

**State Authority and Convict Agency in the Paper Panopticon: The Recording of Convict Ages
in Nineteenth-Century England and Australia**

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The nineteenth century witnessed the creation of a ‘paper Panopticon’ designed to capture information about offenders in England, especially those who were transported to Australia. This article considers the effectiveness of this new record-keeping system and asks whether convicts had some agency within it. These questions are explored through a macroscopic analysis of the recording of convict ages in nineteenth-century England and Australia, made possible by the Digital Panopticon project. By using the methodological opportunities opened up by digital technologies, we can test the accuracy of historical records in new ways, and in the process develop a better understanding of the encounter between state authority and convict agency.

The early nineteenth century witnessed the creation of a ‘paper Panopticon’ designed to capture information about — and thereby identify, control and understand — offenders in England, especially those who were transported to Australia. This formed part of a wider nineteenth-century revolution in personal identification and data collection.¹ But how effective was the state in capturing such

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information, and to what extent did convicts have agency within this new record-keeping system? Early historical studies of the paper Panopticon — such as those by J. J. Tobias and L. L. Robson — were largely impressionistic, relying on the anecdotal comments of contemporaries. On the basis of this evidence they concluded that the information provided by offenders could not be trusted, with claims, for instance, that transportees deliberately lied or obfuscated when asked about their skills.² As Deborah Oxley notes, quantifying can be a way of ensuring the reliability of historical data. A single convict might have lied about their details, but we are likely to receive an accurate picture if the details pertaining to several thousand convicts are taken together. ‘For such a mass of information to be wrong’, Oxley concludes, ‘would require *systematic* lying on behalf of convicts’.³

¹ James Bradley et al, ‘Research Note: The Founders and Survivors Project’, *The History of the Family* 15, no. 4 (2010): 467; Hamish Maxwell-Stewart, *Closing Hell’s Gates: Death of a Convict Station* (Sydney: Allen and Unwin, 2008), 144–59; Edward Higgs, *Identifying the English: A History of Personal Identification 1500 to the Present* (London: Continuum, 2011). Although not all of those accused of crimes were found guilty, for the sake of simplicity the terms ‘offender’ and ‘convict’ will here be used to cover *both* the accused as a whole and convicted offenders specifically. Where it is necessary to distinguish between the two, this will be made clear in the text.

² See, for instance, J. J. Tobias, *Crime and Industrial Society in the Nineteenth Century* (London: Batsford, 1967), 17; L. L. Robson, *The Convict Settlers of Australia* (Hong Kong: Melbourne University Press, 1976), 181–2; Barrie Dyster, ‘Public Employment and Assignment to Private Masters, 1788–1821’, in *Convict Workers: Reinterpreting Australia’s Past*, ed. Stephen Nicholas (Cambridge: Cambridge University Press, 1988), 148; V. A. C. Gatrell and T. B. Hadden, ‘Criminal Statistics and their Interpretation’, in *Nineteenth-Century Society: Essays in the Use of Quantitative Methods for the Study of Social Data*, ed. E. A. Wrigley (Cambridge: Cambridge University Press, 1972), 379.

³ My emphasis. Deborah Oxley, *Convict Maids: The Forced Migration of Women to Australia* (Cambridge: Cambridge University Press, 1996), 21, 26.

In the digital age, historians have started to systematically investigate the interaction between state authority and convict agency by using two different approaches: what might respectively be called ‘deep’ and ‘big’ data approaches.⁴ First, Helen Rogers has utilized the ease of access and name searching made possible through the mass digitization of convict records to carry out a deep, ‘intimate reading’ of the multiple records available for thirty-four men who served time in Yarmouth gaol and were subsequently sent to Van Diemen’s Land. This allowed her to ‘explore what exiles revealed and concealed from the authorities about their past’.⁵ By contrast, Hamish Maxwell-Stewart has utilized big data methods, examining quantitative patterns and correlations in the information on previous convictions, occupations and literacy skills that was recorded about thousands of Tasmanian transportees. The technique allowed him to ‘collectively test the outcome’ of this bureaucratic

⁴ Historians have also started to approach this subject in a non-digital way, for example through more nuanced readings of the historical records. See for instance A. L. Beier, ‘Identity, Language, and Resistance in the Making of the Victorian “Criminal Class”: Mayhew’s Convict Revisited’, *Journal of British Studies* 44, no. 3 (July 2005): 499–515, and Hamish Maxwell-Stewart, ‘The Search for the Convict Voice’, *Tasmanian Historical Studies* 6, no. 1 (1998): 75–89.

⁵ Helen Rogers, “‘A Very Fair Statement of his Past Life’”: Transported Convicts, Former Lives and Previous Offences’, *Open Journal of the Humanities* (2015), <http://doi.org/10.16995/olh.27>, (accessed date). This approach is certainly not dependent on the digital era: Peter Linebaugh for instance compared the information recorded about offenders in the eighteenth-century ‘Ordinary’s *Accounts*’ against other documents, long before the digitisation of such records. See Peter Linebaugh, ‘The Ordinary of Newgate and his Account’, in *Crime in England 1550–1800*, ed. J. S. Cockburn (London: Methuen, 1977), 262. However, to do this kind of record linkage work at any kind of scale and for records held at archives on different sides of the world (such as those for convicts, respectively held in England and Australia) is realistically only possible in the digital era.

encounter between convicts and the state.⁶ Both these important works come to similar conclusions: while convict agency is apparent — in that there was at least some guesswork, selective reporting or even outright fabrication — nevertheless, on the whole ‘the evidence suggests that the state won this particular tussle’, and convicts appear to have been ‘largely credible witnesses to their own life histories’.⁷

This article builds upon these recent works by bringing together the deep and big data approaches in order to put the nineteenth-century paper Panopticon under the microscope. It aims to demonstrate how we can move between close reading of the rich qualitative detail captured about individual offenders on the one hand, and distant reading of the quantitative patterns spread across tens of thousands of convicts on the other.⁸ This is made possible thanks to the mass digitization of convict records (by numerous parties) and to the automated linking together of those records recently carried out by the *Digital Panopticon* project.⁹ This sort of big data, and big data linkage, offers historians a valuable, new method for testing the accuracy of historical records. This is illustrated by Donald Fyson and François Fenchel’s revelatory analysis of prison registers in nineteenth-century Quebec, showing that recorded convict ages were likely the product of self-reporting, and that in a

⁶ Hamish Maxwell-Stewart, ‘The State, Convicts and Longitudinal Analysis’, *Australian Historical Studies* 47, no. 3 (2016): 419. See also Hamish Maxwell-Stewart, ‘Big Data and Australian History’, *Australian Historical Studies* 47, no. 3 (2016): 361.

⁷ Maxwell-Stewart, ‘The State’, 422 ** best spell out which Maxwell Stewart you mean here - his research article or the introduction to the Big Data special issue, guessing article but pls make it clear; Rogers, 34.

⁸ For more on macroscopes within historical analysis, see Tim Hitchcock, ‘Big Data, Small Data and its Meaning’, *Historyonics Blog* (9 November 2014), http://historyonics.blogspot.co.uk/2014/11/big-data-small-data-and-meaning_9.html (accessed 15 October 2019).

⁹ For further information about the *Digital Panopticon*, see Sharon Howard and Jamie McLaughlin, ‘About the Project’, *Digital Panopticon*, version 1.2 (hereafter *Digital Panopticon*), https://www.digitalpanopticon.org/About_The_Project (accessed 2 July 2020).

quarter of cases the ages recorded for individual convicts across two sets of records (when accounting for the passage of time) varied by three years or more, along with considerable variance in recorded heights and occupations.¹⁰ Using data assembled by the *Digital Panopticon* project, this article analyses the frequency, precision and consistency of the recording of convict ages in nineteenth-century England and Australia, as a way of exploring the encounter between state authority and convict agency in the paper Panopticon. Although the state's power was not infallible – with at least some convicts unable, or unwilling, to provide the kind of comprehensive, precise and truthful information expected – for the most part convicts appear to have acquiesced in the face of state authority by providing accurate statements of their age.

The ages of criminal suspects had been collected on an ad hoc basis in England since at least the sixteenth century by victims and local officials in advertisements and handbills. In the 1760s and 1770s the Bow Street magistrate John Fielding further extended and centralised this practice.¹¹ But it was in the final quarter of the eighteenth century — when faced with a crisis in the penal system and looking to take greater control over the pardoning process in London — that the central state made the first demands for the systematic collection of offender ages, through a series of parliamentary Acts and formal directives.¹² In the earliest instance, the Hulks Act of 1776 required the contractors of the

¹⁰ Donald Fyson and François Fenchel, 'Prison Registers, their Possibilities and their Pitfalls: The Case of Local Prisons in Nineteenth-Century Quebec', *The History of the Family* 20, no. 2 (2015): 163–88.

¹¹ Robert Shoemaker and Richard Ward, 'Understanding the Criminal: Record-Keeping, Statistics and the Early History of Criminology in England', *British Journal of Criminology* 57, no. 6 (2017): 1448.

¹² For the changes in record-keeping that were introduced by the Home Office and City of London during the crisis of the late eighteenth century, see Simon Devereaux, 'The Criminal Branch of the Home Office 1782–1830', in *Criminal Justice in the Old World and the New: Essays in Honour of J. M. Beattie*, eds Greg T. Smith, Allyson N. May and Simon Devereaux (Toronto: Centre of Criminology, 1998), 280–9; Simon Devereaux, 'Convicts and the State: The Administration of

hulks (decommissioned warships that were used as floating prisons following the cessation of transportation to America) to send quarterly reports to the Treasury which included the ages (along with names and dates of conviction) of prisoners, and a further Act two years later required the contractors to record the prisoners' ages in the hulks registers.¹³ A later Act of 1784 meanwhile required keepers of houses of correction to record the ages of the inmates in the prison 'calendars' — the lists of those confined in the prison at the time of each meeting of the quarter sessions.¹⁴ And ages also started to be recorded in documents that were being used by the Home Office to make pardoning decisions. First, the *Old Bailey Proceedings* (hereafter *Proceedings*) — printed accounts of the trials held at London's central criminal court — from 1789 started to record the ages of those found guilty. Second, from 1791, ages were stated in the newly-created 'criminal registers' — records of those committed to London's Newgate prison for felonies and misdemeanours, updated by means of weekly returns submitted to the Home Office by the Sheriffs of London and Middlesex, extended nationwide in 1805.¹⁵ The practice was also built into the statutes that mandated the creation of the new, national

Criminal Justice in Great Britain during the Reign of George III' (PhD thesis, University of Toronto, 1997), 386–405.

¹³ Criminal Law Act (Hulks Act) 1776, 16 Geo. III c. 43; Criminal Law Act (Hulks Act) 1778, 18 Geo. III c. 62; Ann Coats, 'From Floating Tombs to Foundations: The Contribution of Convicts to Naval Dockyards and Ordnance Sites', in *The Age of Sail: The International Annual of the Historic Sailing Ship*, eds Nicholas Tracy and Martin Robson (London: Conway Maritime Press, 2003), 36. The resulting quarterly reports for 1778 have survived and can be found at The National Archives, London (hereafter TNA), 'England and Wales: Prisons: Lists of Convicts Condemned to Hard Labour on Hulks on the Thames', T1/539/255–310.

¹⁴ Houses of Correction Act 1784, 22 Geo. III c. 64.

¹⁵ On the creation of the Newgate criminal registers and their use (along with the *Proceedings*) by the Home Office, see Devereaux, 'The Criminal Branch'. As a temporary forerunner to the criminal registers, in February 1789 the Home Secretary had asked county sheriffs to compile lists of those

penitentiaries in the early nineteenth century. The respective statutes that established the Millbank (1816), Parkhurst (1838) and Pentonville (1842) penitentiaries all stipulated that the prisons' registers should record prisoner ages.¹⁶ The 1823 Gaol Act, meanwhile, required local prison keepers to provide the Home Office with a 'prison return' that included figures on the ages of those committed to the prison over the previous year.¹⁷ And finally, in terms of the records of transportation, the 1784 Transportation Act directed the creation of three separate documents, all of which were supposed to record the convict's age.¹⁸ These three documents then fed into the 'convict indents' (the musters for the transportation ships) that were drawn up when the convicts arrived in Australia, with the convicts also interrogated about this information. But it was not until 1814 that the convict ages regularly started to appear in the indents.¹⁹ None of these Acts or directives, however, specified *how* officials should go about recording ages.²⁰

To what extent did local officials and the accused comply with the demand to record convict ages? It seems that at least some local officials failed to provide all the personal information that was

who had been committed to the county gaol, including details of the accused's age — see TNA, State Papers Domestic Entry Book, SP 44/415, 27 February 1789.

¹⁶ An Act for Regulating the General Penitentiary for Convicts at Millbank (Millbank Penitentiary Act) 1816, 56 Geo. III c. 63; An Act for Establishing a Prison for Young Offenders (Parkhurst Penitentiary Act) 1838, 1 & 2 Vict. c. 82; An Act for Establishing a Prison at Pentonville (Pentonville Penitentiary Act) 1842, 5 Vict. c. 29.

¹⁷ Gaols Act 1823, 4 Geo. IV c. 64.

¹⁸ An Act for the Effectual Transportation of Felons and Other Offenders (Transportation Act) 1784, 24 Geo. III c. 56.

¹⁹ Deborah Oxley, 'Convict Indents (Ship and Arrival Registers) 1788–1868', *Digital Panopticon*, [https://www.digitalpanopticon.org/Convict_Indents_\(Ship_and_Arrival_Registers\)_1788-1868](https://www.digitalpanopticon.org/Convict_Indents_(Ship_and_Arrival_Registers)_1788-1868) (accessed 2 July 2020).

²⁰ The same was true in the recording of convict literacy: see Rosalind Crone, 'Reappraising Victorian Literacy through Prison Records', *Journal of Victorian Culture* 15, no. 1 (2010): 5.

demanded: in 1795, for instance, the Home Office's keeper of the criminal register complained that police offices and the gaoler at Newgate prison were 'denying the information necessary for the Secretary of State in the exposition of notorious characters'.²¹ However, a quantitative analysis of the following five digitized sets of nineteenth-century criminal justice records suggests that, in the case of ages at least, local officials and the accused overwhelmingly complied with the state's demand. The first is a dataset of Newgate Prison Calendars — records of those committed to Newgate, for trial at the Old Bailey — forming Home Office record series HO77 in The National Archives, covering the years 1819–52, digitised by *Find My Past*.²² The second is a dataset of defendants recorded in the *Old Bailey Proceedings*, for the years 1800–99, digitised by *Old Bailey Online*.²³ The third is a dataset of the Millbank, Parkhurst and Pentonville Prison Registers in the years 1840–71, forming the HO24 record series, and now digitized by *Find My Past*.²⁴ The fourth is a dataset of the HO9 series of Hulks

²¹ Cited in Devereaux, 'The Criminal Branch', 287.

²² Hereafter referred to as the 'Newgate Prison Calendars dataset'. For more on this dataset, see Robert Shoemaker, 'Newgate Calendars of Prisoners 1782–1931', *Digital Panopticon*, https://www.digitalpanopticon.org/Newgate_Calendars_of_Prisoners_1782-1931 (accessed 2 July 2020). Thanks to *Find My Past* for granting access to the data.

²³ Hereafter referred to as the 'Old Bailey Proceedings dataset'. For more on this dataset, see Robert Shoemaker, 'Old Bailey Proceedings 1740–1913', *Digital Panopticon*, https://www.digitalpanopticon.org/Old_Bailey_Proceedings_1740-1913 (accessed 2 July 2020).

Thanks to the directors of the *Old Bailey Online* for granting access to the data.

²⁴ Hereafter referred to as the 'Prison Registers dataset'. For more on this dataset, see Sharon Howard, 'Prison Registers 1770–1951', *Digital Panopticon*, https://www.digitalpanopticon.org/Prison_Registers_1770-1951 (accessed 2 July 2020)]. Thanks to *Find My Past* for granting access to the data.

Registers, covering the years 1800–45, recently digitized by *Ancestry*.²⁵ And finally, I use a dataset of sampled Convict Indents covering the years 1812–68, containing around half of all those exiled to Australia.²⁶ Each dataset includes both males and females, except for the Hulks Registers, which has male convicts only. The Prison Registers and Hulks Registers datasets include conviction data for England, Scotland and Wales. The Convict Indents dataset includes conviction data for both Britain and Ireland.

As Table 1 shows, age was documented in these five sets of records largely without exception (the lower figure for the *Proceedings* is due to the fact that up until 1860, only the ages of those found guilty tended to be recorded). In most of the records an age was recorded for 90 per cent or more of the accused. Indeed, age was, after name, the category of personal information most commonly recorded about convicts in the nineteenth century.

Table 1. Frequency of age recording.

Dataset	Years covered	Total number of accused	Number with a recorded age	% age recorded
Newgate Prison Calendars	1819–52	226,770	208,300	91.9%
Old Bailey Proceedings	1800–99	168,386	127,276	75.6%
Prison Registers	1840–71	85,982	85,980	100.0%
Hulks Registers	1800–45	117,845	117,433	99.7%

²⁵ Hereafter referred to as the ‘Hulks Registers dataset’. For more on this dataset, see Robert Shoemaker, ‘Hulks Registers 1801–1879’, *Digital Panopticon*, https://www.digitalpanopticon.org/Hulks_Registers_1801-1879 (accessed 2 July 2020). Thanks to *Ancestry* for granting access to the data.

²⁶ Hereafter referred to as the ‘Convict Indents dataset’. Age data is missing for those convicts who died at sea or were so sick on arrival that they were transferred directly to the colonial hospital and were therefore not present when the description process was conducted. For more on this dataset, see Oxley, ‘Convict Indents’. Thanks to Deborah Oxley for granting access to the data.

Convict Indents	1812–68	87,301	80,952	92.3%
Total N / Ave %	—	607,223	558,966	93.5%

Sources: Newgate Prison Calendars dataset; Old Bailey Proceedings dataset; Prison Registers dataset; Hulks Registers dataset; Convict Indents dataset.

In short, state authority was incredibly effective in capturing an age for the accused, with seemingly little noncompliance on the part of either the record keepers or the accused. Why was this so? A number of possible reasons can be considered. For its own part, the central state appears to have seen the information on convict ages as important for making pardoning decisions, and it also wished to understand something of the roots of criminal behaviour, particularly juvenile delinquency.²⁷ In its series of directives issued in the late eighteenth and early nineteenth centuries (discussed above), the central state did not necessarily prescribe the form of the records (aside from the ‘prison returns’ that were established by the 1823 Gaol Act). But in many instances, local record keepers were required to send copies of the records to Whitehall, and the records were thus subject to central oversight. From 1835, for instance, centrally-appointed prison inspectors started to examine record-keeping within local prisons, with some officials berated for their laxity in collecting the requisite information on offenders, such as literacy skills.²⁸ A failure to produce the information demanded by the central government could have potentially significant financial implications for those tasked with compiling the records. Contractors of the hulks and transportation ships were paid by the Treasury on condition they provide regular returns of the convicts on board. Penitentiaries were directly funded by Whitehall. The publisher of the *Old Bailey Proceedings* relied on a subsidy from the City of London

²⁷ On these points, see Shoemaker and Ward, 1448, 1454. For an example of the attempt to use the Home Office’s statistics on offender ages to understand the causes of crime, see F. G. P. Nieson, ‘Statistics of Crime in England and Wales for the Years 1842, 1843, and 1844’, *Journal of the Statistical Society of London* 9, no. 3 (October 1846): 223–76.

²⁸ Rosalind Crone, ‘How to Get More out of Prison Registers: Part 2’, *Prison History*, <https://www.prisonhistory.org/how-to-get-more-out-of-prison-registers-part-2/> (accessed 2 July 2020).

to ensure continued publication, in return providing free copies to City of London and Whitehall officials. Local prison keepers were liable to a fine for not delivering their prison return to the Home Office.²⁹ But for their own part, local record keepers likely also had their own motivations for assiduously recording convict ages, either as a practical measure in distinguishing between offenders with the same name (a common occurrence), or out of what appears to have been a strong and widely-held desire to understand the criminal, at a time when older conceptions of the causes of crime were on the wane.³⁰ And as discussed below in the concluding section, there were powerful reasons for the accused's compliance too.

The central state also demanded precise age information on the accused, in order, for instance, to produce its annual 'judicial statistics' on the number of offenders in each age bracket.³¹ Here too, the accused and local officials appear to have complied with this demand, with seemingly little guesstimation in the recording of convict ages. Anecdotal evidence suggests that such recorded ages were usually the product of self-reporting on the part of convicts. For example, John Clay, the information-gathering chaplain of the Preston house of correction in Lancashire, claimed that almost all of the (extensive) information that he collected on the inmates — including their ages — was

²⁹ Shoemaker, 'Hulks Registers'; Sean McConville, *A History of English Prison Administration: 1750-1877* (London: Routledge, 1981); Clive Emsley, Tim Hitchcock and Robert Shoemaker, 'The Proceedings – Publishing History of the Proceedings', *Old Bailey Proceedings Online*, www.oldbaileyonline.org, version 7.0 (hereafter 'OBPO') (accessed 29 June 2020); Gaols Act 1823, 4 Geo. IV c. 64.

³⁰ Shoemaker and Ward, 1456.

³¹ On the judicial statistics of offender ages, see Gatrell and Hadden, 383–5.

derived from the prisoners themselves.³² After name, age was the first question put to the prisoners by Clay.³³

The following analysis of age patterns suggests that convict ages were usually recorded with precision rather than ‘heaping’ at ages ending in a ‘round’ number of 0 or 5. There is a commonly observed tendency amongst past Western populations for recorded ages to heap at ages ending in a 0 or 5, because contemporaries often did not know their exact age (largely as a result of innumeracy), and therefore guessed at what they (or the record keeper) thought was the nearest round number (such as 30, 35, 40, 45 and so on). This tendency towards ‘age heaping’ can be assessed using the Whipple Index, which measures the level of heaping on specified terminal digits (here 0 and 5), taking into account the fact that in a normally distributed population, we would expect twenty per cent of all recorded ages to end in a 0 or 5. This article also uses \tilde{W} , a transformation of the Whipple Index which signifies the share of individuals that can be said to have a precisely-recorded age (that is, an age ending in a terminal digit other than 0 or 5), rather than a rounded age ending in a 0 or 5.³⁴ A

³² House of Commons Parliamentary Papers (hereafter ‘HOCP’), 1839. *Gaols. Copies of all Reports, and of Schedules (B.)*, 170 (1840), 79. Similar interrogations were undertaken at Reading Ipswich prisons: see Rosalind Crone, ‘The Great ‘Reading’ Experiment: An Examination of the Role of Education in the Nineteenth-Century Gaol’, *Crime, History & Societies* 16, no. 1 (2012): 55, and Rosalind Crone, ‘Education in the Working-Class Home: Modes of Learning as Revealed by Nineteenth-Century Criminal Records’, *Oxford Review of Education* 41, no. 4 (2015): 483.

³³ HOCP, *Eighth Report of the Inspectors of Prisons of Great Britain. II. Northern and Eastern District*, 517 (1843), 67.

³⁴ A Whipple Index score is calculated by summing the number of individuals who report an age ending in the specified terminal digits (here, 0 and 5), dividing that sum by the total number of individuals (i.e. all terminal digits), and then multiplying by five. See Brian A’Hearn, Jörg Baten and Dorothee Crayen, ‘Quantifying Quantitative Literacy: Age Heaping and the History of Human Capital’, *The Journal of Economic History* 69, no. 3 (2009): 787–8.

Whipple Index score of 100 suggests no age heaping on ages ending in 0 or 5 within that population, and thus — in terms of \tilde{W} — that 100 per cent of the population likely reported a precise (rather than rounded) age. The higher the Whipple Index score, the greater the likely level of rounding at ages ending in 0 or 5 in that document, and thus the lower the \tilde{W} score (i.e. the proportion of individuals with a precise, rather than rounded, recorded age).

Of course, a recorded age not ending in a 0 or 5 may still have been the product of guesswork, either on the part of the convict or the record keeper, rather than exact knowledge. But even if this was the case, we can take such guesswork as an internalisation of the state's demand for precise information. The Whipple Index and \tilde{W} patterns match what we expect the convicts to have known about their ages, and tally with the findings from other recent studies of heaping on rounded ages amongst nineteenth-century convicts and civic populations. In the first instance, the patterns in age heaping (and thus the probable extent of guessing at rounded ages end in 0 or 5) correlate in expected ways with the literacy skills of convicts, which we can take as a proxy for numeracy. For the years 1826–52, the Convict Indents dataset includes both the observed literacy skill (recorded as 'read & write', 'read' or 'neither' read nor write) and age for 22,212 convicts aged between 23 and 62. As Figure 1 demonstrates, convicts deemed able to both read and write showed the least tendency towards age heaping (with 98.5 per cent providing a 'precise', rather than rounded age ending in a 0 or 5), with those deemed able to read only showing a greater tendency towards rounding (at 94.8 per cent), and those recorded as 'neither' able to read nor write slightly greater still (at 94.1 per cent).³⁵ The patterns also show the commonly-observed difference between males and females, with recorded ages for male convicts in the Old Bailey *Proceedings* 1800–99 seemingly less likely to have been the product of rounding compared to females (with \tilde{W} scores of 97.5 per cent and 94.3 per cent

³⁵ For similar findings on literacy and age heaping, amongst Tasmanian transportees, see Maxwell-Stewart, 'The State', 422.

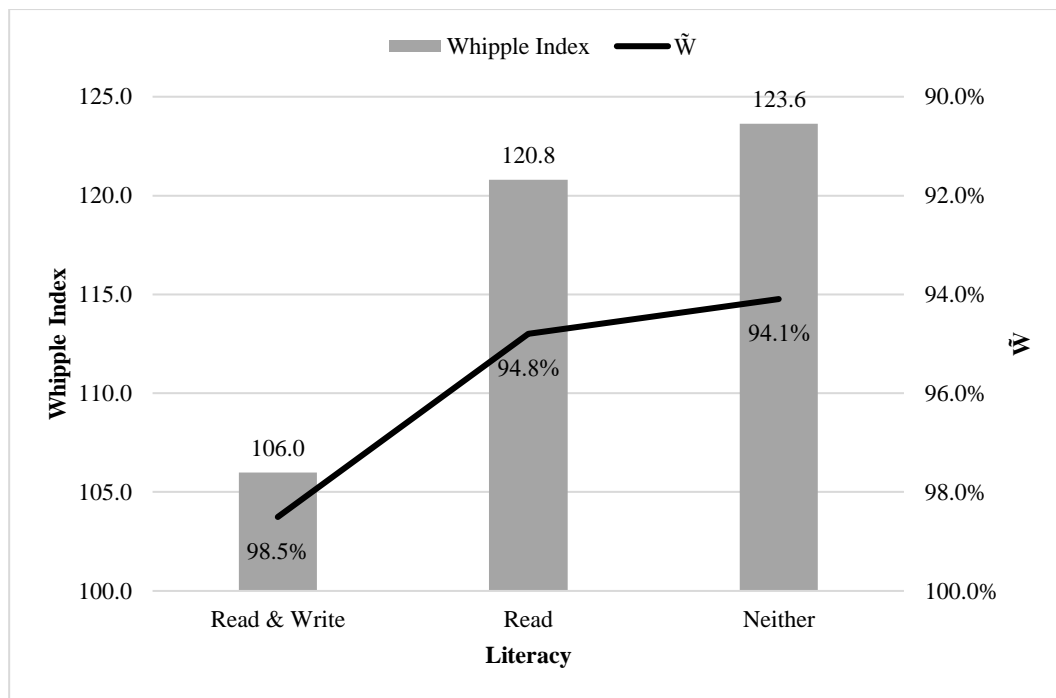
respectively).³⁶ The tendency observed here was for less rounding amongst the elderly compared to those aged 33–62 – across all five datasets combined, some three per cent of those aged 63–72 rounded their age to a 0 or a 5 more than we would expect, but over twice as many did so in the age categories 33–62. That tallies with findings concerning prisoners in Wandsworth gaol between 1858 and 1878.³⁷

Figure 1. Literacy skill and Whipple scores, on terminal digits 0 and 5, ages 23–62.³⁸

³⁶ This analysis has been limited to defendants found guilty in order to isolate for the fact that conviction rates differed for males and females, and that defendant age was in turn positively correlated with likelihood of conviction.

³⁷ Sara Horrell, David Meredith and Deborah Oxley, ‘Measuring Misery: Body Mass, Ageing and Gender Inequality in Victorian London’, *Explorations in Economic History* 46 (2009): 101–2.

³⁸ A Myers’ Blended Index calculation on all five datasets suggests that there was a preference for ages ending with 0, 2 or 5 (with a 2.8 per cent, 1.1 per cent and 0.6 per cent respective deviation above the expected 10 per cent distribution), and that the terminal digits 9, 1 and 7 were the least preferred (at 2.0 per cent, 1.7 per cent and 1.1 per cent respective deviation below the expected 10 per cent distribution). Whilst the terminal digit 2 therefore seems to have been marginally more preferred than 5, it has nonetheless been decided to focus here on 5 (and 0), in order to facilitate comparisons to the existing literature on age heaping in the western world. The age range of 23–62 years was chosen in order to isolate for the effects of the massive increase in juvenile prosecutions in the first half of the nineteenth century.



N = 22,212

Sources: Convict Indents dataset, limited to years 1826–52.

There was thus at least some rounding in the recording of convict ages, due in part to the limits of the convicts' own knowledge of their true age. This very act of rounding might also be interpreted as a form of convict agency, in its rejection of the state's desire for precise information. But what is striking is the seemingly small amount of rounding that went into the recording of convict ages as a whole. Overall, less than 1 in 10 – and in many instances less than 1 in 20 – convicts with a recorded age between 23 and 62 appear to have guessed (or had guessed for them) their age by rounding to a number ending in 0 or 5 (see Table 2). This tallies with similar calculations of age heaping in the eighteenth and nineteenth centuries, both in terms of convicts and the wider population. To take the 1851 England and Wales census as just one example, the level of age heaping on terminal digits 0 and 5 among 23–62 year-olds stands at a Whipple Index score of 126. For the convicts documented across our five datasets here, it stands at 124 for the entire nineteenth century (Table 2),

and at 122.9 for the four record sets that are available for the specific decade of the 1850s.³⁹ As Horrell, Meredith and Oxley note, there is little reason to believe that convicts were less knowledgeable about their age than the rest of the population.⁴⁰ Nor, we could add, was the nineteenth-century state any less successful in capturing precise age information on convicts compared to other populations. Indeed, even amongst elderly convicts and those classified as illiterate – both of which we might expect to have had limited knowledge of their true age – the overwhelming majority analysed here show no rounding, perhaps because they guessed (or had guessed for them) a precise, rather than rounded age. This suggests, as has recently been stated elsewhere, that while age heaping on rounded numbers is a reasonable proxy for cognitive ability, it is more directly the product of broader social, political and cultural factors, which perhaps included, in this instance, the state’s demand for as much precision in the recording of convict ages as possible.⁴¹

Table 2. Whipple scores, on terminal digits 0 and 5, ages 23–62.

Dataset	Years Covered	N	Whipple Index	\tilde{W}
Newgate Prison Calendars	1819–52	68,496	128.1	93.0%
Old Bailey Proceedings	1800–99	69,562	125.1	93.7%
Prison Registers	1840–71	32,938	122.5	94.4%
Hulks Registers	1800–45	57,136	128.2	92.9%

³⁹ Peter Földvári, Bas Van Leeuwen and Jieli Van Leeuwen-Li, ‘How Did Women Count? A Note on Gender-Specific Age Heaping Differences in the Sixteenth to Nineteenth Centuries’, *The Economic History Review* 65, no. 1 (2012): 309.

⁴⁰ Horrell, Oxley and Meredith, 102.

⁴¹ Brian A’Hearn, Alexia Delfino and Alessandro Nuvolari, ‘Rethinking Age-Heaping: A Cautionary Tale from Nineteenth-Century Italy’, *University of Oxford Discussion Papers in Economic and Social History* 148 (September 2016), <https://www.economics.ox.ac.uk/oxford-economic-and-social-history-working-papers/rethinking-age-heaping-a-cautionary-tale-from-nineteenth-century-italy> (accessed 3 July 2020).

Convict Indents	1812–68	26,998	115.8	96.1%
Total N / Ave WI and \bar{W}	—	255,130	124.0	94.0%

Sources: Newgate Prison Calendars dataset; Old Bailey Proceedings Dataset; Prison Registers dataset; Hulks Registers dataset; Convict Indents dataset.

We might then ask *why* the recorded ages were based on self-reporting by the convicts. In some contexts, especially the early stages of the judicial process when there was less likely to have been prior information available on the accused (for example when suspects were committed to Newgate for trial, as recorded in the HO77 Newgate Prison Calendars), record keepers were likely reliant on the convicts for information on personal details, such as age, birthplace and occupation. This certainly seems to have been the case for those prison chaplains who compiled detailed records and statistics on the suspects submitted to their prisons.⁴² And the same may well have been true in the later stages of the judicial process, when prior documentation on the convict was not transmitted, such as when the gaoler's report compiled back in England was not forwarded to the authorities in Australia – an apparently common occurrence, particularly before the 1830s.⁴³ Even when previously-compiled documentation *was* forwarded – such as when gaolers' reports were transmitted to the hulks, or hulk reports were forwarded to Australia – record keepers did not necessarily check a convict's statement against the available documents. But in some instances they did, as for instance when convicts arrived in Van Diemen's Land.⁴⁴ Drawing comparisons between the levels of age heaping for each dataset in Table 2 must be done with caution, since there are differences in the underlying populations documented in each record, and because the overall distribution of ages varies between each dataset.⁴⁵ Such comparisons are however suggestive: in the earlier stages of the judicial process, when less prior

⁴² Shoemaker and Ward.

⁴³ Rogers, 17.

⁴⁴ Maxwell-Stewart, 'The State', 419.

⁴⁵ An intricate accounting for such effects and an exhaustive analysis of convict age heaping is beyond the scope and aims of this study.

documentation was presumably available on the convicts (such as in the Newgate Prison Calendars and the *Old Bailey Proceedings*), there appears to have been slightly more rounding involved in the recording of convict ages. In the prison registers for Millbank, Parkhurst and Pentonville penitentiaries, and in the convict indents, meanwhile – when prior documentation was regularly received with the convicts – the level of rounding was lower. It may well have been the case, then, that recorded ages were ‘refined’ (either by the convict or the record keeper) in light of prior documentation.

The state also expected truthful, as well as precise, self-reporting on the part of the convicts (and as discussed below, the state took measures to ensure this). To what extent did convicts comply, in terms of being consistent in the ages that they reported to record keepers at different points in time? In the case of the civic population of nineteenth-century England, analysis of the censuses has shown that there could be significant inconsistency in age recording over time. Jason Long has shown that a quarter of the children observed in the 1851 census reported ages in 1881 that were between two and five years different from the expected thirty-year increase.⁴⁶ In the case of convicts, contemporaries came to somewhat different conclusions on the reliability of the age information provided by offenders. John Fielding admitted that it was ‘common for criminals to change their names’. But, he maintained, ‘they cannot alter their age or figure’.⁴⁷ Others were less optimistic. In the 1880s, Reverend J. W. Horsley, chaplain to the Clerkenwell gaol in London, wrote that ‘very little notice’ was taken of names and ages in prison, ‘as from various reasons they are apt to alter with each entrance’, with young prisoners allegedly overstating or understating their age if they believed there to

⁴⁶ Jason Long, ‘Rural-Urban Migration and Socioeconomic Mobility in Victorian Britain’, *The Journal of Economic History* 65, no. 1 (2005): 1–35. There was a substantial amount of intentional age mis-reporting in the censuses of early twentieth-century Ireland: see John W. Budd and Timothy Guinnane, ‘Intentional Age-Misreporting, Age-Heaping, and the 1908 Old Age Pensions Act in Ireland’, *Population Studies* 45, no. 3 (1991): 497–518.

⁴⁷ Cited in Shoemaker and Ward, 1448.

be an advantage or disadvantage in being classed as a juvenile.⁴⁸ Henry Mayhew had previously claimed much the same in 1862.⁴⁹

In some circumstances there was certainly an incentive for convicts to misrepresent their age, given that verdicts, sentences and punishments were heavily influenced by the age of the accused: relatively young and old convicts for instance were more likely to be acquitted at trial, and if found guilty, tended to receive more lenient sentences and punishments.⁵⁰ In particular, especially young and old offenders were more likely to be imprisoned, and less likely to be executed or transported, than offenders in their 20s, 30s and 40s. As the quote from J. W. Horsley above suggests, there may have been an incentive to being classed as a juvenile, after separate provision for young offenders in prisons and the hulks was introduced in the early nineteenth century.⁵¹ As noted above, in circumstances where no prior information was available, only the convicts themselves knew their own personal details, especially when documentation was not forwarded on. In 1825, for instance, George Arthur, Governor of Van Diemen's Land, complained that documentation for the female convicts on board the *Henry* ship had not been received, so that his 'judgment of the character of the prisoners must be entirely formed from their own account of themselves, and upon their conduct on board the

⁴⁸ Cited in Tobias, 17.

⁴⁹ *Ibid*, 18.

⁵⁰ Peter King, *Crime, Justice, and Discretion in England, 1740–1820* (Oxford: Oxford University Press, 2000), *passim*; Richard Ward and Lucy Williams, 'Initial Views from the *Digital Panopticon: Reconstructing Penal Outcomes in the 1790s*', *Law and History Review* 34, no. 4 (2016): 893–928. In prisons, there was likewise some incentive for prisoners to lie about their literacy skills, either to gain admission to the prisons school, or to avoid enrolment: see Crone, 'How to get more out of prison resisters: Part 2'.

⁵¹ Shoemaker and Ward, 1449; Leon Radzinowicz and Roger Hood, *A History of English Criminal Law and its Administration from 1750. Vol. 5. The Emergence of Penal Policy in Victorian and Edwardian England* (London: Clarendon, 1990), 142.

transport, which cannot be depended on'.⁵² As Helen Rogers explains, by the time they arrived in Australia, many convicts had become accustomed to (and perhaps adept at navigating) cross-examination.⁵³

But if there was incentive and opportunity for age misrepresentation, it seems that most convicts were not able or willing to do so. This is suggested by an analysis of 5,264 instances in which we can directly compare a convict's age as it was recorded at their trial at the Old Bailey against the age that was recorded for their convict indent on arrival in Australia.⁵⁴ Accounting for the passage of time between the compilation of these respective records, this 'digital textual archaeology' provides us with what will here be referred to as the 'net difference' between the age recorded in the *Proceedings* and the convict indent.⁵⁵ As Figures 2–4 demonstrate, there was a remarkable level of

⁵² Cited in P. R. Eldershaw, *Guide to the Public Records of Tasmania: Section Three, Convict Department* (Hobart: Archives Office of Tasmania, 2003), 5.

⁵³ Rogers, 11.

⁵⁴ I say 'ostensibly' here because, as detailed below, at least some of the links are incorrect, in that the *Proceedings* report and Convict Indent actually refer to different individuals. The convicts recorded in the Convict Indents dataset have here been linked to the defendants recorded in the *Old Bailey Proceedings* dataset via the information that was recorded in the British Transportation Registers, using an automated record-linkage process based on name, trial date and transportation ship. It is important to note that such links have *not* been made on the basis of age. It is therefore a different record-linkage process undertaken by the *Digital Panopticon* from the one used on that same project to create the 'Life Archives' that can be searched on the *Digital Panopticon* website. Many thanks to Jamie McLaughlin at the Sheffield Digital Humanities Institute for carrying out the record linkage and generating the data. The analysis is here limited to the convicts sent to New South Wales or Van Diemen's Land, since those records have been more comprehensively digitised than those for the other Australian penal colonies.

⁵⁵ I owe this phrase to Hamish Maxwell-Stewart.

consistency in the recording of convict ages between trial and transportation.⁵⁶ Erring on the side of caution, we should consider the net differences of -1, 0 and +1 as consistent.⁵⁷ Taken together, these amount to 4,081 cases; some 78 per cent of all the 5,264 compared ages. In other words, the state's recording of convict ages was, overall, consistent far more often than it was not. If convicts therefore lied about their age, they did so consistently between trial and transportation; more likely is that there was no such age misrepresentation amongst the vast majority of convicts.

⁵⁶ Figure 2 focuses on the central, Interquartile Range (IQR) of the bell curve in net difference numbers. Figures 3 and 4 meanwhile zoom in on the 'outliers' within the 'long tails' at the far left and right ends of the X axis cut off from Figure 2 (which would otherwise be impossible to see if included in Figure 2). A negative (i.e. below 0) net difference indicates that the convict's recorded age in the Convict Indents dataset is less than we would expect, given the age recorded in the *Proceedings* and the amount of time between the individual's trial and transportation. A positive (i.e. above 0) net difference meanwhile indicates that the convict's recorded age had increased more than we would expect.

⁵⁷ The net difference of -1 might not actually indicate any real inconsistency at all, because the *Proceedings* and convict indents recorded ages as years, rather than specific birth dates, and so the latter cannot be factored into the net difference calculations. To give a hypothetical example – a convict with a birthday in June might have been convicted at the Old Bailey in December, and then arrived in Australia the following May: the convict indent would thus be dated a year later than the *Proceedings*, but the convict's age would not have changed. This would therefore be counted by the automated process as a net difference of -1 and would suggest a discrepancy where none in fact existed. It might also have been the case that convicts stated the age that they were *due* to be at their next birthday, and this would explain the large number of cases with a net difference of +1. Thus, we should err on the side of caution and consider the net differences of -1, 0 and +1 as essentially consistent.

Figure 2. Net difference in the recorded ages between the Old Bailey Proceedings and Convict Indents datasets (focusing on the net differences within the Interquartile Range).

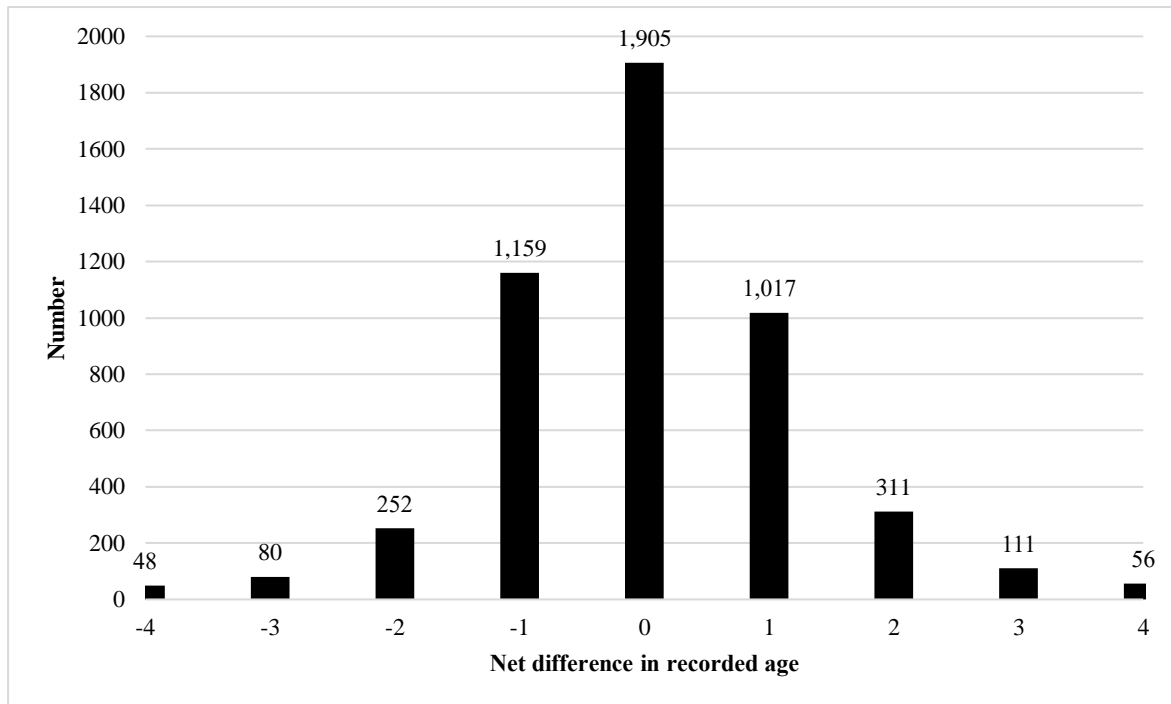


Figure 3. Negative net differences in the recorded ages between the Old Bailey Proceedings and Convict Indents datasets (zoomed-in view on the 'outliers' at the extreme left-hand side of the X axis cut off from Figure 2).

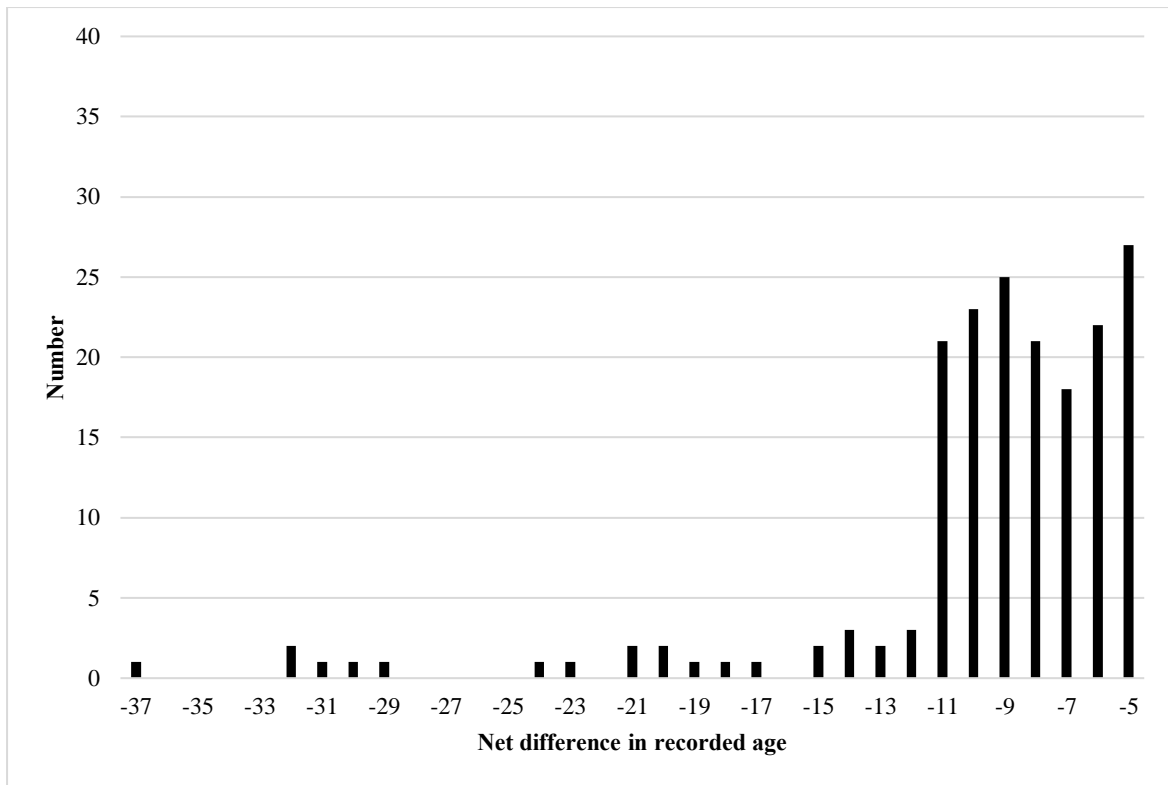
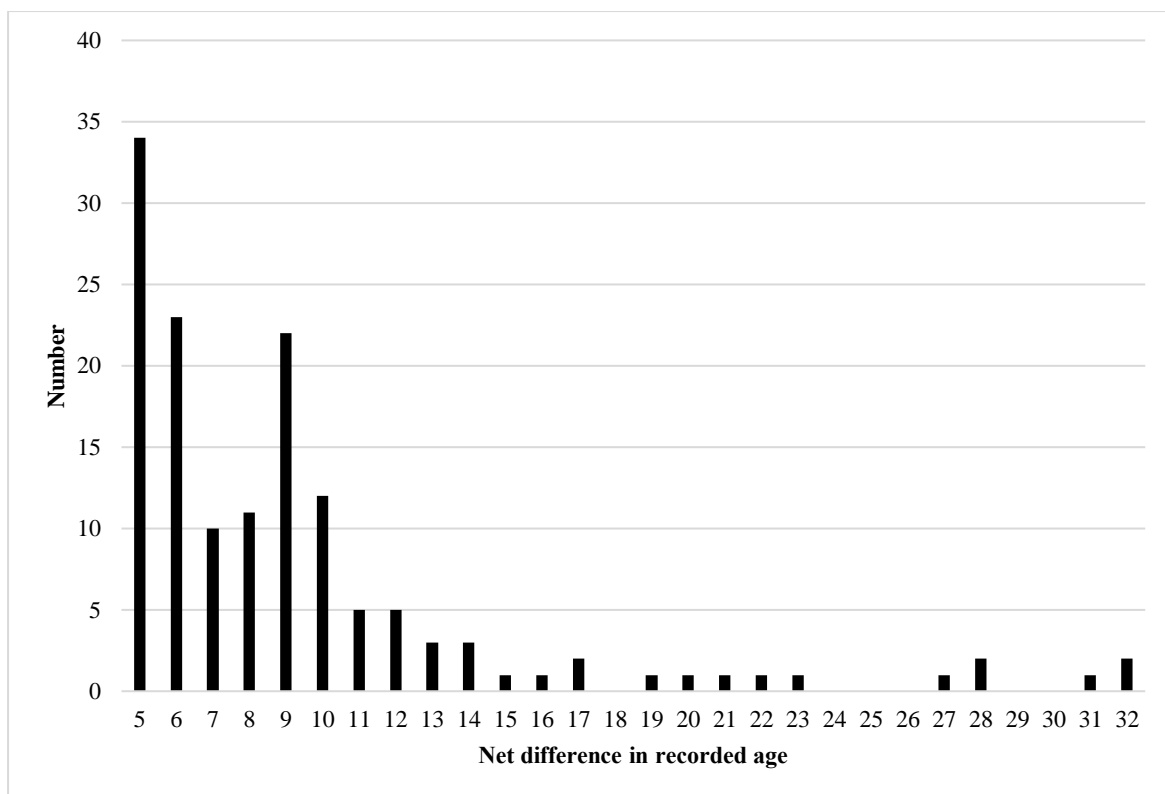


Figure 4. Positive net differences in the recorded ages between the Old Bailey Proceedings and Convict Indents (zoomed-in view on the ‘outliers’ at the extreme right-hand side of the X axis cut off from Figure 2).



N = 5,264

Sources: Dataset of Links between Old Bailey Proceedings and Convict Indents datasets.

Moreover, manual checking of a sample of the remaining 1,183 apparently ‘inconsistent’ cases (i.e. those outside of the range -1 to +1) reveals that many such inconsistencies are actually the result of errors in the digitisation of the records (either in terms of transcription or record linkage), or simple human errors in the originals, rather than age misrepresentation on the part of the convicts.⁵⁸ As Figures 3–4 demonstrate, there are 858 cases in which the net difference was between 2 and 4

⁵⁸ The time-consuming nature of the manual checking process (as explained below) has not made it possible to check all of the 1,183 ‘inconsistent’ cases and thereby remove all that are the result of digitisation errors or simple human errors in the originals. And even when manual checking has been undertaken, it was often not possible to determine whether such an error was the cause of the inconsistency. The decision has therefore been made not to correct the data seen in Figures 2–4 on the basis of the manually-checked sample.

years out, as well as 325 mysteriously large discrepancies of 5 years or more (in a handful of cases, as much as 20 years or more). Investigating the cause of these apparently inconsistent cases involves the time-consuming job of manually checking the results of the automated record-linkage process to peel back the possible layers of explanation. It involves manually checking that the link between the *Proceedings* and the Convict Indent dataset is indeed correct and relates to the same individual.⁵⁹ Second, it requires checking the digital data against an image of the original document, to establish if the discrepancy is due to an error in the transcription of the record.⁶⁰ And finally, it involves manually comparing the information recorded in the *Proceedings* and convict indent against that recorded for the same individual in other documents as a means of identifying possible human errors in the original *Proceedings* or convict indent entries. The time-consuming nature of this task means that manual checking must necessarily be confined to a sample.⁶¹

⁵⁹ On the effectiveness of automated record linkage of historical records more widely, see Martha Bailey, Connor Cole and Catherine Massey, ‘Simple Strategies for Improving Inference with Linked Data: A Case Study of the 1850–1930 IPUMS Linked Representative Historical Samples’, *Historical Methods* 53, no. 2 (2020): 80–93.

⁶⁰ On a similar peeling back of the layers around digitised sources, see Bonnie Mak, ‘Archaeology of a Digitization’, *Journal of the Association for Information Science and Technology* 65, no. 8 (2014): 1515–26.

⁶¹ Manual checking (Column A in Table 3) has here been confined to all of the 325 outliers (Column B) at the most extreme ends of the net differences scale (i.e. those in the range $-5 \leq$ and $\geq +5$, as seen in Figures 3 and 4, and hereafter referred to as the ‘outlier’ cases) along with a randomly-generated twenty percent sample of cases (totalling 179) within the Interquartile Range of ≥ -4 to ≤ -2 and $\geq +2$ to $\leq +4$ (Column C). The results of this twenty per cent IQR sample have then been extrapolated out to all the other 680 cases that sit within the same Interquartile Range of ≥ -4 to ≤ -2 and $\geq +2$ to $\leq +4$, but which have not been manually checked, in order to estimate absolute numbers across the dataset as a whole (Column D).

Table 3. Manual checking of ‘inconsistent’ net differences.

(A) Stages of manual checking	(B) Outliers		(C) 20% IQR Inconsistencies Sample		(D) IQR Sample Extrapolated
	N	% of confirmed cases	N	% of confirmed cases	N
Total N	325	—	179	—	680
Linkage between the datasets:					
Cannot be confirmed	11	—	1	—	4
Incorrect link	13	4.1%	2	1.1%	8
Correct link	301	95.9%	176	98.9%	669
Transcription of original:					
Cannot be confirmed	15	—	7	—	27
OBPO transcription error	13	4.5%	2	1.2%	8
Convict Indents transcription error	20	7.0%	3	1.8%	11
Transcription correct	253	88.5%	164	97.0%	623
Error in the original record:					
Cannot be confirmed	121	—	64	—	243
Likely OBP error	42	31.8%	4	4.0%	15
Likely convict indent error	6	4.5%	2	2.0%	8
‘Genuine Inconsistencies’	84	47.2%	94	87.9%	357

Sources: Dataset of Links between Old Bailey Proceedings and Convict Indents datasets.

The results of this manual checking, as detailed in Table 3, show that of those inconsistent net difference cases that can be confirmed, a small proportion (5.2 per cent) are the result of an incorrect link.⁶² Some 14.5 per cent of the inconsistencies meanwhile are the result of a mistranscription of the original.⁶³ A larger proportion (36.3 per cent of the outliers, and 6 per cent of the IQR sample) appear to be the result of human error by the compiler of the original record. This is more difficult to establish. It has here been assessed by ‘triangulating’ the recorded ages in the *Proceedings* and convict indents against the age recorded for the same individual in other records (where available to view online). Namely, those records are: (1) the Newgate prison calendars, hulks registers and prison registers that were compiled before the convicts left England; and (2) the description lists and conduct registers that were drawn up when the convicts arrived in Van Diemen’s Land.⁶⁴ Such cases of

⁶² The incorrect links are usually due to two individuals with the same name being tried at the Old Bailey on the same day or sent to Australia aboard the same transportation ship. For an example of an incorrect link resulting from two men with the same name convicted on the same day at the Old Bailey, see *Digital Panopticon*, James Day b. 1784, Life Archive ID [obpdef1-1271-18360509](#); *OBPO*, trial of James Day, 9 May 1836 (t18360509-1271); *OBPO*, trial of James Day, 9 May 1836 (t18360509-1329).

⁶³ For a case of mistranscription, we might take the example of Ann Oakes: in this instance, the linked *Proceedings* and convict indent records both refer to the ‘right’ Ann Oakes, but the age of 33 as it is stated in the original trial report has been mistranscribed by the *Old Bailey Proceedings Online* as 53. See *Digital Panopticon*, Ann Oakes b. 1791, Life Archive ID [obpdef1-80-18441125](#). It is unsurprising that the large, outlier net differences are much more often the product of such digitisation errors than the smaller ones within the IQR.

⁶⁴ All searched via the *Digital Panopticon*. The Van Diemen’s Land convict records can be viewed online via the *Tasmanian Names Index*, <https://www.libraries.tas.gov.au/how-to/Pages/Names-Index-content.aspx> (hereafter ‘*TNI*’), (accessed 15 October 2019). As Table 3 shows, in over a third of cases (121 outliers and 64 within the IQR) there has not been sufficient supplementary records available

apparent human error include that of William Henry Brunt, recorded in the *Proceedings* as 21 years of age at the time of his trial in 1841, but recorded in the convict indents the following year as aged 25, thus leaving a net difference of +3 years.⁶⁵ Given that the Newgate prison calendar, hulks register, description list and conduct register are all consistent with the *Proceedings* in likewise recording Brunt's age as twenty-one, we can perhaps interpret this as a simple error on the part of the official who compiled the convict indent.⁶⁶ Such inconsistencies were probably the result of a simple slip of the quill or a misheard word. In the case of the *Proceedings*, this could conceivably have resulted from the noisy setting of the courtroom, the desire to get the publication to market quickly or from the practice of the shorthand reporter reading aloud from his notes to two transcribers.⁶⁷ In the case of the convict indents, inconsistencies may well have resulted from the verbal exchange between two people with very different accents.

online to confirm a basic human error in the *Proceedings* or convict indent. This is especially the case for the convicts sent to New South Wales, who tended to be less well-documented than those sent to Van Diemen's Land, and as the records for New South Wales have not been made available online to the same extent as those for Van Diemen's Land.

⁶⁵ *Digital Panopticon*, William Henry Brunt b. 1820, Life Archive ID [obpdef1-1602-18410614](https://stors.tas.gov.au/CON14-1-13$init=CON14-1-13p11); *TNI*, CON14/1/13, [https://stors.tas.gov.au/CON14-1-13\\$init=CON14-1-13p11](https://stors.tas.gov.au/CON14-1-13$init=CON14-1-13p11).

⁶⁶ *Digital Panopticon*, William Henry Brunt b. 1820, Life Archive ID [obpdef1-1602-18410614](https://stors.tas.gov.au/CON18-1-30$init=CON18-1-30p104); *TNI*, CON18/1/30, [https://stors.tas.gov.au/CON18-1-30\\$init=CON18-1-30p104](https://stors.tas.gov.au/CON18-1-30$init=CON18-1-30p104); *TNI*, CON33/1/17, [https://stors.tas.gov.au/CON33-1-17\\$init=CON33-1-17p25](https://stors.tas.gov.au/CON33-1-17$init=CON33-1-17p25). A similar instance, in this case with the *Proceedings* as the anomaly, can be seen in the case of Charles Young, his trial report stating an age ten years out from the Newgate calendar and transportation records: *Digital Panopticon*, Charles Young b. 1822, Life Archive ID [obpdef1-1665-18410614](https://stors.tas.gov.au/CON33-1-17$init=CON33-1-17p25).

⁶⁷ On the production of the *Proceedings*, see John H. Langbein, 'Shaping the Eighteenth-Century Criminal Trial: A View from the Ryder Sources', *The University of Chicago Law Review* 50, no. 1 (1983): 10; Devereaux, 'Convicts and the State', 476.

In sum, of the cases that could be confirmed through manual checking, digitisation errors and human error in the originals account for just over half of all the outliers and around one in ten of the IQR sample. That still leaves many instances (close to 90 per cent of the IQR sample cases, and around half of the outliers) in which the net difference cannot be explained by errors in the digitisation or the original record, and in which the discrepancy between the *Proceedings* and convict indent is mirrored by a wider discrepancy between the other trial and transportation records available for that individual.⁶⁸ These cases are referred to in Table 3 as ‘genuine inconsistencies’. These include the case of William John Worley (alias Worly), convicted of sheep stealing at the Old Bailey in May 1847 and subsequently transported to Van Diemen’s Land.⁶⁹ The *Proceedings* records Worley’s age as 30, and this has been correctly transcribed by the *Old Bailey Online*. The Newgate prison calendar, Millbank prison register and hulk register all likewise record Worley’s age as 30 in 1847.⁷⁰ Three years later, however, in November 1850 when Worley arrived in Van Diemen’s Land, his age was recorded in both the convict indents and the conduct registers as 45; twelve years more than we would expect given the passage of time.⁷¹ All such records undoubtedly refer to the same William John Worley, and we are therefore left with a curiously large, ‘outlier’ inconsistency in recorded age.⁷² But

⁶⁸ Or, in a handful of cases, no consistency across any of the records at all.

⁶⁹ *Digital Panopticon*, William John Worly b. 1817, Life Archive ID [obpdef1-1170-18470510](#) and Life Archive ID [fasai78604](#).

⁷⁰ *Digital Panopticon*, William John Worly b. 1817, Life Archive ID [obpdef1-1170-18470510](#).

⁷¹ *Digital Panopticon* William John Worley, Life Archive ID [fasai78604](#); *TNI*, CON14/1/41, [https://stors.tas.gov.au/CON14-1-41\\$init=CON14-1-41P318](https://stors.tas.gov.au/CON14-1-41$init=CON14-1-41P318); *TNI*, CON33/1/99, [https://stors.tas.gov.au/CON33-1-99\\$init=CON33-1-99p29](https://stors.tas.gov.au/CON33-1-99$init=CON33-1-99p29).

⁷² As an example of a smaller ‘genuine inconsistency’ from within the IQR sample, we can take the case of Thomas Moss, tried in December 1834 and transported to Van Diemen’s Land in 1835 – his age in 1834 was recorded as 25 in the *Proceedings*, Newgate prison calendars, London prison registers and hulks registers, but a year later both the convict indent and description list entries compiled in Australia recorded his age as 23, a discrepancy when accounting for the passage of time

overall, such ‘genuine inconsistencies’ account for only one in ten of all the 5,264 comparisons between the recorded ages in the *Proceedings* and convict indents.⁷³

Nor are all of these ‘genuine inconsistencies’ necessarily cases of deliberate misrepresentation on the part of the convicts. A significant proportion instead appear to have been the result of guesswork, either in that: (a) the same rounded age was recorded for an individual both in the *Proceedings* and the convict indent (along with the other supplementary records available), but given that time had elapsed between trial and transportation, it has resulted in an inconsistent net difference in the dataset of age comparisons; or (b) that the inconsistency arose from differential age heaping between trial and transportation, for example, that a convict’s age was guessed at 30 at the time of trial and subsequently guessed at 40 at the time of transportation. There are 87 ‘genuine inconsistency’ cases in which the age recorded in *Proceedings* or convict indent ends in 0 or a 5 (i.e. 50 per cent of all 178 manually-checked genuine inconsistencies in Table 3): in a normally distributed set of ages, we expect 40 per cent to end in a 0 or a 5 across both sets of records. Thus, guesswork perhaps accounts for 10 per cent of the genuine inconsistency cases.

of -3 years. Again, neither an incorrect link, mistranscription nor basic error in the *Proceedings* or convict indent can account for the discrepancy. See *Digital Panopticon*, Thomas Moss b. 1809, Life Archive ID [obpdef1-260-18341205](#); *Digital Panopticon* Thomas Moss, VDL Founders and Survivors Convicts, 4th July 1831, Record ID [fasai51140](#); *TNI*, CON14/1/4, [https://stors.tas.gov.au/CON14-1-4\\$init=CON14-1-4P14](https://stors.tas.gov.au/CON14-1-4$init=CON14-1-4P14); *TNI*, CON18/1/16, [https://stors.tas.gov.au/CON18-1-16\\$init=CON18-1-16p58](https://stors.tas.gov.au/CON18-1-16$init=CON18-1-16p58).

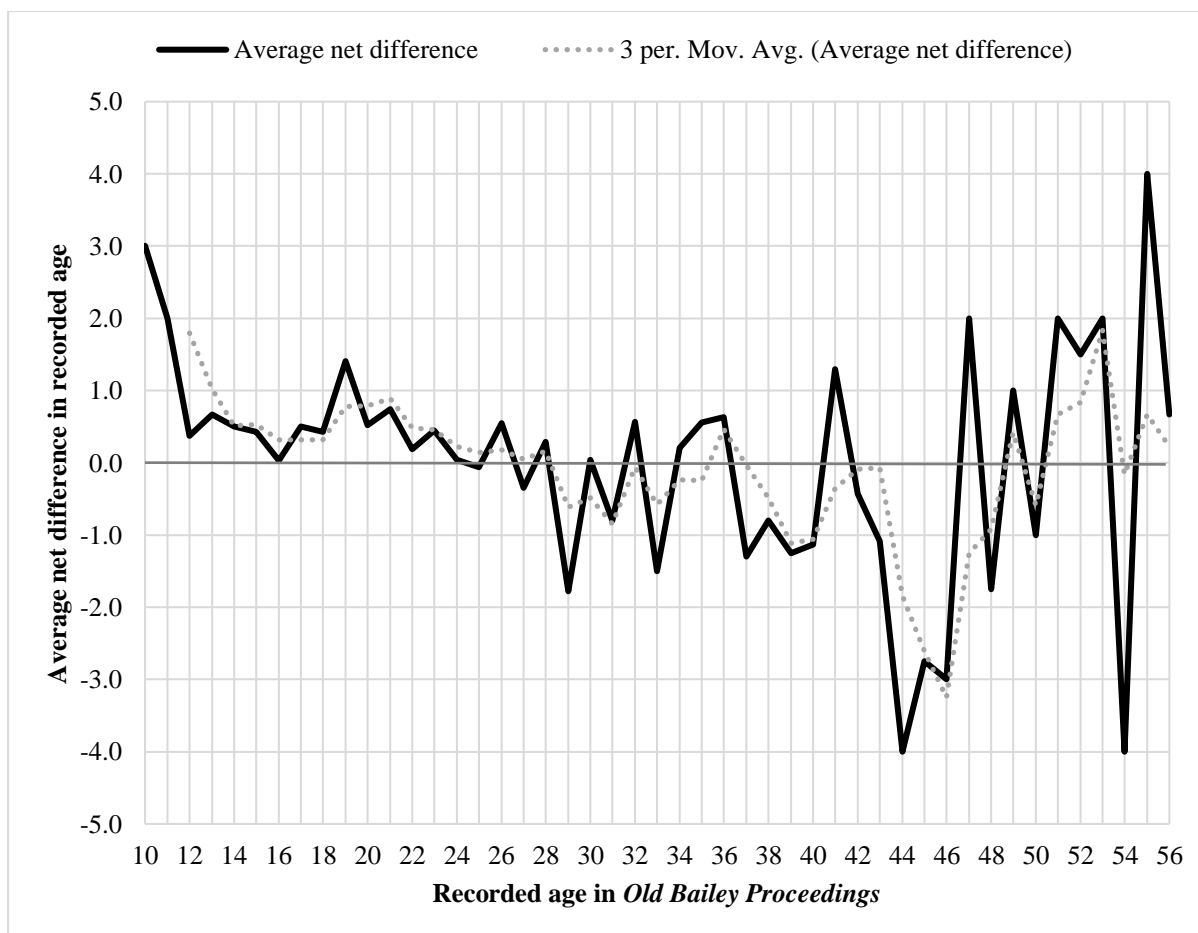
⁷³ As the figures in Table 3 suggest, it is highly likely that if enough supplementary documentation was available online to manually check those cases which cannot be confirmed as ‘original record errors’, the majority would not demonstrate an error in the original record (particularly for the IQR cases), and would thus be left as ‘genuine inconsistencies’. But even if we were to add the 428 such cases that cannot be confirmed as original record errors to the 535 confirmed ‘genuine inconsistencies’, this would still only raise the total to some 18 per cent of all compared ages.

The vast majority of convicts therefore seem to have consistently reported their age between trial and transportation. Nonetheless, a significant minority of convicts (somewhere in the region of 10–20 per cent) seemingly engaged in deliberate age misrepresentation, as well as withholding or changing other details about themselves. Probably, this was a strategy for surviving the transportation system. Age misrepresentations typically had the effect of presenting the convict as being as close to prime working age as possible, within feasible limits. Figure 5 shows the average net difference, at each Old Bailey trial age, between the age recorded in the *Proceedings* against that recorded in the convict indents, for all 858 ‘inconsistent net difference’ cases within the Interquartile Range of ≥ -4 to ≤ -2 and $\geq +2$ to $\leq +4$ (i.e. excluding the outliers). Although the sample sizes are small at some trial ages (especially early teens and fifties), the patterns are nonetheless suggestive. On average, those recorded as teenagers at the time of their trial tended to have recorded ages in the convict indents that were older than expected, given the passage of time. Those recorded in the *Proceedings* as in their thirties typically had slightly younger recorded ages in the convict indents than expected, and those in their forties ‘under-aged’ to an even greater extent. Trial defendants in their mid- to later twenties, however, over- and under-aged in equal amounts.⁷⁴ This pattern might well reflect deliberate age misrepresentation at the point of trial as well at transportation: at trial, it was advantageous for defendants to present themselves, if possible, as relatively young or old, as these groups were typically treated more leniently than other age groups. But once transported to Australia, and faced with a system that valued and rewarded the capacity for labour, it may have been more advantageous for convicts to present themselves as of a productive working age.⁷⁵

Figure 5. Average difference between ages recorded in the *Old Bailey Proceedings* and the Convict Indents.

⁷⁴ Convicts in their late forties and fifties appear to have been the exception to this pattern, instead over-aging further away from prime working age.

⁷⁵ Nicholas, *Workers*.



N = 858

Sources: Dataset of Links between Old Bailey Proceedings and Convict Indents datasets, limited to cases within the IQR.

Some convicts, moreover, had inconsistencies in other categories of information that were recorded about them, which likewise served to present them as both less criminal and more skilled. Not only was Mary Carter's recorded age of 32 in the convict indents some fourteen years less than expected, given that she was recorded as aged 45 in the *Proceedings* a year earlier, the convict indents and conduct registers also referred to only one prior conviction, whereas the prison registers drawn up back in England cited three previous convictions.⁷⁶ But such discrepancies – at least amongst the

⁷⁶ *Digital Panopticon*, Mary Carter b. 1801, Life Archive ID [obpdef1-827-18460330](https://panopticon.tas.gov.au/obpdef1-827-18460330); *TNI*, CON15/1/4, [https://stors.tas.gov.au/CON15-1-4\\$init=CON15-1-4P10](https://stors.tas.gov.au/CON15-1-4$init=CON15-1-4P10); *TNI*, CON41/1/11,

‘inconsistent net difference’ cases that have here been manually checked – are rare. Indeed, it is striking how often the other information that was recorded about convicts besides age – including trades, prior offences and marital status – is consistent across multiple sets of record for the same individual. William Stanton’s recorded age of 23 in the convict indents was four years more than expected, given that the *Proceedings* recorded his age a year earlier as 18. Yet both the *Proceedings* and the convict indents, as well as the Newgate prison calendars, hulks registers and conduct registers are all consistent in recording Stanton as an unmarried baker, with one prior conviction and able to both read and write.⁷⁷ And where there are inconsistencies between records on convict occupations, these can often be explained by the particular contexts and functions of the respective records.⁷⁸ It was common practice in the Newgate prison calendars and prison registers drawn up in England to record a female offender’s occupation as their marital status, or to state ‘not any’ if the individual was not in employment at the point of arrest. The transportation records drawn up in Australia tended instead to list the skills a prisoner brought to the colony, and thus many of those listed in the prison registers as having no trade subsequently had a trade recorded in the convict indents.⁷⁹ Similarly, the convict indents tended to be more specific in recording trade information than did the prison registers: John

[https://stors.tas.gov.au/CON41-1-11\\$init=CON41-1-11p25](https://stors.tas.gov.au/CON41-1-11$init=CON41-1-11p25); *Digital Panopticon*, Frances Leonard, Home Office Prison Records, 1846, Record ID [fprTNA/CCC/2B/PCOM2/01116045](https://stors.tas.gov.au/fprTNA/CCC/2B/PCOM2/01116045).

⁷⁷ *Digital Panopticon*, William Stanton b. 1825, Life Archive ID [obpdef1-1379-18430403](https://stors.tas.gov.au/obpdef1-1379-18430403); *Digital Panopticon*, William Stanton, Life Archive ID [fasai67220](https://stors.tas.gov.au/fasai67220); *TNI*, CON14/1/25, [https://stors.tas.gov.au/CON14-1-25\\$init=CON14-1-25P165](https://stors.tas.gov.au/CON14-1-25$init=CON14-1-25P165); *TNI*, CON33/1/50, [https://stors.tas.gov.au/CON33-1-50\\$init=CON33-1-50p126](https://stors.tas.gov.au/CON33-1-50$init=CON33-1-50p126).

⁷⁸ Maxwell-Stewart, ‘The State’, 421.

⁷⁹ See for instance *Digital Panopticon*, Elizabeth Surridge b. 1833, Life Archive ID [obpdef1-204-18491217](https://stors.tas.gov.au/obpdef1-204-18491217); *TNI*, CON15/1/6, [https://stors.tas.gov.au/CON15-1-6\\$init=CON15-1-6p216](https://stors.tas.gov.au/CON15-1-6$init=CON15-1-6p216).

Cutbush for instance had his trade recorded in the convict indents as ‘groom’, whereas in the prison registers it had simply been listed as ‘labourer’.⁸⁰

Conclusions

Just as Jeremy Bentham’s ‘Panopticon’ prison had its blind spots, nor was the paper Panopticon infallible.⁸¹ State authority may well have wanted precise and truthful information on offenders, but in some circumstances there was a fundamental reliance on the convicts themselves for such information. Some were seemingly unable to meet the state’s demands, for instance in not knowing their precise age. Others were seemingly unwilling, and subtly reinvented aspects of their personal details. Together these actions resulted in evident gaps, guesswork and inconsistencies in the recorded information, never mind the number of offenders who were able to subvert the paper Panopticon through the systematic misrepresentation of personal details, which this analysis is unable to quantify. According to some contemporaries, this was a common problem.⁸² This invites us to adopt a broad conception of convict ‘agency’, which goes beyond resistance alone and instead appreciates the full

⁸⁰ *Digital Panopticon*, John Cutbush b. 1829, Life Archive ID [obpdef1-1559-18470705](https://lifearchive.org/obpdef1-1559-18470705); *TNI*, CON14/1/44, [https://stors.tas.gov.au/CON14-1-44\\$init=CON14-1-44P18](https://stors.tas.gov.au/CON14-1-44$init=CON14-1-44P18).

⁸¹ Recent 3D modelling of Bentham’s designs have shown that parts of the cells would have been out of view of the central guard: see Zoe Alker, ‘Building Bentham’s Panopticon’, *Digital Panopticon Blog* (29 April 2016), <https://blog.digitalpanopticon.org/building-benthams-panopticon/> (accessed 2 July 2020).

⁸² See for example the complaints made in 1823 by the keeper of Newgate prison: London Metropolitan Archives, ‘Annual Returns to the Secretary of State for Newgate’, 1823–44, CLA/032/01/044,

range of convict responses to (and consequent effects on) state authority.⁸³ It also has important implications for any form of historical analysis that uses convict age data, including attempts to reconstruct convict lives through record linkage, studies of adolescent growth patterns and research into life expectancy.

However, on the whole the state was remarkably effective in comprehensively capturing precise and consistent age information about convicts, even though the paper Panopticon was then in its infancy and (in the case of transportees) spanned the globe.⁸⁴ Explaining *why* state authority was so effective is a difficult task, but a combination of two factors are perhaps key. First is the efficient nature of the record-keeping system itself. As described above, there was considerable central oversight of local record-keeping and a great deal of compliance among local officials who compiled the data. Records moreover appear to have been used in conjunction with one another. The Millbank prison register included a column on ‘information received respecting the prisoner’, while the hulks registers included a ‘gaoler’s report’ column for information received with the prisoner.⁸⁵ In Australia, meanwhile, changes to record-keeping practices were introduced in the 1820s which stipulated that the information recorded in the gaol and hulks records drawn up in England should accompany the convicts to the penal colonies, for inclusion in the convict indents, and that on arrival the convicts be subjected to further interrogation about their information.⁸⁶ This explains the regular consistency in observed ages across the various sets of English and Australian records examined here. But further,

⁸³ For an example of such an approach to convict agency, see Tim Hitchcock and Robert Shoemaker, *London Lives: Poverty, Crime and the Making of a Modern City, 1690–1800* (Cambridge: Cambridge University Press, 2015).

⁸⁴ Bradley et al, 475.

⁸⁵ See TNA, ‘Millbank prison registers’ [males and females], HO24/114; TNA, ‘Registers of convicts in the hulk Cumberland, with gaoler’s reports’, ADM6/418.

⁸⁶ Oxley, ‘Convict Maids’, 18–21. For a contemporary account of this in practice, see *An Account of a Voyage in a Convict Ship* (London: The Society for the Propagation of the Gospel, 1847).

the convicts themselves might have *believed* in the bureaucratic efficiency of state authority.⁸⁷

According to George Arthur, Governor of Van Diemen's Land, by 1837 detailed paperwork was now being sent with the convicts, who were also subjected to a 'most minute examination' on arrival, such that:

[The convict] perceives at once that the officer who is examining him does know something of his history; and not being quite conscious how much of it is known, he reveals, I should think, generally a very fair statement of his past life, apprehensive of being detected in stating what is untrue.⁸⁸

As Hamish Maxwell-Stewart and James Bradley argue, such inspection and recording 'served to remind convicts of their status as subjected and (subjectified) objects of "panoptic" knowledge, imprisoned by descriptions of their own bodies and regulated by the internalisation of this knowledge'.⁸⁹ Nor should we underestimate the very real threat of punishment that convicts faced in challenging the state's authority: this might well have served to 'yield a greater consistency in the quality of the responses' amongst convicts during information-gathering exercises.⁹⁰

This does not mean, however, that we should take the paper Panopticon as an unproblematic source of information about the 'authentic' convict, or ignore the role of convict agency, as some studies of the nineteenth-century 'information state' and 'prison machine' have done.⁹¹ A more nuanced approach to the interaction between state authority and convict agency in the paper

⁸⁷ Maxwell-Stewart, 'The State', 417.

⁸⁸ Hamish Maxwell-Stewart and James Bradley, "'Behold the Man": Power, Observation and the Tattooed Convict', *Journal of Australian Studies* 12, no. 1 (1997): 75.

⁸⁹ *Ibid.*, 75.

⁹⁰ Kris Inwood and Hamish Maxwell-Stewart, 'Prison and the History of the Family', *The History of the Family* 20, no. 2 (2015): 161.

⁹¹ Edward Higgs, *The Information State in England* (Basingstoke: Palgrave Macmillan, 2004); Michel Foucault, 'Governmentality', in *The Foucault Effect: Studies in Governmentality*, eds Graham Burchill, Colin Gordon and Peter Miller (Chicago: University of Chicago Press, 1995), 87–104.

Panopticon is now needed.⁹² As Fyson and Fenchel note, the paper Panopticon was a multi-layered bureaucratic process that depended on the function of the record, the framework set out from above and on the response of local officials and the convicts themselves.⁹³ Each record therefore represents a different combination of state power and convict agency. And as Rosalind Crone suggests, we should adopt a similarly nuanced approach to the categories of information that were recorded about convicts, recognising that inconsistencies in the recorded information will be historically significant with some categories and less so with others.⁹⁴ By using the methodological opportunities opened up by digital technologies to explore the gaps, imprecisions and inconsistencies in the paper Panopticon, we can develop a better understanding of the interaction between state authority and convict agency.

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⁹² On the latter, see Paul Dobraszczyk, ‘Give in Your Account: Using and Abusing Victorian Census Forms’, *Journal of Victorian Culture* 14, no. 1 (2009): 21; Ann Laura Stoler, ‘Colonial Archives and the Arts of Governance’, *Archival Science* 2, (2002): 87–109.

⁹³ Fyson and Fenchel, 184.

⁹⁴ Rosalind Crone, ‘Educating the Labouring poor in Nineteenth-Century Suffolk’, *Social History* 43, no. 2 (2018): 166–7.