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doi: 10.1177/147447409800500201

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Science and the Savage: The Linnean Society of New South Wales, 1874-1900

Kay Anderson

The idea that indigenous people of the New World were children of nature - or in darker imaginings, unevolved beasts - has a long ancestry of critique in the human sciences. A tradition of psychologically based research into white attitudes in the settler societies of British empire has chronicled the diverse forms of prejudice against indigenous people, including those who, in moving to cities, were seen as detr ibalized misfits, dislocated from their natural habitats in the open spaces of country. More recently, concepts of ‘the primitive’ have been critically deconstructed to reveal the discursive practices out of which social relations were configured in colonial societies. In that critique, the contribution made by various legitimizing agents to the racialized representation of indigenous peoples has been carefully documented, including that by scientists who, in their various ‘mismeasures of man’ in the nineteenth century, left an indelible stamp on public beliefs. The diverse research efforts of, for example, craniologists, phrenologists, eugenicists and various other physical anthropologists who sought to calibrate ‘man’s’ putatively finite forms of biological organization have been shown to authorize ideas of race difference and hierarchy that flourished under European colonial regimes.

In the analysis of the constitution of racialized knowledges, much less attention, however, has been paid to those sciences which took, not ‘man’, but rather ‘nature’ as their primary object and field of investigation. The overwhelming focus of critical historiographies of race knowledge by the academy have been the disciplines of anthropology and geography, which inscribed otherness in the course of their own institutional development and alignment with the interest of empire. Yet in particular

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1 In the case of Australia, see C. Rowley, Outcasts in white Australia (Melbourne, Penguin, 1970); F. Gale, Urban Aborigines, assisted by Alison Brooking (Canberra, Australian National University Press, 1972). On American attitudes, see R. Berkhofer, The white man’s Indian: images of the American Indian from Columbus to the present (New York, Vintage, 1979).


colonial settings, earth scientists, botanists, zoologists and variously aspiring naturalists played an equally vital role in fuelling nineteenth-century conceptions of difference that were in currency throughout European empires. Such scientists formed societies devoted to studying the colony, of which a natural history organization in New South Wales is this paper’s focus. In the frames of mind of members of the Linnean Society of New South Wales, we shall see that Aboriginal people were conflated with nature, inscribed within models of species fixity and the template of what Martin Rudwick (1985) has called, in his book on pictorial representations of the prehistoric world, ‘deep time’\textsuperscript{5}. Lodged in the bedrock of the past and the seemingly blank space of \textit{terra nullius}, Aborigines were rendered coterminous with the diverse life forms that were thought of as comprising ‘the natural world’. And while Aborigines were admitted theoretical membership of the human race by most nineteenth-century scientists (including anthropologists), people who lacked agriculture and settled abodes seemed to attach themselves more logically to ‘nature’ than to the reverse pole which had long since come to bear the title of ‘culture’.

In this paper I propose to examine the role of one colonial scientific organization in elaborating a specific, politically potent configuration of the nature/culture binary through its positioning of the ‘Aborigine’. In particular, following those theorists who have recently unsettled the culture/nature divide, I wish to examine the collapse of ‘the Aborigine’ into the pedagogic activities of a society devoted to the study of the natural history of New South Wales in the late nineteenth century. In so doing, I seek to highlight the institutional framework of natural historical enquiry, and to register its importance alongside the more widely examined role of individuals and specific theories in knowledge-making endeavours.

The purpose behind such objectives may appear self-evident in the context of the growth of anti-colonial and anti-racist writing. A line of critique could be proposed whose ethical manoeuvre might cohere as follows: that Aboriginals were human - part of culture - and thus, along with their European counterparts in Australia, should have escaped the reflections of a society dedicated to the study of geology, flora and fauna. Such is the line of conceivable argument of contemporary race critique, one that, for all its service in eroding premises about racialized difference, presents a new set of problems under the weight of its own enunciation. Not least are concerns that such otherwise politically progressive work risks reiterating the raced codings of identity that it seeks to upset. Of course, some race scholars are now meeting this criticism by demonstrating that race is a discursive field transected by classed, gendered and other identities that inject their own contradictory but no less material effects on racialized regimes.\textsuperscript{6} Others still, drawing on postcolonial theory, are upsetting the narrative force of the familiar coordinates of ‘us’ and ‘them’ by foregrounding the struggles of those who inhabit and divide the so-called centre\textsuperscript{7}.

\textsuperscript{5} M. Rudwick, \textit{The great Devonian controversy: The shaping of scientific knowledge among gentlemanly specialists} (Chicago, Chicago University Press, 1985).


My point of departure, following recent theorists of the culture/nature binary and those who are bringing the study of animals into a socio-political framework, is, however, different. It is one that seeks to move beyond restrictive notions of the ‘social field’ that reiterate unhelpful oppositions of culture and nature. More specifically, I take as a point of departure the claim that all humans, together with non-human animals, exist in a hybrid world of artifice and nature in which the premiss of a split between realms loses its force and meaning. Such a line of argument is not to invoke or indulge a notion of nature as the life source to which all life forms are interrelationally bound, as might those diverse ecosophies concerned to critique the human conquest of nature. Nor do I seek to deny that certain phenomena studied by members of the scientific organization that is the focus of this paper - including, for example, shells and fish, birds and insects, not to mention large-scale processes such as continental drift and meteorology - operate according to forces that are mostly independent of humans. My intention is rather to suggest how features which are taken as part of ‘nature’ can be manufactured in ideology as well as constructed in nature. In such a way, I continue the work of critical theorists in dislodging the long analytical tendency of ‘modern’ geography to objectify notions of purified spaces, whether of culture or nature.

More specifically, I propose to use the example of the Linnean Society of New South Wales to examine the practical ways in which scientific organizations engage with the historicity of a split in European consciousness as between ‘culture’ and ‘nature’. On the grounds of certain culturally specific criteria of what constituted ‘nature’, the society saw fit to place select people and all animals in nature’s field. In so doing, I shall argue that the society not only lent credibility to racist ideas that denied the humanity of Aboriginals but played a crucial role in promoting culturally specific oppositions of culture and nature. I thus take up the challenge issued by Thrift, Driver and Livingstone in their 1995 editorial on the social construction of science, to ‘combine geographical and historical specificity’ in the example of the Linnean Society of New South Wales, with attention to ‘ontological and epistemological issues’ to do with knowledge-making surrounding race, culture and nature. The result, I hope, is a situated enquiry into an Australian arm of science as well as a critical intervention in some more general and enduring European boundary conventions.

The Linnean Society of New South Wales: nature’s order

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Although the classification system of the Swedish naturalist Carl Linnaeus (1707-78) was never universally accepted by specialists versed in the botanical sciences, it enjoyed enormous popularity in Europe from the mid-eighteenth through the late nineteenth century. Historians agree that Linnaeus was crucial to Enlightenment natural history, with its emphasis on observation, experiment and measurement. His classificatory schemes, first outlined in Systema Naturae in 1735, enabled the elaboration of a common language - and hence a public sphere - of science. As the elite classes of British society took leisure to the garden, conservatory and library, Linnaeus’s practical system for establishing likenesses and differences in plant specimens became widely used and endorsed. Among its most influential advocates was Joseph Banks, who in 1768 took one of Linnaeus’s students on board the Endeavour to New Holland to catalogue the plant collection he envisaged bringing back.

The classification system used by Banks imposed rank and relationship on plant species on the basis of an analogy to animal processes of fertilization and sexual distinction. Such a system classified plants according to the number, shape, proportion and arrangement of the stamens (apparently the ‘male’ reproductive organs) and pistils (‘females’) within the flower. For Linnaeus, this process of reproduction was pre-established by God, who had infused creation with an order it was the charge of scientific investigation to illuminate. Thus arose a habit of thinking of plants and other natural objects as members of fixed, divinely bestowed classes, rather than (for example) as interconnected organisms along a continuum of life. Moreover, for Linnaeus God had constituted nature in an immortal hierarchy that cascaded downwards from God and the angels through man – ‘the miracle of nature and lord of the animals for whom nature has created all other things’ – to the lower orders of creation, including the animal, vegetable and, finally, mineral realms. And just as there were abrupt breaks in Linnaeus’s version of the ‘chain of being’ between God, man, and the lower orders, so were the kingdoms of animal, vegetable and mineral in turn divided into discrete classes, orders, genera and species. Despite the metaphor of a chain of being, then, the logic was one of discontinuity and segregation, not continuity and affiliation.

The idea that nature was a mirror of God’s intentions grew robust during the period of imperial discovery and possession of the ‘New World’ from at least 1750. Not only did key architects of Empire (such as Banks) take some sense of higher purpose in nature from their mission, but travel, it was assumed, would lay bare parts of an order that was in principle fully comprehensible. The Linnean model and nomenclature was granted further legitimacy in 1788 when James Smith, having purchased Linnaeus’s herbarium, founded the Linnean Society of London, devoted to the cultivation and study of the science of natural history.

12 A. Bewell, “‘On the banks of the South Seas’: botany and sexual controversy in the late eighteenth century”, in Miller and Reill, Visions of empire, pp. 173-93.
Linnean societies were established in other European empires, including those of France and Germany (though, surprisingly, no formal organization was founded in Linnaeus’s own country of birth, Sweden). Among the offshoots of the English organization was the Linnean Society of New South Wales, founded much later on, in 1874, for ‘the cultivation and study of the science of natural history in all its branches’¹⁵. Not that the New South Wales society operated as a ‘child’ of the ‘parent’ organization, taking its direction from the imperial centre, as invoked by dependency models of scientific relations between core and periphery. Such models tend to appeal to diffusionist images of a source of light radiating out from a single metropole to civilize the periphery¹⁶. In contrast to such conservative models, there are uncomplicated critiques of the political role served by the botanical, zoological and geological sciences in imperial expansion¹⁷. Contrary to either such school of thought, it can be said that the New South Wales society responded largely to local and regional concerns, operating virtually independently of Linnean organizations in London and elsewhere. As MacLeod’s (1982) concept of a ‘moving metropolis’ suggests and as others have recently demonstrated, scientific relations in the nineteenth century were more heterogeneous, polycentric and mobile than simplistic core-periphery models of colonial science have allowed¹⁸. In the case of the Linnean Society of New South Wales, it was no more connected to its London counterpart than to the multitude of other international organizations with which it corresponded, and to which it donated and exchanged publications (as can be gleaned from the extensive list of donations recorded at each monthly meeting of the society).

Members of the New South Wales Linnean Society might not have been conscious or systematic agents of imperial power overseas, but they doubtless participated in constructing a distinctive settler knowledge about the Australian landscape. The society’s first president, Sir William John Macleay, was the nephew of wealthy landholder and colonial secretary Alexander Macleay, both of whom hailed from the heartland of the gentleman-amateur scientific tradition of England¹⁹. Both were regarded as ‘committed Linneans’, Alexander having been secretary of the Linnean Society of London from 1798 until 1825²⁰. Alexander Macleay’s son, William Sharp, was also a natural history enthusiast, and the family home at Elizabeth Bay House in

¹⁵ A. Walkom, The Linnean Society of New South Wales: historical notes of its first fifty years (Sydney, Australasian Medical Publishing Company, 1925), p. 11.
²⁰ Walkom, The Linnean Society of New South Wales, p. 12. Given that by at least the 1840s in Europe, Linnaeus’s label ‘committed Linneans’ may have referred to the Macleay’s identification with Linnean societies, or perhaps a creationist perspective (see below).
Sydney, which housed an extensive insect collection, became a prominent focus of natural history activities in New South Wales. Throughout the colony there was a lively coterie of field naturalists, collectors and professional scientists on which to draw, as well as an influential patronage from the days when Banks took a keen interest in the natural history of the colony. More immediately, recruitment for the local Linnean society came from the Entomological Society of New South Wales, which folded in 1872.

The Linnean Society began transacting business in 1875, when papers were first read at monthly meetings and the founding issue of Proceedings of the Linnean Society of New South Wales was published. In addition to 10 officers and councillors, the society had a membership of approximately 125 ordinary, corresponding and honorary members at the time it was instituted (with steady growth from then to the present). At the first meeting in January 1875, Sir William Macleay spoke on the virtues of ‘observing, cataloguing, and describing new species’, for such activities he claimed are ‘to science, what grammar and words are to language’. They are the ‘foundation of knowledge, on which a superstructure of “high science” may be reared’. Not only that, but such ‘thoughtful, unbiased study’ as would be undertaken by the society, would, he predicted help to ‘unveil the mystery of creation’, to ‘ascertain by human means ... the plan of the universe, the mind of the Almighty’.

Doubtless Macleay sought to advance his creationist views through the medium of his own organization at a moment when evolutionary theories were becoming, in the president’s words, ‘fashionable faith’. Certainly by the time Macleay founded the New South Wales society, Linnaeus’s classification system itself had long been discredited in Europe, though his nomenclature continued to be widely used. In this sense, the Linnean Society of New South Wales was something of a relic organization that kept alive taxonomic principles in the turbulent local context of debate over evolution. Macleay took particular issue, for example, with the work of Darwin and Wallace on the subject of human evolution from animal ancestors. In his annual address of 1876, he declared insistently that ‘just as man is in his mental and moral nature, his capacities and aspirations, so infinitely raised above the brutes, so his origin is due to distinct and higher agencies’. Subsequent presidents, too, in their annual addresses, celebrated ‘the intervention of a Creator’, the ‘obvious ubiquitous, infinite, overwhelming evidence of Design in nature’, ‘the plan and unity in it all of a Creator’, and the ‘implantation in man of a higher and Divine state of perfection’.

In 1885, some 25 years after the publication of Darwin’s *On the origins of species*

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(1859), Professor W. Stephens, president of the society, was moved to appeal to members. He encouraged them to 'continue their labours in revealing nature’s rich stores, for the advancement of the varied and progressive human interests - advancement which in the past has proceeded on definite lines through the mineral and vegetable kingdoms into the animal kingdom, and in humanity leads on to the higher Spiritual Kingdom of God' 29.

Fifteen years later such ideas had fallen into disfavour among society members. And yet the president’s addresses of 1899, while openly rejecting invocations to ‘teleological’ conceptions of purpose in nature, wished to emphasize that principles of natural selection nonetheless operated on some ‘spontaneous unexplained variability’ such that evolutionary explanation could not claim to be ‘absolute’ 30. The burden of doubt thereby kept alive, the philosophy and practice of taxonomy survived not only the complex debates about polygenism and monogenism among creationists (which are not my concern here) but also the transition to evolutionary theory among the society. Indeed, evolutionary theory, in seeming to historicize the ‘great chain of being’ concept, kept alive and gave fresh momentum to premises of hierarchy. Metaphors of both evolution and design thus continued to figure in the narration of nature’s workings, though, as we shall see in what follows, no member saw fit to query the nature of the ‘nature’ they assembled for their gaze and study.

**Objects of nature, cultures of curiosity**

In addition to the annual meetings at which the president reported, the Linnean Society of New South Wales ran council and monthly members’ meetings, the minutes of which provide a useful record of its concerns and activities 31. Those subjects to which members’ attention was chiefly directed were as follows; botany, ichthyology (the study of fish), geology, entomology, conchology (the study of shells), ornithology and a miscellaneous category called ‘ethnology, reptilia, crustacea etc’ 32. Papers were read at monthly meetings on such subjects in a spirit of what successive presidents called ‘technical science’ based on ‘direct observation’, as distinct from the ‘field of generalisation or theoretic speculation’ of ‘high science’ 33. The society thus evolved a niche at the nexus of theoretical and popular, pure and applied science, and included among its membership both professional scientists and men more closely identified with the tradition of the amateur field naturalist. Women were not admitted to the Linnean Society on equal terms with male members until July 1909, though not because they were not interested in natural history 34. At least 10 women were

29 Ibid., 1885, p. 1241.


31 The following sections of the paper draw on the collection of minutes for council and members’ meetings, as well as the minute books of the annual general meetings, from 1882 to 1900, held at the Mitchell Library of New South Wales. Unfortunately, in 1882 a fire at the Garden Palace in Sydney, out of which the society operated in its early years, destroyed the only copies of the first seven years of meeting minutes. Also used in the article is material contained in papers presented to the society and published in the Linnean Society annual Proceedings.

32 Ibid., 1884, pp. 537-38.

33 See e.g. address published in Ibid., 1881, p. 639.

‘associate members’ prior to 1909, one of whom, artist Elizabeth Rowan, made notable contributions at meetings for many decades to the display of objects of natural history interest.

In 1884 an initiative was introduced to complement the role of the society in supplying the raw material for ‘high science’. Members were encouraged to illustrate their papers by exhibiting natural history specimens at meetings. The idea appears to have been enthusiastically adopted, and soon members were joined at meetings by guests including ‘lovely lizards’, ‘curious centipedes’, some ‘very handsome birds’, a ‘remarkable grasshopper’, ‘rare beetles and caterpillars’, ‘magnificent moths’ and so on. Threaded through such exhibitions seemed to be the Linnean presumption that a whole (apparently undifferentiated) species could actually be known through the visible characteristics of a single specimen. As for the techniques of representation of the specimens, there were parallels with other forums for natural history instruction in the Victorian era, such as zoos and museums. Most displays were of live animals - one member, on the invitation of the society’s president, even finding it appropriate to display his ‘fearlessness and dexterity in handling venomous snakes’ at a meeting in November 1896. But dead specimens, skeletons and fossils were also commonly presented. Pressed wildflowers, seeds and other objects donated by exploration expeditions attracted much interest, while some members used the medium of lantern slides and drawings (e.g. of the life history of beetles) to speak to their displays. The genre’s objectifying fetish even licensed one member in 1900 to display a ‘gold watch found in the stomach of a shark recently captured at Port Jackson’.

So popular did the exhibits component of the meetings become that in 1888 the Linnean Society began its own excursions to sites of interest near Sydney, including the Nepean and Hawkesbury rivers and the Blue Mountains. By putting people in ‘direct contact with the objects of nature’, the enthusiasts in the Linnean Society hoped to not only ‘promote the study of the colony’s natural history’ but also to ‘popularize it’. A visceral connection to objects in the field appears to have been thought consistent with popular science, then, as distinct from the elevated pursuits of (apparently) disembodied minds undertaken at ‘high science’s’ abstracted bench. Thomas (1994) has argued that curiosity in the exotic in eighteenth-century Europe had been identified pejoratively with the bodily impulses of arousal and gratification. The likes of scientifically inspired expeditions such as Cook’s Pacific voyages thus progressively ‘licensed’ vulgar fascination with ‘strange’ artefacts and bodies. Further to this claim, it is possible that curiosity, which does itself have a history, acquired credibility and trust through the rational activities of such organizations as the Linnean Society and in particular its field excursions.

Not that observation alone was the purpose of excursions. Collection of artefacts for ‘enjoyment and edification’ seemed to be their primary objective. The vice-president spoke ardently in 1891 about the ‘rational hobby’ to be found in the study of natural

35 Minutes of monthly meetings, Linnean Society of New South Wales, Mitchell Library MSS 2009/6, 2009/7 and 2009/8, miscellaneous entries.

36 Cited in annual address published in Proceedings, 1891, p. 524.

history. He urged more people to join the society to take advantage of ‘the special opportunities of witnessing and collecting particularly interesting species in their state of nature, of working out the stratigraphical or palaeontological relations of particular strata ... or of collecting relics and traditions of the fast-disappearing black-fellow’\(^{38}\). Here the Linnean Society appears to have followed in the tradition of the Field Naturalists’ Club of Victoria, which - under the leadership of Baron von Mueller, the extraordinarily prolific botanist and author of the first Systematic census of Australian plants (1882) - ran for many decades from 1884\(^{39}\). More generally, the Linnean Society cultivated the association between outdoor activities, a culture of looking and a sense of moral virtue. These connections were characteristic of the field naturalist movement in Britain in the second half of the nineteenth century, when many such organizations joined with archaeological groups (so conjoining the interests of natural and human history). Later on, social utility was fostered more openly still, by the scout movement and other organized ‘practical geographies’ in Britain and elsewhere\(^{40}\).

Members of the Linnean Society appeared to be especially enthralled by the opportunity the excursions afforded for the ‘discovery’ of new species. Two points arise from the apparent obsession with novelty. First, it seems important to note that there was no interest on the part of the society in collecting, describing or displaying familiar, domesticated species of plants and animals. ‘Nature’ had a peculiar meaning, that is - one that did not include introduced life forms such as wheat, cows, roses, weeds, pets or more generally the activities of pastoralism, forestry and agriculture. One exception, in the form of a paper presented in 1884 ‘On the improvements effected by the Australian climate, soil, and culture on the merino sheep’, opened with an apology for ‘drawing your [the members’] attention to a subject which is ‘probably so uninteresting’\(^{41}\).

Second, many members doubtless were aware that indigenous people had already set eyes on the colony’s landscapes’; that the first gaze did not necessarily belong to them as white settlers. Indeed, in the annual address for 1900 the president referred at length to ‘the despised aborigines’ as Australia’s ‘first botanists’\(^{42}\), an observation to which I shall later return. This awareness seems not, however, to have shaken the belief of society members that, in bringing a scientifically informed attention to natural objects, they were in effect discovering them\(^{43}\). This confidence seems in part to have derived from the Linnean view that there existed in nature a finite number and variety of species that could potentially be unveiled and rendered intelligible. All that was needed to exhaust what was knowable about nature was devoted (and by extension, ever-more heroic) penetration of the virgin acres of unexplored terrain.

\(^{38}\) Proceedings, 1892, p. 910.


\(^{41}\) P. Trebeck, Proceedings, 1885, pp. 173-78.

\(^{42}\) Proceedings, 1901, p. 765.

\(^{43}\) For an elaboration of this point for other colonial contexts, see M. L. Pratt Imperial eyes: travel writing and transculturation (London, Routledge, 1991).
Moral virtue thus became attached to scientific endeavour, including (and perhaps especially) to fieldwork. That fieldwork signified a call to a certain type of masculinity seems also to have been likely. Probing the earth with a view to possessing its hidden and buried secrets may well have reflected impulses of masculine sexual desire, and certainly members seemed proud to identify their exhibits with intrepid exploration voyages such as the Horn Scientific Expedition to northern Australia of 1894. Whatever the merits of this argument, however, the quest to systematize an underlying wonder in God’s creation into a rational and authoritative discourse found a most dedicated band of enthusiasts in New South Wales in the late nineteenth century.

Aborigines and other ‘natural curiosities’

The conjoining of curiosity in the exotic with an ambition to promote scientific endeavour - so characteristic of those dispersed sets of situated practices called the Enlightenment - was nowhere more evident than in the Linnean members’ fascination with the material traces of Aboriginality in the Australian colonies. Without explanation, and with all the confidence their mandate to advance natural history knowledge appears to have afforded them, members saw fit to present papers to meetings on matters relating to geology and zoology, alongside those with Aboriginal content. In a further sense, then, ‘nature’ became identified by the society with those ‘natures’ that existed independent of European-derived society; no domesticated or introduced natures on the one hand and all sorts of registers of so-called ‘early man’ on the other.

Note the following juxtapositions of subject-matter as examples of a very common practice. In 1878, Mr J. Cox presented a paper titled ‘Drawings by Australian Aborigines’ in the same meeting as members heard ‘Notes on the tracheae of some Australian ducks’ and ‘The ferns of Queensland’. In the October 1883 monthly meeting, during which William Macleay presented a paper ‘On some habits of the reptiles of the Herbert River’ and another member spoke ‘On a new genus of fish from Port Jackson’, President C. Wilkinson delivered a paper ‘On the customs of the Aborigines of the Albert district’. In the same meeting, of May 1888, that William Macleay described ‘The insects of the West Kimberley district of Western Australia’, Mr W. Froggatt delivered a paper titled ‘Notes on the Aborigines of the West Kimberley’. In the council meeting of 23 November 1898, approval was given to the following papers being read at the next members’ meeting: ‘Notes on the habits of the black snake’; ‘Additions to the fauna of Lord Howe Island’; ‘Observations on the eucalyptus of New South Wales’; and finally ‘Descriptions of two curiously carved boomerangs of the Blacks of north Queensland’. A paper by Mr R. Helms comparing the customs of the Monaro and Omeo peoples was presented before the society in 1895, after which was delivered one titled ‘Australian Termitidoe’. The 1898 paper

On two new species of Eucalyptus’ was followed by ‘A description of certain objects of unknown significance, formerly used by some New South Wales tribes’. In the monthly meeting of September 1900, papers read included ‘The diet of the Ngarrabul and other Australian tribes’ alongside, for example, ‘Notes on the native flora of NSW in the Tumbarumba district’.

Equally common was the practice of displaying artefacts of Aboriginal material culture in the exhibits component of the monthly meetings. Here the Linnean society carried forward the interest of European explorers and missionaries to Australia in the tools, weapons and engineering techniques of the societies they encountered. By contrast, European transformed natures - in the form (for example) of eating instruments like spoons and cooking utensils like saucepans (originally iron ore), drinking vessels like glasses (previously sandstone) or building materials like bricks (once clay) - did not qualify for exhibition. These, and other artefacts that embody the European transformation of so-called nature into so-called culture, were of no apparent interest. Nor were the artefacts of Chinese immigrants, for example, brought to the society’s attention, despite the relatively large numbers in New South Wales by the late nineteenth century. A few examples of the continuity of objects - from geology through zoology to botany to Aboriginals - will need to stand for the dozens that could be mentioned.

In March 1887, Dr Ramsay presented some slabs of shale, some ‘interesting shells’, as well as some ‘unusual flint-flakes used by the Aborigines of Tasmania’; in August of the same year, the president displayed a ‘remarkable fairy stone’ as well as ‘a rude stone axe’ from the Lower Namoi, and Mr Palmer exhibited a fossil from Connor’s Range as well as a ‘large collection of weapons obtained from the Blacks of Port Macleay, Queensland’. This was only the first of numerous presentations by Mr E. Palmer (JP from Lawson, New South Wales) who tirelessly pursued artefacts to show the society for over 20 years. In March 1888 he presented ‘a remarkable range of native skulls’, while also professing knowledge about ‘several cases of foster-parentage among birds’. In July 1899, he exhibited ‘what seems to be very old chipping work from the north-west coast of Australia, though not to cast light on what an Aboriginal archaeology may have consisted of, but rather to illustrate the aptitude of the Blacks in fashioning spear heads’. He then showed specimens of ‘curious bird-like flowers of Ctorlalaria Cunninhamii from Western Australia’. In 1892 Mr C. Darley (a civil servant) exhibited photographs of ‘extensive aboriginal kitchen middens’ made of oyster shells from the Richmond River in Victoria, giving dimensions of their length, width and height. The seeds of the bean-tree of the MacDonald Ranges of central Australia featured in 1893 in connection with a note about Aboriginal necklaces and shields, while in 1899 the practice adopted by Murray River peoples of using clay to make mortuary caps for the dead was described to the members.

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47 These paper titles appear in the table of contents of Proceedings for the respective years.
48 Cited in minutes of members’ monthly meetings in MSS 2009/5.
49 Ibid.
50 Cited in minutes of members’ monthly meetings in MSS 2009/8.
51 Entered under ‘Exhibits and Donations’ in respective Proceedings.
There was a lively recognition of Aboriginal cultures in such accounts. The rituals, artistry, religion and material cultures of Aborigines were by no means lost on the members. What is important to bring to critical attention, however, is how the Aborigine was folded into a continuity of objects signifying stasis or fixity in nature. More precisely, the fascination with the Aborigine seemed to reside in traces of life which signified deep time, their remoteness from a European presence in Australia appearing to congeal the positioning of the Aborigine ‘in nature’. The discovery of the vast dimension of geological time in the early nineteenth century had turned the attention of the scientific community in Europe to the history of humankind\(^{52}\), and Aborigines appeared to offer living evidence of (what was assumed to be) a universal human past. Humans were, it was believed, all once hunter-gatherers. Not only that, but Aborigines seemed to hold up a window to a (what, again, was assumed to be universal) model of human development from savagery through domestication to freedom. ‘Natural man’ was the prevailing term of reference for such ‘primitives’ who had not ‘yet progressed’ to the ‘later stages’ of agriculture, sedentism, city life, government and the deployment of machinery.

There was not much discussion among members of the exhibits, or at least little was recorded. The Aboriginal artefacts seem to have stood for themselves, locking iconically into a set of images of ‘man’ in a ‘state of nature’. Some descriptions, however, relating particularly to ‘intriguing’ exhibits, were published as papers in the society Proceedings. This included descriptions of the shale flint used to slit male urethras for the purposes of fertility control. This implement - the mika-knife - attracted five papers, one published by Dr J. Cox in the Proceedings in 1881, three in 1891 and one in 1892\(^{53}\). Their principal author, Mr R. Etheridge (member and palaeontologist to the Australian Museum), was an unusually prolific publisher on forms of Aboriginal technology in the 1890s.

Come the turn of the century, the convention of juxtaposing signifiers of Aboriginality with ‘other natural objects’ was still in place. In 1900 Dr Cleland exhibited adults and larvae of mosquito from the Koscuisko Plateau; evidence of a reported nesting of white-bellied sea eagle at Middle Harbour; as well as, and alongside, an Aboriginal cooking utensil from Cronulla. From that time on, however, with the opening of the twentieth century, the practice of drawing referents of Aboriginality under the gaze of a society devoted to the study of the colony’s natural history grew much less common. Entries in the minutes of meetings concerning Aboriginals became more narrowly (and probably appropriately) confined to such subjects as the light thrown by Aboriginal relics on the environmental (and demographic) history of specific regions. With the increasing professionalization of science and compartmentalization of knowledge, the scholarly study of the Aborigine was to find an apparently more fitting institutional home in the discipline of anthropology, the first chair of which at the University of Sydney was occupied by Alfred Radcliffe Brown from 1925. In that department, the ‘races of man’ became

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objects of fresh forms of investigation and Darwinism a metaphor for the study of human societies.

**Culture versus nature and the anomalous Aborigine**

One useful and by now well-trodden path of critique of the practice of collapsing indigenous people into the study of nature would be to historicize the logic of nineteenth-century naturalists that Aborigines - in being positioned somehow closer to nature than other people - were appropriate subject-matter for their enquiry. Adopting the point of departure that race is a social construct of substantial rhetorical and practical force, it might thus be possible to critique the role of the Linnean Society of New South Wales in sanctioning premises of race difference and hierarchy. That the society implicitly contributed to the naturalization of race knowledge in the colony, denying Aboriginal people their full and complex humanity by casting in their lot with plants and insects, is doubtless the case. The paper presented by a corresponding member of the society in 1883 is a case in point. In ‘Remarks on a skull of an Aboriginal from the Lachlan District’ Baron N. de Miklouho-Maclay was at pains to point out the peculiarity of the skull’s configuration relative to ‘most human skulls’. Having calculated its ‘cephalic index’, he concluded that it was ‘the narrowest skull ever measured’, before moving on to study the skulls of Australian dugongs.

It is also possible and equally productive, however, to seek critically to enlarge the network of ideas within which members of the Linnean Society were located in the late nineteenth century. Here I refer to the older and more inclusive fellowship of European ideas relating to a nature-culture binary, one that fed racialized world-views from the sixteenth and in particular the nineteenth centuries, and which has been the focus of recent, penetrating critiques in the social sciences. Bruno Latour (1993), for example, in a powerful denunciation of the compartmentalization of knowledge built on a declared separation of culture and nature, argues that the proliferation of hybrid ‘quasi-objects’ (such as acid rain, deforestation and ozone depletion) explode such conventional polarities. He goes on to develop the more general point that ‘the very notion of Culture is an artefact created by bracketing Nature off’. What becomes separated out from culture in our science and society is a (falsely) ‘purified’ nature, Latour claims, one that then gets translated back into society through various acts of scientific mediation and the embodied knowledges of experts.

Relatedly, though from a quite different direction, some geographers have recently taken up the challenge offered by the ‘animal turn’ in the social sciences to unsettle also the antinomy of culture and nature. Their focus has been the human/non-human animal distinction. It is helpful to provide some context to this in order to further my

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54. Baron N. de Miklouho-Maclay, *Proceedings* 1884, pp. 395-400. See also his ‘On a very dolichocephalic skull of an Australian aboriginal’, ibid., pp. 401-43; and his ‘Note on the brain of Halicore Australis’, *Proceedings*, 1886, pp. 192-96. Miklouho-Maclay, the Russian explorer and scientist, had multiple interests that took him to New Guinea in the 1870s, where he studied the everyday life of the indigenous population of the island (see N. Miklouho-Maclay, *Travels to New Guinea: diaries, letters, documents* (Moscow, Progress Publishers, 1982).

55. Latour, *We have never been modern*, p. 104.

efforts to avoid subordinating the interpretation of the indigene by the Linnean Society to a hermetic problematic of race.

Post-Cartesian challenges to the boundaries that have long segregated animality and humanity have brought not only animals into more prominent view by social scientists but, more radically, the very concept of ‘human’ identity. The idea of human uniqueness has been deconstructed by philosophers and others to demonstrate its normative identification, since classical times, with the capacity for mindfulness or reason. That capacity became the defining characteristic of ‘human’ in the writings of Greek scholars (despite its openly gendered and racialized attribution). As for animals, they were by contrast seen to be locked in the grip of instinct, incapable of realizing their potential. Whereas humans (or at least Greek ones) had seen fit to transform other life forms into crops and herds and henceforth pursue a path of agency, animals were ‘stuck’ in nature. The human/animal contrast - both absolute and temporal - was thus fundamental to ancient thought. It constituted the basis, no less, for the premise that ‘culture’ or ‘civilization’ was something that had risen out of particular forms of transforming nature - an ancient sleight of hand that henceforth cast a pall of backwardness over all things consigned to the black box of nature.

The ensemble of life forms called ‘nature’ was in time further mystified by Christian ideals of its divine status and the idea that the hand of a lofty providence was at work in its design. Members of the Linnean Society certainly subscribed to such a belief; they even advanced it by cloaking an otherwise mysterious order in rational principles of classification. Indeed, for all that members clung to the conviction that the pursuit of science enabled the modern world to function without myth, without ‘fashionable faith’, in Macleay’s 1876 words, their claims to objectivity were deeply inflected with normative beliefs. Foundational among them, I have been trying to suggest, was the very premise of a culture/nature divide, one that had long since arbitrarily assigned those irrational creatures called ‘animals’ to the world of ‘nature’ and that, on the other hand, identified an (apparently) oppositional world of ‘culture’ with a distinctive form of civilization. Come the European age of so-called improvement, progress and industrialization from the late eighteenth century, the idea that ‘culture’ entailed erased nature grew still more robust. Yet as Pagden (1982) outlines in his stimulating book The fall of natural man, this concept of culture had not in actuality applied to universal culture, but to a European-derived symbolic system built on such classical ideals (mentioned earlier) as sedentism, agriculture, government and city life. Furthermore, as Adas (1989) notes in his study of western measures of human worth from the time of European overseas expansion, it was a


57 See L. Birke, Feminism, animals and science (Buckingham, Open University Press, 1994); M. Midgely, Animals and why they matter (Athens, University of Georgia Press, 1983); V. Plumwood, Feminism and the mastery of nature (London, Routledge, 1993).


cultural complex equipped with culturally specific concepts of technology and European criterion of technological proficiency.\textsuperscript{61}

Through logical default, then, the anomalous savage - human yet beyond reason, possessed of material culture yet apparently uncivilized - slipped into the residual world of nature, that collective assemblage of life forms left over and behind after civilized man set forth onwards and upwards across the earth bearing the torch of reason. It was as if the condition of primitive man, \textit{after all these years}, vindicated the ‘advance’ of ‘mind’, of ‘culture’, as distinct from beast and nature. ‘Until the arrival of the white man,’ stated the president in the Linnean Society’s annual address in 1900, ‘they were still in the stone age, and this fact alone ... evidences the entire stagnation of civilisation among them, if it is permissible in connection with their state.’\textsuperscript{62} A language of race difference was thus being folded into a much older temporal metaphor of backward versus modern, primitive versus advanced, rooted in classical notions of civilization.\textsuperscript{63} Lodged in an eternal sleep of reason - in the bedrock of geological time where the trajectory of modernity had passed them by – Aborigines thus qualified for equivalent attention to other elements of (falsely purified) nature.

My point, then, is less that the members of the Linnean Society of New South Wales were invoking racially laden ideas of innate difference and hierarchy. It seems important to note, for example, that although Aborigines were seen as primitives existing closer to nature, they were not necessarily viewed by members as ignorant savages. Recall that one president was in 1901 prepared to acknowledge that the Aborigines were Australia’s ‘first botanists’. Another member, to recall another earlier item, noted the ‘aptitude’ of indigenous people for making spears, a point expanded upon by Etheridge in 1890 when describing the ingenuity of ‘our Aborigines’ in carving stone implements for defence purposes and ceremonies.\textsuperscript{64} In 1891 he found the serrations in quartz spearheads from the Kimberly to be a ‘remarkable feat’. Etheridge’s paper on tomahawks, axes, wedges and other stone implements also noted the ‘cunning’ mix of ‘civilised’ materials, such as iron, wire and glass, with ‘aboriginal materials’ (for example wood and stone) among the ‘half-civilised’ people.\textsuperscript{65} Again, note the distinction between groups of people based on the degree and type of resource transformation - the more alienated the product from the raw material the more (somehow) ‘civilised’ the people.

\textsuperscript{61} M. Adas, \textit{Machines as the measure of men: science, technology, and ideologies of western dominance} (Ithaca, NY, Cornell University Press, 1989).


\textsuperscript{63} For an excellent discussion of this metaphor, including its relation to notions of Italy, see J. Agnew, ‘Time into space: the myth of “backward” Italy in modern Europe’, \textit{Time and Society} 5 (1996), pp. 27-45.

\textsuperscript{64} Etheridge, ‘Notes on Australian Aboriginal stone weapons and implements’ (1891), p. 254.

\textsuperscript{65} Etheridge, ‘Notes on Australian Aboriginal stone weapons and implements’ (1892), pp. 31-48. Such technological innovations have been common throughout Australia since white invasion. See R. Baker, ‘Traditional Aboriginal land use in the Borroloola region,’ in N. Williams and G. Baines, eds, \textit{Traditional ecological knowledge: wisdom for sustainable development} (Canberra, Centre for Resource and Environmental Studies, ANU), pp. 126-43.
Other members still, in describing Aboriginal practices such as burials, ‘rain-dancing’, or conventions involving body carving, cast little explicit judgement on the people they observed. Information was offered in the disinterested spirit of rational observation characteristic of empiricist science. A shining exception was Mr W. Harper, who in his 1898 paper was moved to reflect on the possibility that the Aboriginal chiselled stones under his examination were neither decorative or functional items, but rather phallic emblems. ‘It is only to be expected’, he stated, ‘that amongst a people so low in the scale of civilisation as the Australians, the male and female organs should attract a good deal of attention’66. If modernity was a constellation of knowledge and practice characterized by belief in reason and progress, then it followed that Aboriginals were stuck, not least in the vulgar grip of body, of instinct.

Just as the locus of the home had become scripted in the European cultural tradition as ‘the empire of the mother’ (from at least the eighteenth century) - so fulfilling the symbolic and practical identification of women with the private sphere67 - there is a sense in which, for the Linnean members, the Aborigine belonged to nature. Perceived through the lens of Eurocentric models of human development, the Aborigine was born a child of nature. When ‘even young’, stated Etheridge in 1893 in a note about ‘toy tomahawks’, they are ‘accomplished bushmen’. Primitive they may be, but ‘not degraded’, he claimed in 1894, in a paper on the intricate ornamentation of boomerangs from the Bulloo River in New South Wales68. As for Aboriginal women, in not being identified with the material culture of hunting and defence that as we have seen stood iconically for indigenous people (or ‘manly savages’, in the words of one member in 1896)69, they appear to have slipped almost entirely out of the society’s gaze, neither part of culture nor qualified as ‘bushmen’.

Conclusion

In this paper I have attempted in a most preliminary manner to suggest how the historiography of racial ideas might productively be supplemented with attention to some broader conceits that helped constitute them. Scientific organizations, in professing the universality of their own will to truth, have been politically potent agents in knowledge-building concerning race, nature and culture. As I have tried to show in this paper, the nineteenth-century knowledges of such organizations as the Linnean Society of New South Wales - far from being outside public culture and controversy - were very much ‘situated knowledges’ relevant to particular times, places and subject-matters, and subject to social change. Indeed, the organization is a lively example of the making of science’s ‘partial perspective’70, eliding concepts of

69 Cited in Proceedings, 1897, p. 16.
Aboriginality and nature through a range of activities and affiliations—amateur and professional—and more generally popularizing a culture/nature myth in the colony. Such is the importance of the institutions of natural history enquiry. They enable a traffic of ideas and practices between formal and informal knowledge-making sites, from (in this case) the scientific bench to the council meeting to the excursion site to the homes and cabinets of members and back into a public sphere of science. In so doing, they help constitute geographies of knowledge production, consumption and contestation. Such geographies are also structured by national boundaries. There were global exchanges with Linnean societies in other parts of the world (such as England, France and South Africa), the tracking of which might further enrich research into the institutionalization of natural-history knowledge, while simultaneously bringing to light the refractions of the nature culture binary in specific parts of the world.

This paper has been less concerned to chart the precise details of such inflections in New South Wales or, for that matter, the complex matters of intellectual history in Victorian anthropology, natural history and archaeology. Rather, it has been concerned to reflect critically on the impulse to conflate Aboriginals with nature in this setting. This impulse, I argue, grew not only out of racist ideas but also out of a distinctive notion of nature, itself as artefactual as any of the natures exhibited before the Linnean Society. Omitted were domesticated life forms and European material culture, while included in nature’s frame were non-human animals, Aboriginal societies, bodies and technology. Such presences and absences, I argue, did not so much reflect the essence of definitive natural history knowledge as the culturally specific hierarchies of civility and savagery that informed knowledge-making about race, nature and culture.

To press for recognition of the boundaries of objectivity in scientific truth claims in this way is not solely a matter of theoretical importance. The culture-nature binary was no innocent knowledge frame in Australian science and society, but an intensely politicized tool under conditions of British colonialism from the late eighteenth century. Not only did it have profound material consequences for those it empowered and marginalized, but the political and institutional reverberations of these wondrous boundary conventions are resounding up to the present day.

Acknowledgements

The author is grateful to the University of New South Wales for the grant that enabled this research to be conducted and the Council of the Linnean Society of New South Wales for granting me access to society minutes, correspondence and other archived files. The paper has been improved by the comments of Nick Gill, Peter Jackson, Anne Secord, Jim Secord and Mike Summerfield. I am also grateful to those who gave helpful responses to my talks at the Department of Geography, University of Glasgow; the Cambridge Historical Geography occasional discussion series; and the Cambridge Commonwealth and Imperial History series. I wish also to thank Laura Cameron for directing me to Simon Shapin’s (1996) *A social history of truth*. Thanks finally to two anonymous referees for their very useful suggestions for improvement, and to Julie Kesby for her assistance with data collection.