Industrial Imperialism and the Museum: A Coal Biography

*Anaïs Walsdorf**

Abstract

In the nineteenth century, coal was an invaluable resource that served as the foundation and power of British imperialism. This object biography traces the journey of a piece of coal from its primeval formation in Aoteroa New Zealand to its current home in Britain's national science collection. As it travelled through Wellington's Colonial Museum, the Vienna International Exhibition of 1873, the British metallurgist John Percy's Collection, and finally the Science Museum Group's collections, the rock took on different meanings and values. Examining the specimen's biography provides a perspective on industrial imperialism that centres museums as technologies of empire and extraction within the context of climate crisis and ongoing Indigenous struggles for land and sovereignty.

Among fields of sheep and native woodlands in Southwestern England, a repurposed World War II Royal Air Force airfield is home to over 300,000 objects that form Britain's national science collection. The Science Museum Group's National Collection Centre (NCC) in Wroughton contains an extensive range of objects covering the history of science, technology, and medicine. Among rows of museum storage shelves on the upper level of the NCC's Building ONE sits a collection that may appear unassuming at first sight: a procession of small glass bottles and unobtrusive rocks. Upon closer observation, one may catch a glimpse of ancient Indian coins, pieces of a Chinese gong, or an arsenic-laden Greek cannonball.

These are but a few of the almost 4,000 specimens that make up the John Percy metallurgical collection. Percy was a prominent British metallurgist active in the second half of the nineteenth century. His collection documents the science and practice of metallurgy, with specimens spanning thousands of years and all seven continents. It includes different types of metallic ores and products as well as other materials involved in metallurgical processes, including fuels and refractory materials for furnaces. His collection was acquired by the South Kensington Museum (now the Science Museum in London) upon Percy's death in 1889. Following its acquisition, it was described by the metallurgist W.C. Roberts-Austen as 'the most interesting of its kind in the world … no collection can compare with Dr. Percy's, either in historical importance, in scientific interest, or in educational value' (Blake 1892: xi). Indeed, much can still be gained from studying the Percy Collection today. Apart from illustrating the development of the scientific discipline of metallurgy, the specimens also act as a material archive of nineteenth century extraction. Researching the collection reveals the role of European scientists in attempting to know, control, and exploit the global subterranean. These are aptly reflected in its classification, cataloguing and display in the context of the museum (Figure 1).

Museum & Society, November 2024. 22(3) 152-61 ISSN 1479-8360

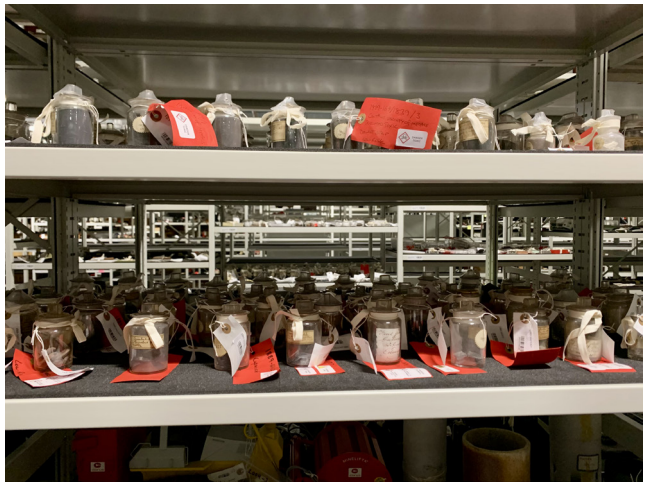

Figure 1: The John Percy Collection in the National Collections Centre. Photograph by Anaïs Walsdorf. CC BY-NC-SA 4.0.

This object biography will trace the history of specimen 288 of the John Percy Collection, a piece of bituminous coal from Aotearoa New Zealand.[1] By definition, object biographies are limited in length and scope, opening avenues for further discussion. This particular biography will follow the coal's vast geological and geographical journey from the Eocene to the present, through mines and museums in Aotearoa New Zealand, to displays at the Vienna International Exhibition of 1873, and finally, to two British scientific collections. John Percy described specimen 288 as 'homogeneous, tender and friable; lustre pitch-like, glistening; often iridescent; colour black, with a purple hue; powder, brownish; cakes strongly; the best varieties forming a vitreous coke with brilliant metallic lustre' (Figure 2) (Blake 1892: 50-1).[2] Despite the aesthetically evocative language, Percy understood the classification of 'fuels' primarily as an economic category related to productivity. Fuels were 'substances which may be burned by means of atmospheric air, with sufficient rapidity to evolve heat capable of being applied to economical purposes' (Percy 1875: 155). For Percy and most other men of science and industry of the nineteenth century, coal was the very foundation of British imperial power – from the moment of extraction, coal became an object, a commodity destined for combustion, a means to a profitable end.[3] Many of Percy's fuel specimens immediately took on the label of 'commodity' upon extraction, while their seam of origin was noted on geological maps and charts. Following the notation of their data, coals went on to be tested and categorized in laboratories, where they became scientific specimens. Then, depending on their chemical composition, they may have simply reverted to a rock with little to no value or transformed into a scientifically legitimized motivation for horizontal and vertical imperial expansion into resource-rich lands.

Specimen 288 passed through diverse social and economic contexts, transforming from subterranean organic material to colonial commodity, to a symbol of scientific dominance and a promise of wealth and power, and finally to a historical object in museum storage. The object biography as methodology reveals these distinctive interactions and transformations, providing a new perspective on industrial imperialism that centres museums as technologies of empire and extraction (Alberti 2005). As Igor Kopytoff notes, 'biographies of things can make salient what might otherwise remain obscure' (Kopytoff 1986: 67).

Figure 2: 'New Zealand coal; from the Brunner Mine, Nelson; from the exhibits of the Colonial Museum in the Vienna Exhibition, 1873', 1889-164/288 John Percy Collection, Science Museum Group.

A biography of Specimen 288 begins with its origins. Fossil fuels are so named because they are derived from the remains of flora and fauna subjected to millennia of geological processes of heat and pressure. While crude oil and gas are derived from ancient marine organisms, coal is a product of plant matter. Thirty-four million years ago, nearing the end of the Eocene Epoch, the West coast of Aotearoa New Zealand's South Island was a swampy forest of tall drooping *Casuarina* trees and spiky red, orange, and yellow nectar-filled *Banksia* wildflowers[4] (Pocknall 1989: 10). As warm Eocene days turned to years and then millennia, the plants cycled through life and death, producing strata upon strata of botanical beds. Around them, tectonic plates collided, converged, and pulled apart, land rose and fell, and cooling temperatures formed polar ice. By the time of the arrival of the first Polynesian peoples to the archipelago between the thirteenth and fourteenth centuries CE, myriad layers of dirt and rock had long settled, bearing the weight and pressure of tens of millions of years of earthly events upon this peaty crypt, transforming it into a carbon-dense seam of sedimentary rock (Walter et al. 2017).

The rough and uneven topography of the coal specimen itself reflects that of its origins in the southern foothills of the rugged Paparoa Mountain range. On 13 December 1642, Dutch explorer Abel Tasman became the first European to see the land he named *Nova Zeelandia* when he laid eyes on the peaks. Two centuries later, this subterranean bed would no longer be just another stratum in the deep history of the earth. The settler colony of New Zealand was founded in 1840 when British settlers and Māori chiefs signed the Treaty of Waitangi. The *te reo Māori*, or Māori-language version of the treaty, granted the Crown governorship over the colony and Indigenous communities their full autonomy. The English version of the document, however, ceded all Māori sovereignty to the Crown and introduced British individual property laws in direct conflict with communal Māori land rights practices.[5] The colonial ideologies embedded in the document resulted in an ongoing Indigenous struggle to regain land, self-determination, and *taonga*, or socially and culturally valuable treasures including objects, ideas, language, and natural resources (Hill 2012: 28). Thus, the colony was built on the foundation of dispossession and the displacement of Māori by White settlers

who came to 'explore' and exploit Aotearoa New Zealand.

Eight years after the treaty, four canoes meandered down the Grey River/Mawheranui on a clear summer day. Englishman Thomas Brunner had been hired by the New Zealand Land Company to travel the South Island and 'report on its resources and potentialities as a field for further settlement' (Lord 1939: 36). For his journey, Brunner had hired two Māori guides, Ekehu and Epikewate, along with their wives (Brunner 1848: 17). Ekehu, known as Hone Mokehakeha or Hone Mokekehu, had planned the route using his precise cartographic skills and extensive knowledge of the landscape (Barton 1998: 498). Māori were systematically hired as guides to accompany European travellers, often keeping them alive through navigation, hunting, and traditional medicine. On this particular day, the canoes carried a total of twenty Māori and one European, along with fishing nets and supplies. With the Paparoa mountains rising in the background, the convoy stopped on an island upon which stood an old fishing station between low black birch hills. Here, Brunner collected samples of coal from a seam that he estimated plunged fifty feet below the surface of the earth (Brunner 1848: 11). As Alberti writes, 'the prehistory of the object, its original context, changes radically when it is collected' (Alberti 2005: 562). And indeed, after months of being kept alive by Māori knowledge and skill while traversing lands he deemed 'quite worthless', Brunner had stumbled upon what would become the most productive site of colonial coal extraction in late nineteenth-century Aotearoa New Zealand (Brunner 1848: 65). In fact, when geologist Julien von Haast retraced Brunner's steps in 1860, he found that the seam would prove a source of great wealth, not only to this district, but to the colony at large:

> In a few years, I said to myself, instead of the wilderness, we shall have the dwellings of men; instead of a few birds, now its only inhabitants, we shall have a busy population of miners enlivening the country; the shriek of the locomotive will resound through its valleys, and busy life and animation will everywhere be seen. The harbor will be the resort of numerous colliers, and an active population will replace the inert savages who now occupy the *pā* ['village'] (von Haast 1861: 43).

Despite the role of Indigenous knowledge and labour in the discovery of the seam, to settler colonists it was a symbol of the triumph of European science and industrialization over the 'wilderness' and 'inert savages' of the island. In Aotearoa New Zealand, Indigenous 'wildernesses' were systematically cleared to establish pastoral landscapes that could generate wealth and reproduce an aesthetic 'neo-Europe' for settlers (Dunlap 1999: 39). This process of 'opening up' and 'clearing the country' of native plants and Indigenous people belonged to what historian James Belich describes as the 'progressive' phase of Aotearoa New Zealand's colonization in the forty years following the Treaty of Waitangi. Belich argues that this phase, representing the 'quadruple assault on nature, natives, emptiness, and distance' allowed for settler colonial expansion throughout the country through war, extractive industry, and the accelerated building of infrastructure and settlements made easier through steam ships and rails powered by the coal economy (Belich 1996: 351).[6]

The Brunner mine was opened in 1864 when the Nelson Provincial Government contracted shopkeeper Reuben Waite to procure coal for testing. A sudden gold rush in the region had created a demand for local coal sources to supply steam ships on the coast. With this in mind, Waite hired a team of Māori workers to extract the first 40 ton coal cargo from the West Coast. In the following years, coal was carried from the mine face to a wooden barge sent downriver to awaiting steamers at Greymouth (Anonymous 1867: 3). This process was later replaced by a railway. By the late 1880s, the Brunner mine was producing one-third of New Zealand's coal (Figure 3). In March 1867, Director of the New Zealand Geological Survey James Hector and his assistant Thomas Hackett arrived at the mine as part of their West Coast coal geological survey (Hector 1868a). Upon inspection, Hector deemed the coal pure and homogeneous, without 'worthless matter' such as 'stone bands [and] shales' excavated alongside it. He calculated that the mine would yield at least five million tons of coal if worked properly, and he proclaimed it very important to the future development of the colony's coal trade (Hector 1868a: 26-7).

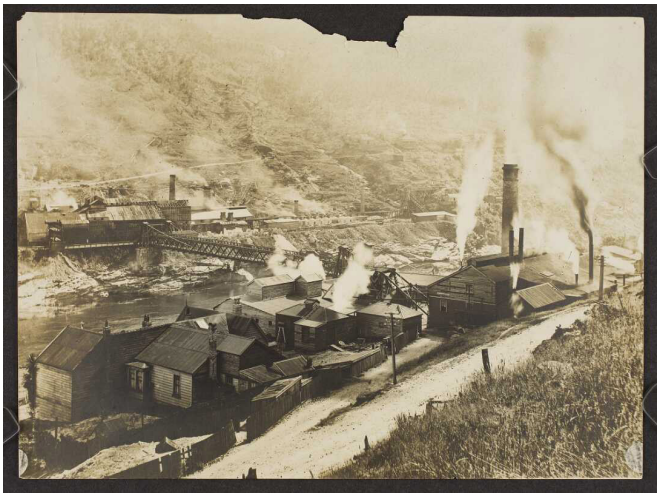

Figure 3: View of Brunner and Tyneside mines, West Coast c. 1880s. Photograph taken by Henry Yeadon. New Zealand Mines Department: Views of Brunner Mines. Ref: PA7-53-13. Alexander Turnbull Library, Wellington, New Zealand.

Hector brought specimens of Brunner coal from this trip back to the New Zealand Geological Survey's headquarters at Wellington's Colonial Museum (today the Museum of New Zealand Te Papa Tongarewa, hereafter Te Papa) (Hector 1868b). The Colonial Museum and its laboratory were built in 1865 as the scientific wings of the settler state with James Hector at the helm. He proclaimed that 'one of the most important duties in connection with the geological survey of a new country is the formation of a scientific museum' in part to '[acquire] knowledge of the resources of the Colony' (Colonial Museum 1870: iv-v). In this way, the institution became a tool of empire as the colony's hub for collecting, studying, classifying and producing scientific and economic knowledge about natural resources.

Within the museum, the Brunner coal represented both geological data and financial opportunity, as well as an ontological foundation and future for the colony. Historian Conal McCarthy writes that in the decades following conquest, museums played a large role in settler colonial nation building, putting on display the acquisition of land, flora, fauna, and alienated Indigenous culture (McCarthy 2020). The museum served as a public instrument for the dissemination of British values regarding cultural hierarchy, education, nationhood, and colonial understandings of self and other.

Alongside the museum's collections of rocks, shells, maps, zoological specimens, paper made from flax, and tables made of native woods were Māori and Moriori skulls, weapons, ornaments, clothing, and tools (Colonial Museum 1870: 231). The Geological Survey also produced maps of Māori towns and defensive settlements, interweaving land dispossession, colonial violence, and geological and economic data.[7] In the words of Māori scholar Dr. Moana Jackson, museums are 'dangerous places because they control the storytelling'; they are the 'namers of names' that define and confine knowledge.[8] In the Colonial Museum, scientific, ethnographic, and military knowledge were created simultaneously, reflecting and reinforcing European settler power over land and people – and when the occasion to present these to the world arose in 1873, Hector seized the opportunity.

Nineteenth-century international exhibitions were showcases for the resources of empire. Empires and colonies displayed commodities and culture in an effort to bolster economic and political power. They were spaces in which ideas of nationalism, imperialism, progress and modernity were built and contested (Hoffenberg 2001). Specifically, James Hector saw the Vienna Exhibition of 1873 as a rich opportunity to promote New Zealand's

exports and encourage White European immigration to the settler colony (McCarthy 2008: 57). As Commissioner, Hector took charge of exhibition selection, transport, display, and promotion. A photograph of the group that prepared New Zealand's Vienna display shows eleven European men, including Hector and von Haast, as active economic and cultural agents, exhibiting and peddling passive and objectified Māori culture and resources (Figure 4). Their exhibition included gold and minerals, fossils, coals, timbers, flax products, wools, a moa skeleton, seeds, leaves, furniture, art, photographs, geological maps, and Māori objects.[9] Carefully arranged in the Colonial Museum's portion of the display were five 'type specimens illustrating the classification of New Zealand Coals' (Royal Commission 1874). The coal specimen collected by Hector from Brunner Mine took on the role of representing a sample of 'bituminous coal (caking)' (Royal Commission 1874: 306). Igor Kopytoff notes that commodities can become 'singularized' by being pulled out of their usual sphere and given an individual significance (Kopytoff 1986: 74). Through its displacement from the earth – from the dark pit, to the Colonial Museum, then to Vienna – the singularized specimen's economic significance increased as it came to represent the growing colony's expanding opportunities for power and wealth in the eyes of coal-fuelled European industrial empires.

Figure 4: Group preparing for the Vienna Exhibition alongside a display of Māori artefacts from the Colonial Museum. James Hector is fourth from the left, and Julius von Haast stands on the far right. Photographed by Alfred Charles Barker, 1872 or 1873. Ref: PA1-q-166-052. Alexander Turnbull Library, Wellington, New Zealand.

New Zealand's display at the Vienna Exhibition was a big success, with an estimated two and a half to three million visitors.[10] As the exhibition came to a close in November 1873, specimens that were not sold on site were either returned to New Zealand or packed and sent to London where they would be marketed to public and private specialists.[11] In London, the coal specimen from the Brunner mine entered into the possession of prolific collector John Percy. Alongside three other coal specimens 'from the exhibits of the Colonial Museum in the Vienna Exhibition', the Brunner coal was subsumed into Percy's metallurgical collection, which he used as a tool for research, teaching and producing scientific knowledge (Blake 1892: 51). As head of the metallurgical laboratory at the Museum of Practical Geology, Percy was responsible for analyzing the quality of coals of the British Empire, including assaying coals sent by the Admiralty as well as those in his private collection. His 1875 volume of *Metallurgy:*

The Art of Extracting Metals from their Ores contained over 150 analyses of British and foreign coals. It documented 'the occurrence of mineral fuel in various parts of the world, with a view to the possibility of introducing metallurgical operations there with reasonable hope of success' (Percy 1875: Preface). Percy's analyses went on to scientifically inform extractive colonialism for private and state actors in coal-producing regions worldwide.

The Percy Collection was purchased by the South Kensington Museum (now Science Museum) upon his death in 1889, catalogued, then put on display until the late 1920s.[12] Since then, select specimens have been displayed temporarily, but the collection has largely remained in storage. Despite its importance as an archive of nineteenth-century metallurgical science and geographies of extraction, academic and public engagement with the collection has remained limited. Specimen 288 now lives accessioned, catalogued, and labelled as a historical object in Britain's national science collection.

While Europeans imposed their colonial perspectives on the Brunner specimen, significance and meanings of objects can change depending on the viewer (Alberti 2005: 568). Despite Specimen 288's seemingly frictionless history of colonial commodity circulation, settler control of land and resources always has, and continues to face resistance. In 1989, the Court of Appeal in *Tainui Māori Trust Board v Attorney-General* ruled that coal could be considered a form of *taonga*, or treasure, and acknowledged that Māori had used coal before 1840. This case gave coal resources limited protection as a form of *taonga* and recommended Tainui entitlement to coal resources under the treaty. However, land rights remain a key issue in Indigenous struggles in Aotearoa New Zealand and globally, and museums are held more and more accountable as bastions of public knowledge and national narrative. In December 2023, protesters vandalized a large copy of the English version of the Treaty of Waitangi in an exhibition at the Colonial Museum's successor Te Papa, claiming that it misled visitors, leading them to believe that Māori sovereignty was legally ceded to the Crown. Among calls to centre the *te reo Māori* Treaty instead, one protester said that 'perpetuating these lies, the destruction of Indigenous communities, that is what is destroying our planet'.[13] Indeed, in the era of continued land dispossession and climate crisis, the long history of industrial imperialism and fossil fuels in museums remains a pertinent issue.

Just as James Hector's Colonial Museum played a part in the ontological and economic foundations of the settler state of New Zealand, twenty-first century museums continue to play a role in the cultural and ideological legitimization of the fossil fuel economy (Mahony 2017; Sharp 2022). The current custodian of the John Percy Collection, the Science Museum Group, has been the target of campaigns by activist groups such as Culture Unstained for its continued sponsorship by fossil fuel companies.[14] Most recently, the museum has been accused by activists of greenwashing for its sponsorship by Adani Green Energy, which is part of the Adani Group, a multinational conglomerate that also includes companies involved in coal mining. In a 2021 open letter to the Science Museum, representatives of Indigenous communities from India, the Pacific, Indonesia, and Australia accused the museum of complicity in Adani's violation of Indigenous rights through 'land-grabs, repression, the destruction of sacred lands, pollution of air, land and water and, of course, the worsening impacts of climate change exacerbated by burning coal'.[15] As Andreas Malm and Alf Hornborg argue, the origins of the modern fossil fuel economy lie in rationales of nineteenth-century European economies of slavery and colonialism (Malm and Hornborg 2014). The biography of specimen 288 helps reveal that the history and present of fossil fuels and Indigenous land rights are inextricable and remain a foundational element of power in museums from Wellington to London.

To close this biography, in 1896 the Brunner Mine was the site of Aotearoa New Zealand's deadliest mining disaster when an explosion killed 65 men and boys.[16] Ten years later, the site was permanently closed. Today, Percy's coal specimen may be one of the last remaining specimens left from the Brunner Mine, its selection having saved it from combustion. However, sociologist Kevin Hetherington argues that disposal of objects is never complete – they leave traces, and their absences continue to play social roles (Hetherington 2004). All objects, in this way, are much like coal – the Brunner coal burned in the nineteenth century still lingers in our atmosphere, haunting the twenty-first century as a ghost of exploited land and labour.

Acknowledgements

I am grateful to my supervisors, James Poskett and Katayoun Shafiee at the University of Warwick and Richard Dunn and Ben Russell at the Science Museum, for their continuous support and feedback on all of my work. I would also like to thank the three anonymous peer reviewers, my fellow contributors Livia Cahn and Annemarie De Wildt, and the guest editors of this special issue for their valuable and thoughtful comments in the development of this article.

Funding

This research was funded by a Collaborative Doctoral Award from the Arts and Humanities Research Council (grant number AH/X003159/1).

Notes

1 In this article, I will use the name 'Aotearoa New Zealand' to refer to the geographic landmass and nation and the name 'New Zealand' when referring to the settler colony and specific historical occurrences, titles, and events.

2 Although coal is not a mineral, it occupies adjacent and overlapping historical spaces in the context of nineteenth-century colonial surveying, extraction, valuing, and collecting.

3 For a discussion on fossil fuels and how they relate to gender and power, see Daggett (2018).

4 Banksia are named for English naturalist Sir Joseph Banks, the first European to collect specimens of the flowers while on James Cook's initial Pacific voyage.

5 Māori land is held in kinship groups who think in terms of people 'belonging to' the land in contrast to European concepts of private land ownership. The English version of the 1840 Treaty of Waitangi combined British understandings of private land ownership with colonial ideologies of racism, expropriation, expansion, and settlement, leading to large scale land confiscations and wars to suppress Māori anti-colonial resistance in the following decades.

6 European colonial narratives routinely described colonized lands as 'empty' to justify White settlement, environmental transformation and capital expansion. This narrative tool was also used to uphold the fiction that colonized land did not hold any social value for Indigenous communities.

7 'Sections of Taurangaika Pa, West Coast', Museum of New Zealand Te Papa Tongarewa Collections. https://collections.tepapa.govt.nz/object/34999, accessed 22 January 2024.

8 Puawai Cairns, '"Museums are Dangerous Places" – Challenging History', Museum of New Zealand Te Papa Tongarewa blog 2018. https://blog.tepapa.govt.nz/2018/10/19/museums-are-dangerous-places-challenging-history/, accessed 22 January 2024.

9 The Moa was a flightless bird endemic to Aotearoa New Zealand. It is believed to have gone extinct in 1445 due to hunting and habitat loss.

10 Phillips Bevan, Agent of the Australian and New Zealand Commission, 3 December 1873, quoted in 'The Vienna Exhibition, (Papers relative to).' Appendix to the Journals of the House of Representatives, 1874 session I, H-07.

11 Isaac Earl Featherston, Agent-General for New Zealand and Commissioner for the Vienna Exhibition, 17 October 1873, quoted in 'The Vienna Exhibition, (Papers relative to).' Appendix to the Journals of the House of Representatives, 1874 session I, H-07.

12 Science Museum, file number 2002/00/51.

[13] Vita Molyneux and James Perry, 'Protestors Abseil Inside Te Papa, Deface Treaty of Waitangi Exhibition', Te Ao Māori News 2023. https://www.teaonews.co.nz/2023/12/11/protestors-abseil-inside-te-papa-deface-treaty-of-waitangi-exhibition/, accessed 22 January 2024.

[14] 'Science Museum Group's Partnerships with Adani, Shell, BP & Equinor', Culture Unstained 2023. https://cultureunstained.org/sciencemuseum/, accessed 22 January 2024.

[15] Adrian Burragubba, Phillip Kujur, Siti Maimunah, and Joseph Zane Sikulu to Science Museum Senior Leadership Team and Board, open letter, 1 December 2021. https://cultureunstained.files.wordpress.com/2021/11/letter-on-indigenous-rights-to-science-museum-1.pdf, accessed 26 January 2024.

[16] Alan Sherwood and Jock Phillips, 'Coal and Coal Mining – Mining Accidents', Te Ara – the Encyclopedia of New Zealand 2021. http://www.TeAra.govt.nz/en/speech/7453/brunner-mine-disaster-1896, accessed 17 May 2024.

References

Alberti, S. (2005) 'Objects and the Museum', *Isis*, 96 (4) 559-71.

Anonymous (1867) 'The Geological Survey of the West Coast. – Grey District', *Nelson Examiner And New Zealand Chronicle*, 11 April, 3.

Barton, P. (1998) 'Māori Cartography and the European Encounter', in David Woodward and G. Malcolm Lewis (eds) *Cartography in the Traditional African, American, Arctic, Australian, and Pacific Societies*, 493-532, Chicago: University of Chicago Press.

Belich, J. (1996) *Making Peoples: A History of the New Zealanders from Polynesian Settlement to the End of the Nineteenth Century*, Auckland: Lane.

Blake, J. (1892) *Catalogue of the Percy Collection of Metallurgy in the South Kensington Museum*, London: Eyre and Spottiswoode.

Brunner, T. (1848) *Journal of an Expedition to Explore the Interior of the Middle Island of New Zealand*, Nelson: Charles Elliott.

Colonial Museum (1870) *Catalogue of the Colonial Museum, Wellington, New Zealand*, Wellington: Colonial Museum.

Daggett, C. (2018) 'Petro-masculinity: Fossil Fuels and Authoritarian Desire', *Millennium*, 47 (1) 25-44.

Dunlap, T.R. (1999) *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand*, Cambridge and New York: Cambridge University Press.

Hector, J. (1868a) *Abstract Report on the Progress of the Geological Survey of New Zealand during 1866-67*, Wellington: G. Didsbury, Government Printer.

(1868b) *Third Annual Report on the Colonial Museum and Laboratory: Together with a Report of the Results of the Analyses of Soils from Various Parts of the Colony*, Wellington: Colonial Museum.

Hetherington, K. (2004) 'Secondhandedness: Consumption, Disposal, and Absent Presence', *Environment and Planning D: Society and Space,* 22 (1) 157-73.

Hill, R. (2012) 'People, Land and the Struggle for *Rangatiratanga*/ Autonomy in New Zealand', *Identities: Global Studies in Culture and Power*, 19 (1) 26-42.

Hoffenberg, P. (2001) *An Empire on Display: English, Indian and Australian Exhibitions from the Crystal Palace to the Great War*, Berkeley: University of California Press.

Kopytoff, I. (1986) 'The Cultural Biography of Things: Commoditization as Process', in Arjun Appadurai (ed) *The Social Life of Things: Commodities in Cultural Perspective*, 64-91, Cambridge: Cambridge University Press.

Lord, E. (1939) *Old Westland: A Story of the Golden West Coast of the South Island of New Zealand Known to the Maori as Te Wai Pounamu (The Waters (or place) of Greenstone)*, Auckland: Whitcombe and Tombs Limited.

Mahony, E. (2017) 'Opening Spaces of Resistance in the Corporatized Cultural Institution: Liberate Tate and the Art Not Oil Coalition', *Museum and Society*, 15 (2) 126-41.

Malm, A. and Hornborg, A. (2014) 'The Geology of Mankind? A Critique of the Anthropocene Narrative', *The Anthropocene Review*, 1 (1) 62-9.

McCarthy, C. (2008) 'Displaying Natural History: Colonial Museum', in Simon Nathan, Mary Varnham and Peter Hector (eds) *The Amazing World of James Hector: Explorer, Doctor, Geologist, Botanist, Natural Historian, and One of New Zealand's Most Remarkable Figures*, 49-61, Wellington: Awa Press.

(2020) 'From Histories of Museums to Museum History: Approaches to Historicising Colonial Museums in Aotearoa New Zealand', *Museum History Journal*, 13 (1) 95-110.

Percy, J. (1875) *Metallurgy: The Art of Extracting Metals from their Ores*, London: John Murray, Albemarle Street.

Pocknall, D. (1989) 'Late Eocene to Early Miocene Vegetation and Climate History of New Zealand', *Journal of the Royal Society of New Zealand*, 19 (1) 1-18.

Royal Commission for the Vienna Universal Exhibition of 1873 (1874) *Reports on the Vienna Universal Exhibition of 1873*, London: HMSO.

Sharp, C. (2022) '"Shell is proud to present…The Spirit Sings": Museum Sponsorship and Public Relations in Oil Country', *Museum and Society*, 20 (2) 172-89.

von Haast, J. (1861) *Report of a Topographical and Geological Exploration of the Western Districts of the Nelson Province, New Zealand*, Nelson: C. and J. Elliot.

Walter, R., Buckley, H., Jacomb, C. and Matisoo-Smith, E. (2017) 'Mass Migration and the Polynesian Settlement of New Zealand', *Journal of World Prehistory*, 30 351-76.

***Anaïs Walsdorf** is an AHRC-funded Collaborative Doctoral Partnership PhD researcher between the History department at the University of Warwick and the Science Museum in London. Her thesis, Metallic Empire: Science, Energy, and Industrial Imperialism in the John Percy Collection, 1817–89, focuses on the metallurgical collection of John Percy, and explores histories of colonial extraction, collecting, metallurgy, and nineteenth century industrial imperialism. She has also worked as a museum, library, and archive professional with institutions such as the 1947 Partition Archive, Wellcome Collection and Library, the Migration Museum, and the International Coalition of Sites of Conscience (ICSC).