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From Convicts to Colonists: the Health of Prisoners and the Voyage to Australia, 1823 – 1853

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Abstract

From 1815, naval surgeons accompanied all convict voyages from Britain and Ireland to the Australian colonies. As their authority grew, naval surgeons on convict ships increasingly used their medical observations about the health of convicts to make pointed and sustained criticisms of British penal reforms. Beyond their authority at sea, surgeons' journals and correspondence brought debates about penal reform in Britain into direct conversation with debates about colonial transportation. In the 1830s, naval surgeons' claims brought them into direct conflict with their medical colleagues on land, as well as with the colonial governor, George Arthur. As the surgeons continued their attempts to combat scurvy, their rhetoric changed. By the late 1840s, as convicts' bodies betrayed the disturbing effects of separate confinement as they boarded the convict ships, surgeons could argue convincingly that the voyage itself was a space that could medically, physically, and spiritually reform convicts. By the mid 1840s, surgeons took the role of key arbiters of convicts' potential contribution to the Australian colonies.

'Prisoners', Dr Browning wrote from the convict ship *Hashemy* anchored off the English south coast in December 1848,

when embarked from the cells in which they have long been solitarily confined are liable for several days after their embarkation to be affected with *syncope* and *convulsions*, sometimes *hysterical*, sometimes *epileptic*, or resembling those of epilepsy... *One, two, three, & even sometimes four* at one time were carried out of the prison, and laid on the deck under the influence of the affections just specified...¹

Colin Arrott Browning was an experienced naval surgeon whose superintendence of the *Hashemy* was his ninth voyage to the Australian colonies. Later, Browning recalled that he had never before witnessed these 'violent, and indeed alarming nervous affections'; as the convicts boarded the ship the convulsions had affected at least fifty of the men. For three days and nights, Browning wrote, 'the shrill convulsive shrieks of the sufferers' were 'most painfully heard in every part of the *Hashemy*'.² He believed that the cause of such afflictions was 'the *suddenness* and *extent* involved in the change of the embarkation of the prisoners from their solitary cells', particularly those who had been imprisoned in Pentonville.³ Moreover, Browning observed a causal chain of illness. 'These affections were followed by griping pains in the bowels, then came diarrhoea, then cholera', he wrote. The crew raised the *Hashemy's* anchor on 8 February 1849, by which time Browning had dealt with 193 cases of cholera, and fourteen of the prisoners had died. In his medical journal, submitted to the Governor of New South Wales and the Admiralty at the end of the

¹Colin Arrott Browning to William Burnett, 13 December 1848, Correspondence regarding sickness on convict and emigrant ships (1836 – 1851), ADM 105/36. The National Archives, London (TNA).

²Browning, *The Convict Ship*, 336.

³Browning to Burnett, 13 December 1848, TNA ADM 105/36. (Emphasis in original).

Hashemy's voyage, Browning described the 'absolute incapacity' of some of the convicts, 'to render themselves useful to the community either at home or in the colonies'.⁴

Important works such as A.G.L. Shaw's *Convicts and the Colonies*, Stephen Nicholas' edited volume *Convict Workers*, Deborah Oxley's *Convict Maids* and Kirsty Reid's recent *Gender, Crime and Empire* have emphasised the dual identity of convicts as both British rejects and a vital colonial labour force. Since the 1980s, revisionist work has asserted male and female convicts' contributions to Australian economic, political and social development, at the same time as it has highlighted their place in wider systems of imperial migration and confinement.⁵ Yet, in extant studies of the British convict transportation system, careful studies of the voyage remain conspicuous by their absence. There has been some detailed attention to the gender dynamics of female convict ships, but the only substantial study of convict voyages remains Bateson's *The Convict Ships*, now over half a century old. Moreover, historians have done little to seriously challenge Charles Bateson's assertion that convict ship surgeons were the inexperienced and drunken dregs of the medical profession, or to investigate the broader implications of their increasing authority beyond the confines of the ship.⁶ This is perhaps more surprising, given historians' methodologically sophisticated attention to military and penal medicine in other colonial contexts.⁷

I

This article argues that between the 1830s and 1850s, naval surgeons on convict ships used their medical observations to carve themselves an important niche as astute and ardent critics of British penal reforms and increasingly argued that the space and time of the voyage itself could accommodate the competing priorities of metropole and colony. Time at sea became a space that could medically, physically, and spiritually reform convicts. Perhaps most importantly, this article will show how naval surgeons' claims, and their increasing confidence, were achieved not by working alongside their medical colleagues in British prisons, but often in conflict with them. This is important because although scholars in other contexts have identified tensions within colonial regimes with regard to convicts' health, they have also depicted a united medical profession, working as a 'discipline' to ensure that prisoners were healthy enough to undertake voyages of transportation.⁸ By integrating the Australian voyage into historical discussions about the intersections among medicine, colonialism and punishment, this article helps advance our understanding of the 'medicalization of punishment' in the nineteenth century.

From 1615, the English Government transported convicts overseas as a commutation of capital punishment. In 1718, the Transportation Act made a sentence of transportation a secondary punishment in its own right, along with hard labour and incarceration in a house of correction.⁹ The British government first sent convicts to New South Wales in 1787, after the War of Independence had ended the possibility of banishing them to the American colonies. Between 1787 and 1868, the government transported 160,000 men and women from Britain and Ireland to the Australian colonies. The greatest numbers sailed during the 1820s and 1830s; in this period around one-third of assize or quarter sessions sentences resulted in an order that the felon be transported, or that a death sentence be commuted to transportation. Of these, between two-thirds and three-quarters actually made the voyage to

⁴Colin Arrott Browning, Surgeon's Journal on *Hashemy*, General Remarks, TNA ADM 101/32/5.

⁵Nicholas, *Convict Workers*; Duffield and Bradley, *Representing Convicts*; Oxley, *Convict Maids*; Reid, *Gender, Crime and Empire*; Meredith and Oxley, 'Contracting Convicts'.

⁶Bateson, *The Convict Ships*; Humphery, 'A New Era of Existence'; Brooke and Brandon, *Bound for Botany Bay*.

⁷Levine, *Prostitution, Race and Politics*; Arnold, *Colonizing the Body*; Sen, *Disciplining Punishment*; Peers, 'Colonial Knowledge'.

⁸Sen, *Disciplining Punishment*, 134-5; Hardy, 'The Development of the Prison Medical Service'.

⁹For the early history of transportation to America see Smith, *Colonists in Bondage*, in particular Ch 5. & 6.

Australia. During the 1830s around 43,000 male and 7,750 female transportees made the voyage from Britain and Ireland to Australia.¹⁰ From 1815, after William Redfern's damning report into the state of convicts arriving in Australia, the Naval Transport Board assigned a qualified naval surgeon to every convict ship departing Britain and Ireland for Australia. Over the following decades, the surgeon's moral and medical authority increased to encompass all aspects of the convicts' discipline and care.¹¹

Convicts embarked onto convict ships from prisons and coastal hulks. On being told that a transport was ready to take prisoners, the prison surgeon selected the prisoners he considered fit for the voyage before submitting them to the convict ship surgeon's inspection. Often, the naval surgeon would reject men, women and children who appeared unwell, frail or elderly. These were tense moments for the convicts, but also for the surgeons who faced each other across the prison courtyards and hulk decks. In 1830, one ship surgeon complained of the impossibility of picking out every case of sickness as convicts lined up before their embarkation:

The examination of the convicts ... is very unsatisfactory, for the men being anxious to get away, and the surgeon equally anxious to get rid of bad or troublesome cases, both the parties from whom the naval surgeon expects to receive information are interested to conceal any symptom of disease. Many therefore were approved who ought never to have been brought forward for examination, and even some of those I had rejected were embarked – a piece of ingenuity not found out until too late to be remedied.¹²

While hulk and prison surgeons on land served their own interests by attempting to rid themselves of chronically sick convicts, or by hiding cases of serious disease, convict ship surgeons had to ensure that the convicts they accepted could withstand the voyage in order to receive their pay for the voyage and passage home. Simmering tensions between members of the medical profession erupted when the *Lord Lyndoch* arrived in Van Diemen's Land on 20 August 1836. The passage had been relatively quick, taking just under four months, there had been five deaths and 138 cases of illness out of 330 prisoners. Many had been cases of scurvy but discussions focused on two cases of consumption.

George Arthur, Lieutenant Governor of Van Diemen's Land (1824 – 1836) was a rigorous defender and promoter of the transportation system. In particular, the 'morally austere, resolutely independent and discipline orientated' governor had assumed personal responsibility for the assignment system.¹³ Under his watchful eye, the penal system became a 'sophisticated and wide-ranging enterprise that could punish, reward and, if necessary, brutalise'.¹⁴ In a society that so fundamentally relied on assigning convict labour, the chronically ill could play no part, and Arthur also wielded his personal authority beyond the colony, to the voyage.

On receiving surgeon James Lawrence's journal from the *Lord Lyndoch* just two months before his governorship ended, Arthur stated that the deaths of James Smith and George Manders had been 'inevitable under any circumstances', and it angered him that sick prisoners 'should be embarked and placed in a situation only likely to add to and aggravate their suffering and misery'.¹⁵ Even as the ship lay at anchor off the English south coast,

¹⁰Shaw, *Convicts and the Colonies*, 148.

¹¹Humphrey, 'A New Era of Existence', 63.

¹²George Fairfowl, Surgeon's Journal on convict ship *Andromeda* from Cork (1830), General Remarks, TNA ADM 101/2/6.

¹³Reid, *Gender, Crime and Empire*, 83-84.

¹⁴Boyce, *Van Diemen's Land*, 162.

¹⁵Report of Board of Medical Officers of Van Diemen's Land into Sickness onboard the *Lord Lyndoch* (undated, 1837), TNA ADM 105/36.

Smith had complained of 'frequent purging attended with griping pains'; Manders also told the surgeon that he had been 'in delicate health' for two years. '[H]e was in the hospital all the time he was in Chatham'.¹⁶ Colin Arrott Browning (who would later act as surgeon-superintendent on the cholera-struck *Hashemy*) enquired into the case of the *Lord Lyndoch* for the Admiralty. 'There is, on the part of the officers of the Hulks, whose business it is to bring forward the Prisoner for inspection with a view to embarkation, a disposition to impose upon the Surgeon of the Transport, men in a state of health, which renders them quite unfit for the voyage', he wrote. In addition to the two cases of consumption, Browning pointed out that 'two of Mr Lawrence's worst cases of scurvy had for their subjects, toothless worn out old men'. Others, too, 'appeared to be of a delicate habit of body'.¹⁷

Andrew Robertson, the surgeon of the *Fortitude* hulk at Chatham, took the accusations personally, and emphatically denied that he had embarked any prisoner direct from his hospital to the *Lord Lyndoch*. He argued that Governor Arthur's proposal not to allow any prisoners who previously laboured under disease to be exposed to the hardship of the Australian voyage would 'in a short period render the hulks at home floating hospitals, for there are numerous Chronic Diseases which affect the constitution but which will not prevent the prisoner from being landed safe at any of the Colonies'.¹⁸ Robertson's willingness to send the chronically sick to sea was not unusually callous. As he reminded the Admiralty, their own instructions to surgeons stated that the criterion for selecting convicts was only whether the voyage was likely to 'destroy' life. Robertson's belief that colonial concerns should play no part in how he should decide whom to send to the transport ship, thus reflected the government's own policy; the voyage revealed how the priorities of prison authorities and colony conflicted in policy and practice.

Surgeons' complaints about deception and ingenuity during embarkation echoed a recurring theme in contemporary complaints about the convict system: the suspicion that convicts might actually want to be transported. Thomas Galloway, an experienced surgeon, told the Molesworth committee that since his first voyage in 1832 convicts had begun to 'get themselves into scrapes for the purpose of being transported'.¹⁹ A convict's account also describes a hulk surgeon's repeated attempts to get rid of a sick convict, and the willingness of another man to take his place. In September 1839, while John Ward was on the convict hulk *York*, 'a ship came to take 240 men'. Although nine ships had come since Ward arrived on the *York*, this was the first time he had been mustered for inspection. Yet, he recalled that the ship's Doctor pulled him by the elbow saying 'I cannot take a man like this'. At the time, Ward had been suffering from a severe cough, 'and so I was sent forward to change clothes with another man who was glad enough to go in my stead.' Ward believed that his illness was consumption, but he was again mustered two months later, and was this time allowed to embark the *Mangles*.²⁰ In the Andaman islands and in Australia, historians have argued that 'medical officers came increasingly to function as detectives engaged in a game of political hide and seek with convicts, who had their health, i.e. their ability to work to hide'.²¹ Here, by contrast, the surgeons who inspected Ward played hide and seek with men who hid their *sickness*, rather than their health. More frustrating, was the willingness of other medical officers to also play these games.

¹⁶James Lawrence, Surgeon's Journal on convict ship *Lord Lyndoch*, (1836). Case 3, James Smith, 20 April 1836, TNA ADM 101/44/3.

¹⁷Colin Arrott Browning to John Montague regarding the report into the sickness on board *Lord Lyndoch*, 21 Sept 1836, TNA ADM 105/36, (emphasis in original).

¹⁸Andrew Robertson, Letter regarding sickness on the *Lord Lyndoch*, 27 April 1837, TNA ADM 105/36.

¹⁹Evidence of Thomas Galloway, 'Report from the Select Committee on Transportation' *Parliamentary Papers* 1837 [518] xix, 183.

²⁰Diary of John Ward including voyage to Sydney on convict ship *Mangles* (1841 – 1842), entry dated September 1839. National Library of Australia, Canberra (NLA), MS3275

²¹Sen, *Disciplining Punishment*, 150; Nichol, 'Malingering'.

Just two years after the heated exchange with Arthur over consumptive convicts, and in the immediate wake of the Molesworth Committee's reports, the *Lord Lyndoch* again became the centre of an argument about convicts' health, this time in Sydney. If surgeons found the early stages of consumption difficult to identify on a cursory inspection, incipient scurvy was worse. On his arrival in New South Wales in 1838, the convict ship surgeon Obadiah Pineo explained that scurvy had appeared in 'a very aggravated form' among the male convicts on the *Lord Lyndoch* after the ship had rounded the southern tip of Africa. Pineo described how scurvy had concealed itself behind the convicts' appearance of wellbeing. 'Even when the disease was most general, you could not perceive any symptoms of ill health'. Pineo appears to have been happy to let the *Lord Lyndoch*'s crew take full advantage of favourable winds as they left the southern Atlantic and turned eastwards into the southern oceans; he had missed the vital opportunity of putting in at the Cape of Good Hope for replenishment and recuperation. As he completed the 'General Remarks' section of his voyage journal, Pineo lamented that he had not persuaded the Captain to steer for the southern tip of Africa. Nevertheless, he maintained that there had not been sufficient cause to warrant a change in the ship's course. Pineo had 'gone two preceding voyages without calling anywhere & without the loss of a person, of any discomfiture whatever. I had hoped to have been equally fortunate in this, but in that I was deceived. It has been a source of much regret ever since'. Scurvy deceived Pineo. It had also fooled the free passengers on board the *Lord Lyndoch*. They too, Pineo said, had remarked 'how uncommonly healthy the prisoners appeared'.²²

On arrival, Pineo sent 113 sick prisoners to the Colonial Hospital and a colonial Medical Board was summoned to enquire into the reasons for sickness. With his journal and professional reputation subjected to the governor's scrutiny, Pineo wrote to William Burnett, Physician-General to the Admiralty, maintaining that he had done no wrong. Pineo re-emphasised that the prisoners' external appearance on their embarkation had not allowed him to comprehend the underlying physical state of the convicts' bodies. 'I could not think it possible that any epidemic could reach them after the Cape of Good Hope... Nor do I believe at this moment had I touched at the Cape of Good Hope, we should have saved one life... It could have only *saved appearances*'.²³ Critics of transportation argued that the system degraded and brutalised convicts, and depended upon punishments that were 'irrational and extreme'.²⁴ Thomas Galloway had testified to the Committee that he was sure that convicts were in worse health at the end of the voyage than at the beginning.²⁵ The scurvy on the *Lord Lyndoch* was extreme, but Pineo was not alone. Even as the second of the Molesworth Committee's reports made a rare concession that precautions against disease had remedied the 'the physical evils of the long voyage' scurvy developed in virtually every convict ship that arrived in the Australian colonies in 1838.²⁶ If, as the Molesworth Committee believed, 'idleness' during the voyage had 'a demoralising effect', and if transportation as a whole seemed to keep British colonial society mired in the cruelty of slavery, the continuing scourge of scurvy did the system's supporters no favours.

As he tried to account for the outbreak of scurvy, Pineo described the typical rigours of the convict ship regime:

the prisons were kept dry, clean and well fumigated with hot vinegar, or sprinkled with cold vinegar and the solution of chloride of lime, alternatively every day of the week...The provisions and comforts for the prisoners were of excellent quality. ... I

²²Obadiah Pineo, Surgeon's Journal on convict ship *Lord Lyndoch* (1838), General Remarks, TNA ADM 101/44/4.

²³Obadiah Pineo to William Burnett, 15 September 1838, TNA ADM 105/36 (emphasis in original).

²⁴Reid, *Gender, Crime and Empire*, 167-9.

²⁵Evidence of Thomas Galloway, surgeon R.N. 'Report from the Select Committee' (1837), 189.

²⁶'Report from the Select Committee' (1837-8), iv; Staniforth, 'Deficiency Disorder', 126.

began the general use of lemon juice and sugar shortly after leaving England, and wine some time afterwards.²⁷

Yet, these usual routines and medical comforts had failed and Pineo remained confused by such a widespread occurrence of disease. Perhaps, because the convicts 'were all from the country', the men had 'suffered considerably from the excessive cold of the preceding winter'; Pineo attributed disease to 'a peculiar diathesis, or constitutional temperament of a great portion of these people'. The British winter of 1837 had been especially harsh, but Pineo had another theory; he also believed that the convicts' change from 'the plentiful exercise and restricted diet' of the English hulks to the 'generous diet and abridged exercise' of the ship had triggered disease.²⁸

The New Poor Law of 1834 most clearly enshrined the utilitarian principle of 'less-eligibility', but prison authorities had already been steadily reducing the dietary scales in Britain and Ireland from the 1820s. In 1829, a convict ship surgeon named Charles Cameron had observed that the convicts on his ship en route to Australia had begun to suffer in the tropical Atlantic from a disease that took the same characteristics as something he described interchangeably as scurvy and 'the Millbank disease'.²⁹ Millbank had opened in 1816 as the first national convict prison. The episode in 1823, when a disease, apparently the same as 'that which is known by the name of sea scurvy', caused an epidemic in the prison has played a leading role in nineteenth-century prison history, and needs no repetition here.³⁰ It is significant to this story, however, because it illustrates how quickly the naval surgeons' understanding of scurvy had shifted since the late eighteenth century.

Scurvy had long been the maritime surgeon's nemesis; during the eighteenth century naval surgeons and ships' captains had insisted that disciplining sailors' minds, bodies, and the interior spaces of the ship was the key to curing maritime diseases such as scurvy.³¹ The Admiralty authorised the regular issue of lemon juice in 1795. In 1822, Gilbert Blane could write that the 'medical art' had cured scurvy, and saved Britain in the Napoleonic wars. By the 1840s, it became possible to declare that a surgeon had 'never seen scurvy in the Navy before, so completely have modern discoveries and improvements eradicated that naval scourge'.³² The physical layout of the surgeons' printed journals had also 'eradicated' scurvy. Naval surgeons now had to write scurvy into their journals with their own pens, as it no longer appeared in the nosological table of diseases in which surgeons totalled up medical cases. Scurvy had changed from the disease that had dominated maritime medicine in the eighteenth century; by the 1820s surgeons at sea looked for its causes beyond the confines of the voyage. To name scurvy the 'Millbank disease' reinforced the idea that the scurvy experienced by convicts was somehow different from the disease that had commonly affected sailors. Scurvy also began to emerge before ships reached the equator. Jonathan Lamb has argued that in the eighteenth century 'the connection between the symptoms of scurvy and the South Seas voyage narratives is extensive and exact'; such a northward shift further suggested that the scurvy of prisoners originated on land, rather than at sea.³³ For convicts, scurvy had become as much a marker of their imprisoned status, as it was a physical record of their time on the high seas.

²⁷Pineo's Journal on *Lord Lyndoch*, General Remarks, TNA, ADM 101/ 44/4, Until the 1860s surgeons referred to 'lime juice' and 'lemon juice' interchangeably.

²⁸Pineo's Journal on *Lord Lyndoch*, General Remarks, TNA, ADM 101/ 44/4.

²⁹Charles Cameron, Surgeon's Journal on board convict ship *Fergusson*, (1828 - 1829), General Remarks, TNA ADM 101/27/4.

³⁰For accounts of the Millbank scurvy see Guy, 'On Sufficient and Insufficient Dietaries', 251 - 253; Griffiths, *Memorials of Millbank*, 55 - 68; Sim, *Medical Power*; Ignatieff, *A Just Measure of Pain*; Higgins, 'The Scurvy Scandal'.

³¹Lawrence, 'Disciplining Disease', 85 - 6, 91 - 92.

³²Blane, *Select Dissertations*, 19; Jukes, *Narrative*, 116.

³³Lamb, *Preserving the Self*, p. 127.

During the voyage of the *Emily* in 1842, Andrew Henderson, an experienced naval surgeon who superintended eight convict voyages during his career, described scurvy's unusually swift emergence before the ship reached the Cape. Henderson had received large groups of convicts from three different prison hulks – the *Justitia* and *Warrior* at Woolwich, and the *Fortitude* at Chatham – and identified a distinct correlation between disease and penal experience. The majority of the fourteen convicts who suffered from scurvy had come from the *Warrior* and *Justitia* hulks. The voyage took its toll in different degrees according to the state in which the convicts embarked. 'The 80 prisoners from the *Justitia* and in a less degree the 80 from the *Warrior* were in a very low state of health, bordering upon scurvy when they embarked', Henderson wrote, 'otherwise why were the 80 prisoners from the *Fortitude*... not similarly affected?' The *Fortitude* convicts had also been 'much more troublesome to manage' than those from the two Woolwich hulks, confirming Henderson's suspicion that they must have been in much better health. 'No man has much... mischief in him, whose spirits are broken from an attenuated state of the blood'. Perhaps, he realised, the convicts' low spirits should have forewarned him of disease, but as Pineo had done four years previously, Henderson pleaded that he could not have realised how sick the convicts were on a cursory inspection. 'Men may seem to be enjoying a fair state of health, who are on the very brink of stumbling into maladies of the most fatal character'.³⁴

Henderson's belief that the convicts had been on the verge of scurvy before they embarked the ship supported comments made by Archibald Robertson, the surgeon of the *Wye* hospital ship which cared for the sick men of both *Justitia* and *Warrior*. Robertson had been not 'in the least surprised at the rate of mortality' during a recent influenza epidemic. 'We now receive prisoners from different gaols who have been subjected to the silent or solitary system, and fed on gruel or bread and water. Their vital powers are injured before they reach us'.³⁵ In the same report, the *Warrior*'s surgeon, Mr Bossy, invited the House of Commons to note the recently introduced 'sources of debility in the health of the prisoners'. Convicts' tendency to scurvy and scrofula had only existed 'since the changes in prison discipline were introduced'. Bossy believed that this state could only be alleviated by altering 'the diet and forms of discipline to which prisoners were now subjected'.³⁶ In 1843, *The Berkshire Chronicle* and *The Times* published a further warning from Bossy:

When such individuals are subjected to removals that increase the demand upon the power of the constitution, as, to the labour of the hulks or the privations of the voyage to New South Wales, or when exposed to powerful depression from distress of mind, or in unfavourable seasons, serious and destructive effects may be sometimes suddenly developed, the concealed mischief painfully disclosed, and the victims numerous.³⁷

A magistrate rejected proposals to further reduce the dietary in the new Reading gaol, by quoting Robertson and Bossy's reports from *Warrior*. 'It is astonishing', he said, 'how much ignorance, and how many wanton fooleries, have been displayed by experimentalists in the art of confining men'.³⁸

But let us return again to surgeon Pineo on the *Lord Lyndoch* in 1838. His declaration that the ship's diet was 'generous' in comparison to that of the prison, was not the whole story. Pineo could not have been unaware of recent debates that had surrounded the reduction of dietary scales on convict ships. In 1835 the *George III* had been wrecked in D'Entrecasteaux

³⁴Journal of Surgeon Andrew Henderson on the convict ship *Emily*, (1842), General Remarks. TNA, ADM 101/25/2.

³⁵Archibald Robertson, Enclosure: Medical Report, 'Convicts. Two reports of John Henry Capper, Esq. superintendent of ships and vessels employed for the confinement of offenders under sentence of transportation', *Parliamentary Papers* 1842 [122] xxxii, 3.

³⁶John Bossy, 'Convicts. Two reports of John Henry Capper', 3.

³⁷'New Prison Dietary (From the Berkshire Chronicle)', *The Times*, 15 May 1843, p. 3.

³⁸Anon., 'Prison Discipline', *The Times*, 19 October 1842, p. 5.

channel, only a few miles from Hobart, with the loss of 127 lives. The surgeon David Wyse explained that the Captain had taken the decision to sail through the narrow channel, rather than the usual passage by Storm Bay because of the need 'to reach Hobart-town with the least possible delay, owing to the alarmingly increasing state of the sick list, and the total want of proper nourishment' that remained in the ship. During the subsequent enquiries, it became clear that in 1832 the Admiralty had recently reduced, by at least a quarter, the rations to be supplied to convict ships, including those of lemon juice and sugar. Utilitarian economy with regard to prisoners' dietary, Michael Roe's study of the disaster makes clear, was not confined to authorities on land.³⁹ After the wreck of the *George III*, William Burnett reinstated the old scale of lemon juice. Article no. 17 of the 'Instructions for Surgeon-Superintendents on Convict Ships' (1837) specified that the surgeon was 'to cause lemon-juice and sugar to be issued to the convicts in the proportion of an ounce of each to a man daily'. It should be 'mixed occasionally with the wine allowed to them, or used unmixed as sherbet, unless at any time he should consider it prejudicial to them'.⁴⁰ Yet, convict ship surgeons of the late 1830s still could not entirely displace the blame for scurvy to the prisons, because surgeons continued not only to experiment with lemon juice, but also to test altogether different remedies.

Reflecting on the problems of scurvy on convict ships during the 1830s, Alexander Bryson, (later to become the Director-General of the Navy's Medical Department) explained that it was impossible to store a sufficient portion of fresh vegetables for long voyages in vessels with such large numbers of people. The victualling demands of a convict voyage to Australia made the need for a reliable scurvy remedy particularly acute and surgeons had begun to substitute 'other articles likely to answer the same purpose' as fresh food but which would occupy comparatively little space. These extra articles included lime-juice, vinegar and pickled vegetables, as well as preserved peas, carrots and potatoes, nitrate of potash, and crystallised citric acid. By the end of the 1830s, it had 'become desirable', Bryson suggested with some understatement, 'to ascertain, with some degree of certainty, the relative value of these agents, from data which might be subjected to the test of comparison'.⁴¹

As part of a broader culture of military experimentation in the post-Napoleonic era, such medical tinkering must have seemed perfectly reasonable. Freed from the demands of warfare, naval surgeons turned their attention to a series of practical problems. The Admiralty carried out experiments using chloride of lime as a disinfectant in warm climates, East India Company ships, hospitals and dockyards.⁴² The Navy and Army had also both established anatomical museums and libraries, the curator of which was instructed 'to receive from all contributors such specimens of Morbid Anatomy, or subjects of Natural History, &c., as may be offered to you'.⁴³ Further afield, surgeons actively experimented with fever remedies on the West Africa Station. The Navy participated in John Franklin's patronage of colonial science during his governorship of Van Diemen's Land, and undertook a survey of terrestrial magnetism in the southern hemisphere.⁴⁴

Between 1840 and 1844, as all convict ships now sailed for Van Diemen's Land, Burnett issued lime juice, citric acid and 'nitrate of potass' surgeons who superintended the voyages of ships from Britain and Ireland. The surgeons were not to *cause* scurvy; Burnett instructed

³⁹Roe, *An Imperial Disaster*, 21, 96.

⁴⁰Instructions for Surgeons Superintendent on Board Convict Ships, 'Report from the Select Committee on Transportation' *Parliamentary Papers* 1837 [518] xix, 346.

⁴¹Alexander Bryson, 'On the Respective Value of Lime Juice, Citric Acid, and Nitrate of Potash, in the Treatment of Scurvy', *Medical Times*, 16 March 1850, p. 212 – 214, p.213.

⁴²Chloride of Lime Experiment, Reports on experiments with chloride of lime and other innovations (1816 – 1829), TNA, ADM 105/27.

⁴³Instructions for the Royal Naval Hospitals at Haslar and Plymouth (London, William Clowes, 1834), p. 68.

⁴⁴Gascoigne, *The Enlightenment*, 94.

his surgeons to undertake a trial only 'if scurvy appeared during the voyage'.⁴⁵ But as the early 1840s witnessed an 'avalanche' of convicts to the colony, at least fifty-six ships carrying fifteen thousand convicted men provided an unprecedented opportunity for naval surgeons to understand scurvy. The experiment would attend to residual doubt about the medical efficacy of lime or lemon juice, and oft-expressed concerns about the 'unnecessary expenditure', of issuing lemon juice at sea.⁴⁶ The surgeons came to strikingly different conclusions. Surgeon Deas mixed the nitre with lime juice and citric acid, and felt that both mixtures were useful. On another ship, the sick convicts experienced bad effects with both citric acid and nitre and consequently the surgeon abandoned both. On the *Asia* in 1841, Dr Sinclair reported that 'no benefit appeared to be derived from the use of either of the three articles'.⁴⁷ Alexander Bryson, however, was frustrated that his fellow surgeons had not undertaken the experiment properly. Bryson argued that the daily issue of lemon juice from early in the voyage, 'by long continued use... would partly, if not entirely, lose its influence on the system'. The juice would then be 'at a great disadvantage, when it came to be used at an advanced period of the voyage in competition with the nitre and citric acid'. In the *Marquis of Hastings*, Bryson withheld the convicts' usual allowance of lime-juice 'in order that the effects of each remedy might be more clearly observed', if scurvy appeared during the voyage. Scurvy did indeed appear before the ship had crossed the equator. To justify his withholding the convicts' lemon juice, Bryson referred to Article 24 of the instructions.⁴⁸ This stipulated that 'in regulating the diet of the sick', the surgeon was 'not only to employ the articles specially provided for them in the supply of medical comforts, but also *save of their general rations while in health* as may in his judgment be applicable to their respective cases'.⁴⁹ In withdrawing the lemon juice, Bryson argued that he had exercised discretionary power in accordance with his authority. In so doing, 'whatever proof' he might obtain from the trial 'would be the more conclusive and satisfactory'.⁵⁰ William Burnett concluded that the experiments, particularly the journals for 1842, proved the utility of lemon juice as an antiscorbutic. 'In 11 ships in which lemon juice was issued daily in the usual manner only 56 cases of scurvy are reported. Whereas in 2 vessels where lemon juice was not issued to the prisoners for reasons specified by the medical officers upwards of 100 cases occurred, many of them of a serious nature before they reached the Cape of Good Hope'.⁵¹

To modern eyes, the scurvy experiment – Bryson's report in particular – is an unsettling episode in a long history of medical experimentation with prisoners; one surgeon vividly illustrated the bruises, sores and lesions of scurvy as he painted the effects of disease on convicts' bodies.⁵² But these experiments also marked a shift as surgeons came to believe that the voyage was a powerful and productive space. At sea, they could use convicts to make medical knowledge, but they could also participate in transforming convicts into colonists. By the 1840s, surgeons began actively to promote the voyage as an alternative space of moral, as well as physical redemption. As they did so, surgeons increasingly allied with, rather than fell foul of, the requirements of the colonial penal system.

⁴⁵William Burnett to the Admiralty, 'Report on Scurvy', (undated c. 1844), TNA ADM 105/36.

⁴⁶Committee's Report to the Board, Medical and Victualling Reports etc to the Victualling Board of the Navy (1829), TNA ADM 105/7.

⁴⁷William Burnett, 'Citric Acid', (undated, c. 1844), TNA, ADM 105/36.

⁴⁸Bryson, 'On the Respective Value', 213; Journal of Alexander Bryson on convict ship *Marquis of Hastings* (1842), TNA ADM 101/6. Bryson's journal and discussion in the *Medical Times* suggest that at least sixty of the convicts developed scorbutic symptoms.

⁴⁹'Instructions for Surgeons' (1837).

⁵⁰Bryson, 'On the Respective Value', 213.

⁵¹Burnett, 'Citric Acid', TNA ADM 105/36.

⁵²see Henry Mahon's journal of the *Barrosa* (1841- 2) TNA ADM 101/7/8. One of Mahon's paintings is reproduced in Brooke and Brandon, *Bound for Botany Bay*, p. 180 - 181

IV

In Colin Arrott Browning's published account of the voyage of the *Earl Grey* in 1842, a convict named 'WB' became ill as the ship sailed down the English Channel. Initially, Browning believed that WB was 'not a fit subject for entering upon a long voyage in a crowded ship'. However, the convict assured Browning 'that his knowledge of his constitution was such, that he felt satisfied that removal to a milder climate would prove very advantageous to his health, and that he hoped soon to get well, and to make himself useful to me in any way I might think fit to employ him'. Browning still refused WB, until

the following morning he sent me a note, in which he implored me to allow him to remain in the *Earl Grey*, and made some statements which led to a still further investigation of his case, whereby my mind was ultimately satisfied, that I might, with propriety, permit him to remain where he was and proceed on the voyage.⁵³

WB's health improved, and he became one of Browning's 'most useful teachers'. The example conveyed both the morally and the medically reformative possibilities of the convict voyage. WB had proved his knowledge of himself, but had also demonstrated his potential to assist other convicts. The sea also assisted in the convict's restoration, as Browning tapped into the growing contemporary belief that sea voyages could cure invalids of illnesses such as consumption. By the 1840s, naval surgeons increasingly espoused a vision of the convict voyage as a space of educational, moral and medical reform. The surgeons' instructions of 1848 also re-emphasised the importance of setting up schools, and show that religious instructors routinely accompanied many convict voyages. Evidence of convict ship newspapers on many ships from the mid 1840s onwards provide the most striking examples of this ethos. On the *Pestonjee Bomanjee* for example, the surgeon introduced the weekly journal as a vehicle for preparing the convicts for their 'advent in that beautiful country where, where, it is hoped, you will retrieve the errors of your past life'. Week by week, the newspaper would '[indicate] the advance you make in correct reasoning and feeling'.⁵⁴

At first glance, the surgeons' developing concept of the voyage as a space of reform seems to mirror these developments in penal discipline on land. During the 1830s, prison reformers had looked to America as they introduced new principles of penal discipline based on the 'silent', or the 'separate' systems of punishment. Both were characterised by their focus on religion, moral reflection, and the exact calculation of punishment and labour. During their early experiments in the 1830s, the governors of local prisons such as Wakefield had adopted the silent system. However, the inspectors appointed after The 1835 Prisons Act provided for the central inspection of prisons, and the new inspectors, William Crawford and Whitworth Russell, favoured the separate system.⁵⁵ The Committee of Millbank Penitentiary were also enthusiastic about this 'even more complete and severe form of separation'.⁵⁶ In 1842, the government opened Pentonville prison – the model of the separate system. Moreover, Pentonville was the 'portal to the colonies'. Reformed convicts who had undergone a probationary period of solitary confinement in British prisons would travel with tickets of leave to Australia. But, just as Archibald Robertson, the surgeon of the *Wye* hospital ship at Chatham, had argued that solitary confinement rendered many convicts 'more fit for an hospital than for dockyard labour', so convict ship surgeons soon began to

⁵³Browning, *The Convict Ship*, 125 – 6.

⁵⁴'Introduction', *The Pestonjee Bomanjee Journal* no. 1, (28 April 1852), State Library of New South Wales (Mitchell Library), A1831/CY1267.

⁵⁵Ogborn, 'Discipline, Government and Law'; Emsley, *Crime and Society*, p. 274.

⁵⁶McConville, *History of English Prison Administration*, 164.

draw attention to the physical and mental state of the 'exiles' who had endured the separate system.⁵⁷

In November 1844, the *Sir George Seymour* transported the first shipload of Pentonville convicts. It first arrived in Hobart on 27 February 1845 to disembark 175 prisoners, before sailing to Port Phillip in March with the remaining 169.⁵⁸ John Hampton, the surgeon, had previously superintended two other convict voyages. A year later he would become comptroller of convicts in Van Diemen's Land; the career trajectory of surgeons such as Hampton and Pineo (who went on to become Superintendent of Deloraine probation station after the disastrous voyage of the *Lord Lyndoch*) demonstrate surgeons' investment in the practicalities of convict labour extraction.⁵⁹ On their arrival in Australia, Hampton remarked on the 'superior quality' of the *Sir George Seymour's* convicts. These men were 'well worthy of the establishment from which they were received and deserving the attention of all who are interested in the success of reformatory penal discipline. The religious instructor on the ship, Alexander Cairnduff, was also confident that the convicts had shown a true spirit of reform. And yet, Hampton's apparent enthusiasm for the new system of penal discipline jars with his account of the ship's departure.⁶⁰ Hampton had received 345 exiles and convicts from Pentonville. They had all experienced separate confinement for periods varying from fifteen to twenty two months. He described how 'the sudden change from extreme seclusion to the noise and bustle of a crowded ship produced a great number of cases of convulsions, attended in some instances with nausea and vomiting in others simulating hysteria, and in all being of a most anomalous character'. Hampton laid the convicts down, gave them fresh air and mild stimulants, but so many 'novel and alarming cases caused doubts as to the prudence of sailing, not only until the convulsions ceased, but until it was seen whether the men were otherwise in a fit state to commence a long voyage'. Hampton clearly believed that it was his regime of 'health, discipline and moral training', during the voyage, and not the period they had spent in Pentonville, that had produced a group of healthy, 'useful and efficient workmen'.⁶¹

Other convict surgeons soon corroborated Hampton's experience of convulsing convicts. On the *Stratheden* nineteen men suffered from convulsions immediately after their embarkation. All had spent between eighteen and twenty months in solitary confinement in Pentonville.⁶² When the Medical Officer for Pentonville visited the convict ship *Eden* in September 1848, he too admitted that 'of the 193 Prisoners from Pentonville on board, there had been nineteen cases of convulsive fits, and less violent symptoms in great number'.⁶³ Amidst the failing probation system in Van Diemen's Land system, the vociferous anti-transportation campaign, the recall of Governor Eardley Wilmott and constant changes in government policy, it is perhaps unsurprising that the surgeons' observations went unremarked.⁶⁴ In 1846, male transportation to Van Diemen's Land was suspended as the British government looked to Port Phillip to receive these 'exiles'. In 1848, Lord Grey re-introduced transportation to New South Wales. Rejected by colonists at Port Phillip, the *Hashemy*

⁵⁷ Medical Report of the Fortitude Convict Hulk, 'Convicts, Two Reports of John Henry Capper', *Parliamentary Papers*, 1843 [113] xliii, 8.

⁵⁸ Bateson, 395. See also TNA CO 280/240 Captain Maconochie on Convict Management

⁵⁹ Shaw, *Convicts and the Colonies*, 356; Dunning and Maxwell-Stuart, 'Mutiny at Deloraine'.

⁶⁰ Carroll-Burke, *Colonial Discipline*, 54; John S. Hampton, Surgeon's Journal on *Sir George Seymour*, (1844 – 1845), General Remarks, TNA ADM 101/67/10.

⁶¹ John S. Hampton, Surgeon's Journal on *Sir George Seymour*, (1844 – 1845), General Remarks, TNA ADM 101/67/10. A year later, Hampton was made comptroller of convicts in Van Diemen's Land, a position he would hold (not without controversy) for nine years.

⁶² Henry Baker, Surgeon's Journal on Convict Ship *Stratheden* from London to Port Phillip and Hobart, 1845 – 6, General Remarks, TNA ADM 101/69/6.

⁶³ Minutes of a Convened Meeting of the Commissioners for the Government of Pentonville Prison, 30 September 1848, Pentonville Prison Minute Book (1848), TNA PCOM 2/88.

⁶⁴ Gilchrist, 'The Victim of his own Temerity?'.

would be the first convict ship in a decade to sail to Sydney. Historians have vividly described the mass opposition that the *Hashemy* received as it arrived in Melbourne and Sydney, but the circumstances of its departure from Britain were equally traumatic.⁶⁵ Although the departure of the *Hashemy* coincided with the return of cholera to Britain, Browning seems to have paid little attention to the epidemic except to suggest that prisoners should embark from a healthy locality during a season likely to ensure favourable weather.⁶⁶ Primarily, Browning believed cholera resulted from the anguish, dislocation, and protracted mental and physical deprivation caused by prolonged or solitary imprisonment.

Browning received 237 convicts from four different prisons. One hundred and eleven convicts came from Wakefield, one hundred from Pentonville, and one man embarked from Millbank. Twenty-five boys embarked from Parkhurst juvenile prison on the Isle of Wight, many having spent time in two or three prisons. Under questioning from Browning about the circumstances of their removal from confinement, the Pentonville prisoners reported that in preparation for the voyage they had undergone 'association' over a period of twenty-three days, for two hours each day before they embarked the transport.⁶⁷ Under a canvas or tent in the prison yard, association allowed convicts to readjust to social contact and the presence of other people, but Browning described how the convicts' 'power of thinking, their common sense, and in a peculiar degree their *memory*, appeared to have been left behind them buried in their cell'. Imprisonment had sapped the convicts' physical and mental energies and predisposed them to disease, a collapse signalled by the convulsions as they stepped on to the *Hashemy*'s deck. Other factors, including hunger and previous disease, conspired to render 'the prisoners exceedingly liable to the result of cholera; ill prepared to endure its violence even under most effective treatment or to recover from its effects on the entire frame'.⁶⁸ The prisoners from Wakefield prison had also endured separate confinement. Browning again described their physical and mental collapse on the *Hashemy*'s decks after being 'so long buried'.⁶⁹ Although the Wakefield authorities had received forty days notice of their departure, still the prisoners said that they had been associated 'only from four to nine times'. Browning also complained that many of the prisoners from Wakefield were aged and suffered from chronic illnesses. In addition to being prone to cholera therefore, the Wakefield prisoners were particularly unfit for colonial labour. By contrast, the boys who had come from Parkhurst and had been 'daily grouped and worked together when not at school, either in large apartments or in the fields', did not suffer from convulsions.⁷⁰

In May 1849, seven of the prisoners who joined the *Mountstewart Elphinstone* directly from Pentonville, bound this time for Moreton Bay, also suffered convulsive fits the day after embarkation. George Moxey, the ship's surgeon wrote, 'These attacks were in every respect of an Epileptic nature, being attended by insensibility [and] frothy discharge from the mouth... The sufferers were all young subjects, generally of a pale complexion, thin and weakly looking'.⁷¹ In comparison, Moxey described the prisoners who came from the hulks as comparatively 'robust'. This point is important because historians have argued that after the opening of Pentonville the prison hulks moored off the English south coast increasingly became repositories for the sick and elderly.⁷² Moxey's assessment of hulk prisoners suggests that we should more carefully investigate this assessment, but also highlights just

⁶⁵see for example, McKenzie, *Scandal in the Colonies*, 174 – 179; Hughes, *Fatal Shore*, 555 – 557; Shaw, *Convicts and the Colonies*, 324 – 326.

⁶⁶Colin Arrott Browning, Report on cholera on the *Hashemy*, December 1848, 26, TNA ADM 105/36.

⁶⁷Browning, Report on Cholera, 4.

⁶⁸Browning, Report on Cholera, 27-9.

⁶⁹Browning, Report on Cholera, 3-4. Unlike Pentonville, Millbank and Parkhurst, Wakefield was a local, rather than government convict prison.

⁷⁰Browning, Report on Cholera, 7.

⁷¹George T. Moxey M.D, Surgeon's Journal on *Mountstewart Elphinstone* to New South Wales, 1849, General Remarks, TNA ADM 101/55/9.

how serious the effects of separate confinement appeared to be. Moxey also explained that thirty-five prisoners from Portland prison – opened in 1847 to house prisoners who had passed through solitary confinement and engage them in public works – were stout men with a ‘ruddier complexion’ than those from Pentonville. In Portland, as in the hulks, prisoners worked outside building a military barracks and breakwater in the harbour. During the voyage of the *Mountstewart Elphinstone*, none of the Portland prisoners died or needed hospital treatment.

Since the 1820s surgeons had identified the causes of scurvy in the conditions of imprisonment, but convicts’ convulsions as they were released from solitary and protracted confinement onto the crowded decks of the sailing ships in the 1840s signalled a new and extreme phenomenological reaction to the experience of confinement. Crucially, however, although these effects were violent and sudden, they were short-lived. While scurvy had dominated whole voyages and surgeons journals had incurred the anger of Governor Arthur, once at sea in the 1840s convicts now remained largely healthy. Thus, surgeons could argue that the voyage had become a space of moral and spiritual reform, even while they continued to complain about the effects of imprisonment, and the state of the prisoners they received. Even the *Hashemy*, so ravaged by cholera, was included in the *Report of the Surveyor General of Prisons* (1850) as an example that proved that convicts who had ‘passed through periods of penal and reformatory discipline at Pentonville... are likely, on their release, to be respectable in their station if life and useful to those who engage their services’.⁷³

V

While concerns about the effects of separate confinement focused on male convicts, as convict transportation entered its final years, surgeons often emphasised the convicts’ colonial role most clearly in their discussions of female convicts.⁷⁴ In December 1851, for example, one surgeon-superintendent listed forty-one female convicts from Grangegorman government female prison whom he had refused to accept on to the *John William Dare*. Clarke explained his strict rationale; it was in ‘the interest of the colony’, to select only ‘the young and healthy’.⁷⁵ He rejected two of the women for debility, two others for their age, and four for both ‘age and debility’. Clarke also included cases of consumption. In total, Clarke rejected seventeen out of the forty women for being weak, debilitated, wasted, too old, or suffering from ‘descent of the uterus’. One woman was simply ‘totally unfit’. In the same year, John Moody asked that prison medical officers should not bring forward for his inspection ‘Women in an advanced stage of pregnancy or immediately after their confinement, women who from disease or age have lost their teeth or those who have suffered from serious mental affections’.⁷⁶

The voyage was *the* space in which convicts became colonists. During the physical process of transportation, convicts embodied both of these identities; they were undesirable and desirable, rejected and required. Naval surgeons who superintended convict voyages from

⁷²The British government had used hulks since the American Declaration of Independence. By 1842, these ‘temporary’ establishments moored in the Thames and in the major ports of the English south coast now contained indefinitely up to seventy per cent of English convicts under a sentence of transportation. Prisoners worked on outdoor labour undertaking dockyard construction or other public works. McConville, *English Prison Administration*, 197, 199.

⁷³Anon. ‘The Effects of the Separate System of Confinement on the Mental and Physical Health of Convicts’, *London Medical Gazette*, 21 November 1851, p. 80; United Kingdom. Surveyor General of Prisons, *Report on the Discipline and Construction of Portland Prison and its Connection with the System of Convict Discipline now in Operation* (London, 1850), p. 35.

⁷⁴Reid, *Gender, Crime and Empire*.

⁷⁵R Whitmore Clarke to the Admiralty re refusal to accept 40 female convicts intended for embarkation, 24 December 1851, National Archives of Ireland, GPO Letter Book 2/1215.

⁷⁶John Moody, Journal on female convict ship Blackfriar (1851), TNA ADM 101/12/1.

Britain and Ireland to the Australian colonies were intensely aware of these contradictions and tensions, and their discussions about convict health make it clear that time spent *on* the seas, not just the removal *beyond* them, was laden with social, political and colonial importance. In one sense, the voyage to Australia was a uniquely isolated penal space which deserves historical attention in its own right. But studying how surgeons' journals, reports and letters brought debates about penal reform into direct conversation with debates about transportation reveals two things. First, they show that convict ship surgeons consistently complained about the health of convicts they received from British prisons, creating conflict with their counterparts on land. However, between the 1830s and late 1840s their experience of disease, and their focus, changed. While surgeons' accounts of scurvy and consumption in the 1830s had incurred the anger of the colonial governor, by the 1840s, surgeons increasingly focused on religious and moral reform, and adopted a role as key arbiters of convicts' potential contribution to the Australian colonies.

Thus, to understand the significance of convict voyages, and the contexts within which surgeons' authority changed over time, we also need to look beyond, and make connections between, the bounded spaces of prison cells, hulks, voyages and penal colonies as convicts' bodies revealed the complex physical and mental effects of dietary and spatial reforms. It is prisoners' movements, as much as their confinement, that illuminate the extent to which 'penal reality... had little to do with ambitious plans on paper'.⁷⁷ As this article, and other recent studies of punishment in colonial and global contexts make clear, more work is needed to explore the ways in which penal systems in different local, national, colonial and historical contexts compete, conflict or reinforce each other across geographical and temporal distance.⁷⁸

References

1. Alexander, Jocelyn; Anderson, Clare. Politics, Penalty and (Post-) Colonialism. Special Issue. *Cultural and Social History*. 2008; 5:5.
2. Arnold, David. *Colonizing the Body*. University of California Press; London, Berkeley and Los Angeles: 1993.
3. Bateson, Charles. *The Convict Ships, 1787 – 1868*. Brown Son and Ferguson; Glasgow: 1985.
4. Blane, Gilbert. *Select Dissertations on Several Subjects of Medical Science*. London: 1822.
5. Boyce, James. *Van Diemen's Land*. Black Inc.; Melbourne: 2010.
6. Brooke, Alan; Brandon, David. *Bound for Botany Bay: British Convict Voyages to Australia*. The National Archives; London: 2005.
7. Browning, Colin; Arrott, The. *The Convict Ship and England's Exiles*. 5th edn. London: 1851.
8. Carroll-Burke, Patrick. *Colonial Discipline: The Making of the Irish Convict System*. Four Courts Press; Dublin: 2000.
9. Dikotter, Frank, editor. *Cultures of Confinement: A History of the Prison in Africa and Asia and Latin America*. C. Hurst; London: 2007.
10. Duffield, Ian; Bradley, James. *Representing Convicts: New Perspectives on Convict Forced Labour Migration*. Leicester University Press; London: 1997.
11. Dunning, Tom; Maxwell-Stewart, Hamish. Mutiny at Deloraine: Ganging and Convict Resistance in 1840s Van Diemen's Land. *Labour History*. 2002; 82:35–47.
12. Emsley, Clive. *Crime and Society in England, 1750 – 1900*. Longman; London and New York: 1987.
13. Gascoigne, John. *The Enlightenment and the Origins of European Australia*. Cambridge University Press; Cambridge: 2002.

⁷⁷Dikotter (ed.), *Cultures of Confinement*, 9.

⁷⁸Alexander and Anderson, eds. Politics, Penalty and (Post-)Colonialism; Dikotter and Brown, eds., *Cultures of Confinement*.

14. Gilchrist, Catie. The Victim of his own Temerity? Silence, Scandal and the Recall of Sir John Eardley Wilmot. *Journal of Australian Studies*. 2005; 28:151–161.
15. Griffiths, Arthur. *Memorials of Millbank*. London: 1884.
16. Guy, William A. On Sufficient and Insufficient Dietaries, with Special Reference to the Dietaries of Prisoners. *Journal of the Statistical Society of London*. 1863; 26:239–280.
17. Hardy, Anne. The Development of the Prison Medical Service, 1774 – 1895. In: Creese, Richard; Bynum, WF.; Bearn, J., editors. *The Health of Prisoners: Historical Essays*. Rodopi; Amsterdam and Atlanta: 1995.
18. Higgins; Peter, McRorie. The Scurvy Scandal at Millbank: A Reassessment. *Medical History*. 2006; 50:513–534. [PubMed: 17066131]
19. Hughes, Robert. *The Fatal Shore*. Collins Harvill; London: 1987.
20. Humphery, Kim. A New Era of Existence: Convict Transportation and the Authority of the Surgeon in Colonial Australia. *Labour History*. 1990; 59:59–72.
21. Ignatieff, Michael. *A Just Measure of Pain*. Macmillan; London: 1978.
22. Jukes, JB. *Narrative of the Surveying Voyage of H.M.S. Fly*. London: 1847.
23. Lamb, Jonathan. *Preserving the Self in the South Seas, 1680 - 1840*. University of Chicago Press; Chicago and London: 2001.
24. Lawrence, Christopher. Disciplining Disease: Scurvy, the Navy, and Imperial Expansion, 1750 – 1825. In: Miller, David Philip; Reill, Peter Hans, editors. *Visions of Empire: Voyages, Botany and Representations of Nature*. Cambridge University Press; Cambridge: 1996.
25. McConville, Sean. *A History of English Prison Administration, Volume 1: 1750 – 1877*. Routledge; London: 1981.
26. McKenzie, Kirsten. *Scandal in the Colonies*. Melbourne University Press; Carlton, Vic.: 2005.
27. Meredith, David; Oxley, Deborah. Contracting Convicts: The Convict Labour market in Van Diemen's Land 1840 – 1857. *Australian Economic History Review*. 2005; 45:45–72.
28. Nichol W. Malingering and Convict Protest. *Labour History*. 1984; 47:18–27.
29. Nicholas, Stephen. *Convict Workers, Reinterpreting Australia's Past*. Cambridge University Press; Cambridge: 1988.
30. Ogborn, Miles. Discipline, Government and Law: Separate Confinement in the Prisons of England and Wales, 1830 – 1877. *Transactions of the Institute of British Geographers*. 1995; 20:295–311.
31. Oxley, Deborah. *Convict Maids: The Forced Migration of Women to Australia*. Cambridge University Press; Cambridge: 1996.
32. Reid, Kirsty. *Gender, Crime and Empire*. Manchester University Press; Manchester: 2007.
33. Roe, Michael. *An Imperial Disaster: The Wreck of the George III*. Blubberhead Press; Hobart: 2006.
34. Shaw, AGL. *Convicts and the Colonies*. Faber; London: 1966.
35. Sim, Joe. *Medical Power in Prisons: The Prison Medical Service in England, 1774 – 1989*. Open University Press; Milton Keynes and Philadelphia: 1990.
36. Smith; Emerson, Abbot. *Colonists in Bondage: White Servitude and Convict Labour in America, 1607 – 1776*. Peter Smith; Gloucester, Massachusetts: 1965.
37. Staniforth, Mark. Deficiency Disorder: Evidence of the Occurrence of Scurvy on Convict and Emigrant Ships to Australia 1837 – 1839. *The Great Circle*. 1991; 13:119–132.