanders" were probably not of "Ethiopian" origin, but were Malay people in whom the interaction of physiological processes and the rigors of life in a harsh environment had over time degenerated into a low state of savagery. Anatomical investigation thus revealed why eyewitness testimony from the Australian colonies should report that the British crown's new subjects "had neither houses nor clothing; were totally ignorant of agriculture, and did not practice in any one of the arts of civil life."[48] It appeared to explain Aboriginal resistance to integration within the emerging agrarian economy of New South Wales, raising doubts whether the process of degeneration that was assumed to have affected Aboriginal people had gone beyond the point of being arrested or reversed.

Australian corporeal and mental inferiority was fixed in the minds of Edinburgh medical students by Monro's theatrical correlation of morphology with deeply encultured interpretations of indigenous life-ways and culture. Amongst the several generations of students who witnessed his invoking the essential nature of Australia's indigenous inhabitants were many who were to visit or settle in the Australian colonies in the course of their careers. They left the university having had impressed upon them that initiatives such educating Aboriginal children along the lines employed in the Irish Charity School system had merely proven how degraded in body and mind the continent's native inhabitants had become.[49] "Though much pain has, for thirty years, been taken to instruct them," Monro lamented from the lectern, "not one of them has been induced to avail himself of his education; and, indeed, those who have had the advantage of education, generally flee to the woods, when they arrive at manhood."[50]

Phrenologists and Australian Crania

By the mid-1820s, British anatomy teachers found their efforts to acquire Aboriginal Australian crania rivaled and outstripped by devotees of the radical cerebral science of phrenology. Leading British phrenologists championed phrenology as a technique for individual improvement through self-appraisal of mental strengths and weaknesses, and as a program for the reform of social institutions. But it was fundamentally a science of race in that within the network of phrenological clubs and societies established in many British cities and provincial centers during the 1820s, cranial specimens of the "savage races" of mankind were perceived as exemplifying with particular clarity the foundational tenet of the science: that skull shape was a reliable indicator of the relative strength of intellectual powers and emotion in the individual mind.

Phrenology's creator, the Austrian surgeon Franz-Joseph Gall (1758–1828), had drawn heavily upon and sought to reinterpret the reasoning of

Blumenbach and Camper on the origins and nature of human variation. In arguing that over time humanity had been transformed into four or five distinct varieties, both Blumenbach and Camper maintained that each variety typically exhibited different emotional and intellectual qualities, but that none manifested any great difference in intellectual ability or moral character. However, Gall rejected Blumenbach and Camper's belief in humanity's natural equality, arguing that the typical shape of various African crania reflected the relative size of the various discrete parts of the brain which he believed gave rise to specific qualities of intellect and emotion. The differences between skull shape in Africans and Europeans bespoke differences in mental makeup that accounted for the wealth of derogatory testimony in circulation since the beginnings of the Atlantic slave trade. "I may get on the bad side of [these] highly esteemed men," he declared in an article published in the form of a letter to his medical colleague, Joseph von Retzer 1798

> But maybe you will come to understand why some of our brothers cannot count over three; why others do not have a notion of private property; why eternal peace among mankind remains an eternal fantasy; etc.[51]

Similarly, Johann Gaspar Spurzheim (1776–1832), Gall's student and some time collaborator, whose arrival in Britain in 1816 was largely responsible for stimulating British interest in phrenology, similarly placed great weight on national variations in cranial shape. After breaking with Gall in 1813 he sought to develop his own model of the organic locality of mental attributes in large part by examining institutional and private collections of "national crania" that he energetically and indiscriminately correlated with the testimony of voyagers, explorers, and colonial officials. Some time between 1816 and 1818, for example, Spurzheim made Joshua Brookes's acquaintance and was permitted to examine his collection, and arrange for an engraving of a Maori skull to be included in what was to be his most influential publication, the *Observations sur la phraenologie* of 1818. The similarities Spurzheim saw between the cranial morphology of the indigenous peoples of the Caribbean Islands and Maori led him to explain why there should be a wealth of testimony as to these two peoples practicing cannibalism. Both had extraordinarily large organs of "destructiveness." Similarly, he believed the existence of an organ of "numeration" accounted for the prevalence in pro-slavery writings of accounts of Africans being unable to perform even relatively simple mathematics: "their heads," he declared, were "ordinarily recessive in the place where that organ is located."[52]

Spurzheim also made much of his having sought out and examined crania of "savages" in British and continental medical institutions and private collections, contrasting the outcomes of his inquiries with Blumenbach and Camper's defense of African intellectual and moral equality, arguing that they rested their case on the dubious basis of personal acquaintance with one or two men of African ancestry. Indeed, in his correlations of observational testimony with non-European cranial morphology, he was

more contemptuousness than Gall of African intellectual and moral capacity. Writing of the skull of a young congenitally deformed man he had examined in Amsterdam, he could not resist stressing that during his short life, the man had proved "so stupid that one could be forgiven for thinking that he was an African savage, even though it was well known that he was born in Amsterdam."[53]

Most importantly, in correlating intellect and head shape, Spurzheim championed Camper's geometric technique for representing national variations in head and facial shape as a "tool to measure intellectual dispositions" – ignoring what the great Dutch anatomist had repeatedly maintained: his invention was no more than a reliable device for creating accurate visual representations of people of different nationalities.[54]

While indigenous Australian skulls did not figure prominently in Spurzheim's writings, the dissemination and uptake of his phrenological findings in Britain saw not only accounts of indigenous Australian savage life-ways and culture, but also tales of violent encounter on the Australian frontier become integral to the production of phrenological knowledge.

London's best-known phrenologist during the 1820s was James Deville a lamp-maker turned dealer in "natural curiosities" active in the city's radical politics. Besides phrenological lecturing, Deville offered personal diagnoses of cerebral strengths and weaknesses. As one skeptical client was to recall the experience,

> He certainly gave me a great deal for my half Guinea, and of the most flattering description; and I could not but admire the dexterity or rather rapidity with which he ascertained the relative size of the 35 organs, by merely passing his hand for a few seconds over my head.[55]

Where Deville was most successful, however, was in capturing the British domestic and colonial market for phrenological busts, casts, and crania, employing the strategy he had perfected in selling rocks, shells, and stuffed animals of creating provenances for mundane specimens accentuating their uniqueness, rarity, or the hazards supposedly braved in their collection. His range of phrenological merchandise included casts of the heads of historical figures, notorious criminals, and exotic "national examples" of cranial peculiarities.

Amongst the casts Deville was marketing by the early 1830s were replicas of Joshua Brookes's Australian crania, which he had acquired after the anatomy teacher was bankrupted and forced to auction off his collection. Deville was also the owner of a skull of a man who had obviously died of massive head injuries. Casts from this skull were sold as replicas of that belonging to "Carbon Will" a "Chief of the Moreton Bay Tribe" who supposedly had speared Patrick Logan (1791–1830), the first commandant of the Brisbane penal settlement, established in 1823 (Logan was indeed killed, at the junction of the Brisbane and Stanley Rivers in late 1830 by Aboriginal men who were never identified).

Deville's range of Australian casts was enlarged by his making the acquaintance in 1832 of Robert Espie, a naval surgeon who over the previous decade had become a leading pastoralist on the Ouse River in Tasmania. As conflict between indigenous Tasmanians and settlers worsened through the 1820s into what became known as the "Black War," Espie had no qualms about aggressively responding to native resistance. When he visited England it was with the skulls of two men of the "Big River" people whose lands he had occupied, which he offered to sell Deville. One was allegedly killed in retaliation for the murder of two shepherds the previous year.[56] One of Espie's overseers had shot the other man when a group of warriors attacked a hut on Bashan's Plains.[57] What Deville may not have been told by Espie is that this man had been carried away dead or severely wounded by his fellow warriors, only to have Espie's men seek out his burial place to procure his head.[58]

Within British phrenological circles, the circulation of cranial casts and the outcomes of analyses of Aboriginal skulls not only reinforced received environmentalist explanations of Aboriginal degradation, but also accentuated the degree to which Aboriginal people had allegedly become physiologically incapable of sustaining civilization. Typical in this regard was the assessment of Sir George Mackenzie, a leading figure in the Edinburgh Phrenological Society, of a skull said to be that of a woman belonging to "the Cow-Pasture Tribe, New Holland" in 1824. Mackenzie held that the shape of the skull confirmed the woman had possessed a brain small in those areas supposedly giving rise to "higher faculties," such as "ideality," "constructiveness," and "conscientiousness." In other words, the woman had no capacity to think complex or beautiful thoughts, initiate or solve complex tasks, or sense the morality or otherwise of her actions. Where the brain was well endowed was in the lower, animal faculties:

> When we consider what faculties are necessary for the lower animals, we find that they are such as greatly preponderate in the New Holland female. The intellect is so exceedingly weak, that action must have been the result of momentary impulse. The forehead slopes rapidly; and the sides fall from the central line of the skull like a roof. This individual, however, stands higher in intellect than the Charaibs [*sic*], and is less of a savage, though as much of the animal.[59]

Nonetheless Mackenzie urged caution about assuming this skull to be representative of the natives of New Holland. While it had become commonplace to regard them "as the lowest species of the human race," the differences in cranial shape in specimens so far acquired by the Society he believed were sufficient to suggest that they belonged to different tribes of possibly varying intelligence. Clearly a more representative collection of skulls had to be acquired before about offering any firm phrenological assessment of the Australian race.

Mackenzie's caution in this regard was also certainly due to the fact that while phrenology had gained converts within medical circles, most leading British anatomists, while believing that intellectual capacity could be gauged

from the size and density of cranial bones, were dismissive of the idea that the shape of the outer surface of the human cranium could be an accurate indicator of the relative strength within the mind of specific emotions and intellectual qualities. Nonetheless, it is important to see that anatomists critical of phrenology such as Alexander Monro, for example, would have endorsed the view of George Mackenzie, when reviewing Blumenbach's 1828 annotated catalog of his cranial collection, that contrasting

> for a moment the thick coarse-grained skulls of some of the New Hollanders, with the fine texture and smoothness of the Circasian or Hindoo skulls . . . you will find it in vain to attempt, even in fancy to figure them filled with brains of equal quality. With the same mental powers, where the development is alike in size, there will be coarseness.[60]

Phrenologists in turn would have agreed with Monro that the degradation of the Aboriginal bodily economy was responsible for their descent into savage life-ways and culture. They were equally ready to see a causal relationship between assumed peculiarities in Aboriginal morphology and colonial testimony as to Aboriginal people's alleged lack of familial structures, social institutions, and meager subsistence through hunting and gathering.

Conclusion

By the early 1830s, Aboriginal remains were not only regarded by anatomists and phrenologists as illuminating the physical basis of indigenous Australians intellectual and cultural degradation, but also were routinely spoken of an endangered scientific commodity. The naturalist Allan Cunningham, for example, wrote in a memorandum he sent London's College of Surgeons in 1829, accompanying the skin of an Aboriginal man of the Moreton Bay region, which he had secured after its postmortem removal as prescribed by mortuary custom, that the impact

> disease, dissolute habits, and the readily imbibed vices of the Europeans have made on the Population . . . is now making progressive strides towards an entire extinction of the original Inhabitants of those parts of the country inhabited by us.[61]

Similarly, George Bennett, a Sydney based-surgeon and naturalist who actively collected on behalf of College of Surgeons, of which he was a member, argued in 1834 that the decline in the Aboriginal Australian population underscored the need to move quickly and systematically collect ethnographic material, including the "skulls of the different tribes and accurate drawings of their peculiar cast of features." Within the context of museums remains would figure prominently "as lasting memorials of the former races inhabiting the land."[62]

In the prologue to his recent study of the "doomed race theory" in Australia between 1880 and 1939, Russell McGregor notes that the "expectation of [Aboriginal] extinction" had begun to gain a secure place in the colonial imagination as early as the 1830s. McGregor attributes this

to the evident impact on indigenous communities of settler violence, disease and social anomie, but suggests that belief in Aboriginal extinction "was primarily . . . a manifestation of ultimate pessimism . . . arising out of the repeated failures to civilize and convert."[63] Certainly, indigenous resistance to successive humanitarian and missionary schemes for Aboriginal assimilation within colonial society in the first-half century or so of European settlement gave rise to pessimism. However, as this article has shown, there are strong grounds for suspecting that what distilled pessimism into belief in the inevitability of racial extinction was the fate of Aboriginal remains in anatomical and phrenological circles. Admittedly, few if any commentators who anticipated Aboriginal extinction from the 1830s onwards discounted settler aggression and disease as causes of indigenous population collapse. But it is telling that the earliest assessment that the transplantation of British civilization would result in the "extermination of the simple race of Australia" was published in 1825 by a leading figure within the New South Wales colonial establishment well acquainted with the writings of leading comparative anatomists, known for his interest in phrenology and ready to nominate physiological weakness as the prime cause of Aboriginal extinction.[64] In the years that were to follow this verdict was only to be increasing echoed and amplified in both the British metropolis and the Australian colonies.

Short Biography

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Notes

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[1] Nancy Stepan, *The Idea of Race in Science: Great Britain, 1800–1860* (Macmillan: London, 1982), 4, 5–46; also Adrian Desmond, *The Politics of Evolution: Morphology, Medicine, and Reform in Radical London* (Chicago: Chicago University Press, 1989); Dov Ospovat, "Perfect Adaptation and Teleological Explanation: Approaches to the Problem of the History of Life in the Mid-Nineteenth Century," *Studies in the History of Biology*, 2 (1978): 33–56.

[2] Stepan, *Idea of Race*, xvii–xix; H. H. Odom, "Generalizations on Race in Nineteenth Century Physical Anthropology," *Isis*, 58 (1967): 5–18.

[3] Robert Knox's racial thought and its stimulation of scientific trafficking in Aboriginal Australian remains is discussed in my essay "British Anthropological Thought in Colonial Practice: The Appropriation of Indigenous Australian Bodies, 1860–1880" in a forthcoming collection edited by Bronwen Douglas and Chris Ballard, entitled *Foreign Bodies: Oceania and the Science of Race, 1768–1888*.

[4] Within Australian historiography, biologically grounded theories of human difference have generally been seen as not informing colonial thinking about the management of Aboriginal people until the 1860s and the conceptual impact of Darwinian thinking. See, for example, Richard Broome, *Aboriginal Victorians: A History since 1800* (Sydney: Allen and Unwin, 2005), 99. Henry Reynolds, however, draws attention to early nineteenth century explanations of human origins and difference in his influential "Racial Thought in Early Colonial Australia," *Australian Journal of History and Politics and History*, 20 (1974): 45–53. Even so, Reynolds unduly emphasizes the influence of Charles White's idiosyncratic *Account of the Regular Gradation in Man* (1799), at the expense of considering how subscribers to environmental degradation could be equally fatalistic about the capacity of Aboriginal people to transcend their supposed state of savagery.

[5] Harold Carter, *Sir Joseph Banks, 1743–1820* (London: British Museum [Natural History], 1988), 46.

[6] J. G. A. Pocock, "Gibbon and the Shepherds: The Stages of Society in the *Decline and Fall*," *History of European Ideas*, 2 (1981): 83–94.

[7] Adam Ferguson, *An Essay on the History of Civil Society*, ed. Duncan Forbes (Edinburgh: Edinburgh University Press, 1966), 76–7.

[8] As most strikingly illustrated by his eager participation in the violent mourning rituals following the death of a high-ranking woman at Matavai Bay in June 1769. See the *Endeavour Journal of Sir Joseph Banks: 1768–1771*, ed. James Cawte Beaglehole, 2 vols. (Sydney: Public Library of New South Wales; Angus and Robertson, 1962), 1:266.

[9] Ferguson, *Civil Society*, 117–18.

[10] See Francis E. Cuppage, "Scurvy's Conquest and Sailors' Health," *Historian*, 57 (1995): 695–702.

[11] Roy Porter, *Bodies Politic: Disease, Doctors and Death in Britain* (Ithaca, NY: Cornell University Press, 2001).

[12] Camper formulated and refined a set of relatively simple procedures by which differences in morphology could be recorded and expressed as variations in a set number of angles. The most important, Camper maintained, were those to be found on placing the head of the subject at right angles to the observer. The position of common head and facial features, such as the end of the lower jaw and the ridge above the eyes, could then be reduced to angles of deviation from a baseline drawn through the *auditory meatus* and the lower part of the nasal septum. By following this procedure, Camper argued that subtle differences between the heads of facial shapes of peoples of different nationalities could be accurately reproduced, irrespective of whether the original drawing was done at leisure in the anatomy theatre or quickly sketched in the course of exploration. Camper's representational system and anthropological writings are explored in depth by Miriam Claude Meijer, "The Anthropology of Petrus Camper, 1772–1789," PhD. dissertation (University of California, Los Angeles, 1991). See also Robert Paul Willem Visser, *The Zoological Work of Petrus Camper (1722–1789)* (Amsterdam: Rodopi, 1985), esp. 96–115.

[13] Including skeletal material then housed at Oxford within Christ Church College. Among the Oxford specimens Camper was particularly intrigued by and carefully sketched was the lower jaw of a Tahitian procured by Captain James King, who served under Cook on the latter's ill-fated third voyage of 1776–80. Douglas Guthrie, "The Travel Journals of Peter Camper (1722–1789), Anatomist, Artist, and Obstetrician," *Edinburgh Medical Journal*, 55 (1948): 352.

[14] Banks to Blumenbach, June 20, 1787, British Library Add. Ms 8096, f. 384–4v.

[15] See *The Anthropological Treatises of Johann Friedrich Blumenbach: De generis humani varietate nativa* (1795), trans. and ed. Thomas Bendyshe (London: Longman, Green, Longman, Roberts and Green, 1865), 21.

[16] Thomas Cogan, "Preface," *The Works of the late Professor Camper, on the Connexion between the Science of Anatomy and the Arts of Drawing, Painting, Statuary*, 2 vols., trans. T. Cogan (London: C. Dilly, 1794), 1:xi.

[17] Blumenbach to Banks, December 20, 1798, British Library, Add. Ms 8096, ff. 434–4v.

[18] David Collins, *An Account of the English Colony in New South Wales*, ed. Brian H. Fletcher, 2 vols. (Sydney: A. H. and A. W. Reed, 1975), 2:70.
[19] "The natives about Sydney and Hawkesbury continued as domesticated as ever and reprobated the conduct of the natives in the neighbourhood of Paramatta Toongabee, who were irritated . . . by Pemulwye, & in the few intercourses we had with some of his companions, they expressed their sorrow for the part they were obliged to act by the great influence Pemulwye had over them" (Colonial Secretary's Office, Public Record Office (UK), CO 201/22/6–7).
[20] A career naval officer and keen amateur naturalist, King was indebted to Banks for securing him the position of Superintendent and Commandant of the secondary convict station and naval supply base built in 1788 on Norfolk Island, some 1600 kilometers east of New South Wales. In the twelve years he spent on Norfolk he sent Banks a wide variety of botanical and animal specimens, who in turn used his influence to secure King's eventual appointment as the third governor of New South Wales. See A. G. L. Shaw, "King, Philip Gidley (1758–1808)," *Australian Dictionary of Biography*, Online Edition, Copyright 2006, updated continuously, ISSN 1833-7538, published by the Australian National University, http://www.adb.online.anu.edu.au/biogs/A020052b.htm, accessed September 26, 2006.
[21] Diary entry for October 1788, William Bradley, *A Voyage to New South Wales: The Journal of William Bradley RN of HMS Sirius, 1786–1792* (Sydney: Trustees of the Public Library of New South Wales in association with Ure Smith, 1969), 142.
[22] Ralph Clark, *The Journal and Letters of Lt. Ralph Clark, 1787–1792*, ed. Paul G. Fidlon and R. J. Ryan (Sydney: Australian Documents Library in association with the Library of Australian History Pty Ltd, 1891), 110.
[23] Banks to King, April 8, 1803, *Historical Records of New South Wales*, 7 vols., *Volume 5: King 1803–1805*, ed. Alexander Britton and F. M. Bladen (Sydney: Government Printer, 1892–1901), 834–5.
[24] William Clift, Diary, 24 October 1818, Royal College of Surgeons of England Library, MS 276.9.8. So far my attempts to locate these sketches have been unsuccessful.
[25] On the hazards of preparing soft tissues with spirits of wine, see Frederick John Knox, *The Anatomist' Instructor and Museum Companion* (Edinburgh, 1836).
[26] William E. L. H. Crowther, "Mr. Jacob Mountgarret, R.N., the Pioneer Colonial Surgeon of Van Diemen's Land", *Journal of the Royal Australian Historical Society*, 34 (1948): 5.
[27] What occurred at Risdon Cove has been a focal point of debates occurring since the 1830s about how violent Tasmanian colonization was. Most recently, Keith Windshuttle has claimed that Australian frontier historians have vastly inflated the number of Tasmanians killed during the first half of the nineteenth century. See his *Fabrication of Aboriginal History: Volume 1, Van Diemen's Land* (Sydney: Macleay Press, 2002), especially 11–26. For a careful refutation of Windshuttle's arguments, See Bain Atwood, *Telling the Truth about Aboriginal History* (Sydney: Angus and Robertson, 2005).
[28] Mountgarret to Knopwood, 3 May 1804, Robert Knopwood, *The Diary of the Reverend Robert Knopwood 1803–1838*, ed. Mary Nicholls (Hobart: Tasmanian Historical Research Association, 1977), 51. Keith Windshuttle writes that Mountgarret's shipment of remains was "no more than a rumour told twenty-six years after the event, for which there was no contemporary corroboration" (*Fabrication of Aboriginal History*, 24). However, we do know from Mountgarret that he dissected at least one Tasmanian body, and given the value of the head in anatomical circles it seems quite plausible that the surgeon would have sent it to Sydney for shipment to London. Consider also the testimony of Ralph Clark cited above.
[29] Ernest Scott, *The Life of Matthew Flinders* (Sydney: Angus and Robertson, 1914), 143, 164, 171.
[30] Ibid., 173–4.
[31] Ibid., 176.
[32] Matthew Flinders, *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' ship the Investigator*, 2 vols. (London: G. and W. Nichol, 1814), 2:196–8.
[33] Flinders, *Terra Australis*, 2:197–8.
[34] The drawing is among those Westall undertook during the *Investigator* voyage now in the library of the Royal Commonwealth Society and reproduced in Drawings by William Westall, *Drawings by William Westall, Landscape Artist on board H.M.S. Investigator during the Circumnavigation of Australia*

by Captain Matthew Flinders, R.N., in 1801–1803, ed. T. M. Perry and Donald H. Simpson (London: Royal Commonwealth Society, 1962), n. 102.

[35] "The Journal of Peter Good, Gardener on Matthew Flinders' Voyage to Terra Australis 1801–3," ed. Phyllis Edwards, *Bulletin of the British Museum (Natural History) Historical Series Volume 9* (London: British Museum (Natural History), 1981), 112.

[36] J. Ramsbottom, "Robert Brown, *Botanicum facile princeps*," *Proceedings of the Linnean Society of London* (1931–32), Part I, 20–2; also S. Savage, "Robert Brown as an Official of the Linnean Society," *Proceedings of the Linnean Society of London* (1931–32), Part I, 38–9.

[37] *Journal of Peter Good*, 19.

[38] Brown to Banks (March 1803), Brown Papers, British Library, Add. Ms 32439, ff. 86–7.

[39] D. J. Mabberley, "Brown, Robert (1773–1858)," *Oxford Dictionary of National Biography*, http://www.oxforddnb.com/view/article/3645, accessed March 13, 2006. Archival material relating to the Edinburgh University collection of Australian skeletal material, repatriated to Australia in 1991, refers to several skulls.

[40] John Struthers, *Historical Sketch of the Edinburgh Anatomy School* (Edinburgh: MacLachlan & Stuart, 1867), 67.

[41] William McGillivray, *Catalogue of the Museum of the Royal College of Edinburgh* (Edinburgh: Neill and Co., 1836), 363.

[42] The lower figure is given by Adrian Desmond, *Politics of Evolution*, 157, the higher in Brookes's obituary in the *London Medical and Surgical Journal*, 2 (1833): 779.

[43] Joseph Barnard Davis, *Thesaurus Craniorum. Catalogue of the Various Races of Man, in the Collection of Joseph Barnard Davis* (London: printed for the Subscribers, 1867), 261–7.

[44] Joshua Brookes, *Museum Brookesianum. A Descriptive and Historical Catalogue of the Remainder of the Anatomical Collection of J. Brookes* (London: Richard Taylor, 1830), 14.

[45] Alexander Monro, *Elements of Anatomy*, 2 vols. (Edinburgh: MacLachlan & Stewart, 1825).

[46] Monro acquired the skeleton of the young man from John Jamison, the son of Thomas Jamison, who had sailed with the first fleet as naval surgeon on the Sirius, and had served in New South Wales as surgeon general from 1801 until 1809, when ill-health and his involvement in the "Rum Rebellion" led him to return to England. John Jamison had graduated in medicine from the University of St. Andrew's in 1808 and served as a naval surgeon physician until 1814, when he resigned to manage the grazing lands his father had been granted in New South Wales, eventually becoming a wealthy and politically ambitious member of the colony's pastoral elite.

[47] Monro, *Elements of Anatomy*, 2:198.

[48] Ibid., 2:226.

[49] On the Irish Charity Schools, see Oliver MacDonagh, *The Inspector General: Sir Jeremiah Fitzpatrick and the Politics of Social Reform, 1783–1802* (London: Croom Helm, 1981). On the so called "Black Schools" in early New South Wales, see Jack Brook and J. L. Konen, *The Paramatta Native Institution and the Black Town: A History* (Sydney: University of New South Wales Press, 1991).

[50] Monro, *Elements of Anatomy*, 2:226.

[51] Franz Joseph Gall, "Letter from Dr. F. J. Gall to Mr. Joseph Von Retzer on the Prodromus He has Completed on the Functions of the Human and Animal Brain," in Paul Eling (ed.), *Reader in the History of Aphasia from Franz Gall to Norman Geschwind* (Amsterdam: John Benjamins, 1994), 26.

[52] J. G. Spurzheim, *Observations sur la Phraenologie, ou la connaissance de l'homme moral et intellectual fondeé sur les fonctions du système nerveaux* (Paris: Treuttel et Würtz, 1818), 290.

[53] Ibid., 27.

[54] Ibid., 55.

[55] George Swinton to George Combe, June 22, 1834, Combe Papers, National Library of Scotland, MS 7223, ff. 172–2v.

[56] Lloyd Robson, *A History of Tasmania*, 2 vols. (Melbourne: Oxford University Press, 1983–91), 1:217.

[57] Davis, *Thesaurus Craniorum*, 268.

[58] This incident occurred in August 1831, some three months before George Augustus Robinson arrived on the Plains in the course of his "Friendly Mission" to persuade the Tasmanian tribes to place themselves under the protection of the colonial authorities. When Robinson reached the Plains a woman of the Big River people who had joined his party informed him that the body of the man killed attacking the hut of Espie's overseer had been retrieved by his clan and buried with

appropriate ceremonies within a hollow tree in nearby marshes. Intrigued, Robinson had the women lead them to the tree. "There was no body there," Robinson wrote that evening in his journal: "She said the white men had taken him away."

[59] George Stewart Mackenzie, "Observations on the Skull of a Woman of the Cow-Pasture Tribe, New Holland," *Phrenological Journal and Miscellany*, 2 (1825–26): 132.

[60] [George Stewart Mackenzie], "Review of Blumenbach, *Decades Craniorum*, 1790–1828," *Phrenological Journal and Miscellany*, 6 (1829–30): 282.

[61] Memorandum by Allen Cunningham, August 1, 1829, Letters to William Clift and Others, Royal College of Surgeons of England Library, MS 275.g.9.

[62] George Bennett, *Wanderings in New South Wales . . . Being the Journal of a Naturalist*, 2 vols. (London: Richard Bentley, 1834), 1:69.

[63] Russell McGregor, *Imagined Destinies: Aboriginal Australians and the Doomed Race Theory, 1880–1939* (Melbourne: Melbourne University Press, 1997), 18.

[64] Barron Field, first judge of the New South Wales Supreme Court. Field was to theorize indigenous resistance and the inevitability of their extinction, drawing on both the work of Blumenbach and British phrenologists. See my essay, "'Rare Work amongst the Professors': The Capture of Indigenous Skulls within Phrenological Knowledge in Early Colonial Australia," in Barbara Creed and Jeanette Hoorn (eds.), *Body Trade: Captivity, Cannibalism and Colonialism in the Pacific* (Routledge: New York, 2001), esp. 14–17.

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