### Digital crime histories and developing a public pedagogy of criminal justice

## **Alana Piper and Katherine Roscoe**

**Keywords:** digital humanities, historical criminology, public engagement, education

#### **Abstract**

Crime history was a pioneer in the digital arena, democratising access to the past by engaging large public and academic audiences with primary datasets online. This article traces the evolution of digital crime history from 2003 to 2021 in the United Kingdom and Australia. It charts a shift from catering to a passive audience towards projects that actively engage public audiences through crowdsourced transcriptions, interactive data visualisations and other aural, visual and multimedia forms. It has never been easier to access these nations' criminal pasts online, but we must pause to reflect on what the aims of public engagement are. What kinds of digital public pedagogy do we want to build, and how can they be critical, reflective and widely representative? We conclude by considering the challenges to this endeavour, including what roles academics and commercial gatekeepers might play, the effects of the COVID-19 pandemic and the uneven geographies of digitisation within the Southern Hemisphere.

#### Introduction

In a 2015 address to the United Kingdom (UK) Royal Historical Society, crime historians Hitchcock and Shoemaker (2015) argued that academics were proving slow to embrace the possibilities that the internet presented for opening up historical research to public audiences. They urged historians to pursue blogging, open-access publications and the public presentation of complex histories through data visualisations, record digitisations and digital history projects. The landscape has significantly shifted in the last eight years, especially in crime history. In this article, we review the current state of the field for digital crime history and historical criminology, arguing for the use of digital platforms not just as a means of engaging the public but as a method of encouraging stronger public literacy in legal and social justice issues.

We start by mapping out the current landscape of digital crime and criminal justice history projects, considering the effects of this digital turn towards interdisciplinarity and public engagement. We then reflect on the end purposes of such engagement, arguing in favour of shifting the conversation from *public engagement* to *public pedagogy* to generate more clearly defined learning objectives for such engagement. In the final section, we outline the challenges to such an approach, considering the effects of the COVID-19 pandemic and long-term structural inequalities over whose records are preserved and digitised. For instance, the comparative focus on Australia and the UK is driven by the large uptake of digital methods by crime and legal historians in these localities, even compared to other Western nations such as the United States (Robertson 2016). However, this means that this area forms yet another field where history's Western origins can reproduce cultural biases by privileging ways of knowing and forms of historical evidence that are limited to coloniser perspectives (Ashton and Hamilton 2009).

## Crime history and the digital world

From its development as an academic discipline in the 1970s, crime history was embedded in a commitment to creating histories for and about 'common people' (Emsley 2005; Thompson 1966) and, as such, was enmeshed with various forms of public history. Academic research on crime was matched, even propelled, by a massive upsurge in the 1970s of family historians visiting archives to research their criminal ancestors (B Smith 2008). Genealogists' and academics' demands coalesced to encourage archives to make accessible convict records, which had previously been closed or censored to hide the convict stain within family trees. The microfilming of convict records from London's national archives for the use of Australian family historians encapsulated these new demands for locally accessible criminal records.

In 2003, another major leap forward in public accessibility of historical crime data occurred when the Old Bailey Proceedings Online (n.d.) launched. Badging itself a 'new history from below' (Poole 2005), it offered computer users around the world the chance to search 200,000 trial proceedings from London's Central Criminal Court between 1674 and 1913. This radical democratisation of knowledge was accessed by 3 million people from 2008 to 2014 alone (Hitchcock 2014). The dataset was searchable by defendant name, offence and trial outcome, enabling both genealogical research and analysis of patterns in offending, conviction and sentencing. These court transcripts offer the opportunity to read testimonies from defendants, witnesses and victims, with a corpus of over 25 million spoken words (AJ Johnson 2015). In Australia, the Prosecution Project (Finnane and Piper 2016), launched in 2014, digitised trial data for supreme court prosecutions across all six Australian states from the start of colonisation to the 1960s. This case-level data enables the exploration of a range of historical, criminological and legal questions (Finanne 2020; Finnane and Piper 2016; Finnane et al. 2018), with the public dissemination of this data described as a 'commitment to generosity, sharing, collegiality and mutual support' (Biber 2020: 746). Those seeking trial information in Britain or Australia can also turn to digitised newspaper archives British Newspaper Archive and Trove (Crone 2009).

The rich, granular detail of the bureaucracy the UK Government created to keep track of its criminals transported to *prisons without bars* (i.e., the Australian penal colonies) constituted an information revolution in its own right (Maxwell-Stewart 2016), as recognised by the records' inclusion on the UNESCO Memory of the World Register (Frost 2011). Prison and transportation registers include data that is not just about a person's conviction but also their occupation, locality, family relations, literacy and biometrics. The use of internal identifiers in the form of assigned numbers enables the tracing of convicts' journeys between institutions on both sides of the globe.

Founders & Survivors (n.d.) harnessed this potential for linkage between datasets, creating a resource of over 1.5 million digital records related to the lives of those transported to the penal colony of Van Diemen's Land (Tasmania) from 1803 to 1853. It led to the development of the Libraries Tasmania Names Index, which enables the searching of an individual's name across a wide range of colonial record sets (Libraries Tasmania n.d.). This data linkage also allowed

Founders & Survivors to answer new questions about the intergenerational effects of offending and institutionalisation (Godfrey et al. 2018). The scope of record linkage to uncover individual cradle-to-grave life courses and analyse patterns of recidivism and desistance longitudinally was expanded by the Digital Panopticon (2020). This website allowed users to search for millions of records from around 50 datasets relating to the lives of 90,000 convicts tried at London's Central Criminal Court, including post-transportation to the Australian colonies.

The detailed bureaucracy of convict record keeping persisted in Australia's post-convict era institutions. This offers opportunities for digital projects focused on the punishment and institutionalisation of colonial populations. Criminal Characters (n.d.) was launched in 2018 to study the life courses of prisoners in Australia from the end of the convict period in the 1850s through to the Second World War (Piper 2020b). In particular, it has used crowdsourcing to digitise the rich information in prison records into structured data. On a smaller scale, the website Cockatoo Island Convicts includes a database of more than 2500 transported convicts and colonial prisoners incarcerated there between 1847 and 1869 (Roscoe 2020). Overall, the detail and consistency of criminal record keeping, from prosecution to punishment, their digitisation and the fact they exist for many localities make regional and transnational comparative analyses increasingly possible for historians and historical criminologists (Shoemaker and Ward 2017).

Digitisation of records has also facilitated a boom in family history research, with genealogy the second most popular use of the internet (Barnwell 2013). Much of this genealogical research is focused on criminal ancestry. In Australia, around 5 million people claim convict ancestry, and a further 2 million in the UK (Plowright 2020). Being an ancestor of a transported convict, once stigmatised, is now embraced as a point of pride, as discoveries of criminal ancestral pasts are increasingly welcomed for offering vivid details of family histories (Barnwell 2019; B Smith 2008). According to Evans (2011: 68), family historians have different priorities to academics: rather than engaging with history's *big picture* first, they perceive many diverse, individual life stories collectively as creating a holistic view. The Digital Panopticon (2020) and the Prosecution Project configure their datasets in ways that serve both functions: enabling researchers to search for named individuals while also providing public access to a large dataset that can be analysed for wider patterns (Finnane and Smaal 2018; Shoemaker 2018).

Today more than ever, the past is being 'consumed on a grand scale' by public communities (Clark 2016: 2). According to a survey hosted on the Criminal Characters website (n.d.), out of 1098 respondents, only 9.6 per cent reported that they had had no significant contact with crime or legal histories in some format in the past two years. For the remainder, their engagement with these histories took many forms. The types of digital activities outlined above were popular, with 34.4 per cent reporting researching a criminal ancestor and 46.5 per cent having visited a crime history website. Other forms of crime history consumption included: visiting a museum or heritage site (30.5 per cent), watching documentaries (72.2 per cent) or dramatised films or series (63.6 per cent), reading non-fiction (52.1 per cent) or fiction books (45.5 per cent), and listening to podcasts (47.1 per cent).

Many of these more traditional public history formats are supplemented or perhaps even driven by online sources, especially in the wake of COVID-19. Founders & Survivors' data was used to create online learning resources and augmented reality experiences for visitors to the penal heritage sites of Port Arthur and the Cascades Female Factory. On-site multimedia experiences, such as projected theatrical performances and touchscreens loaded with primary sources, can bring these histories to life (D Johnson 2018). Historical dramatisations based on Founders & Survivors' and Prison Health History's (n.d.) data were performed live and released digitally afterwards (C Cox and Marland 2018; Nicholson 2018). True crime, already a popular genre of non-fiction publishing and TV, is growing in popularity in podcast form. Such podcasts reveal not only history itself but 'provide audiences with an intimate engagement with the historical process' (Cuffe 2019: 569). The growing prestige of the form, and low barriers to entry, have encouraged academics to produce podcasts of their own based on their research, for example, investigating Tasmania's emancipated convicts (Watkins 2021) and French penal colonies (Sené and Fuggle 2020). Blogging and social media are other popular formats academics have used to engage with public audiences digitally, having been taken up so widely to contribute to a new 'history from below' (Rogers 2015, p. 54).

The digital humanities not only open up historical records to the public but encourage participatory user experiences of them, whether through crowdsourcing record transcriptions, presenting interactive data visualisations or creating applications that offer virtual or augmented reality experiences of the past. As has been noted of public history in general, this has changed the relationship between the public and historians, reducing their role as gatekeepers of the past because users can interact with records of the past directly. The observation that digital history means today's public 'are more than passive audience members absorbing content expertise from historians' (Leon 2017: 58) holds true for the sub-field of digital crime histories.

Both the Prosecution Project and Digital Panopticon enable users to generate custom data visualisations—from line charts to Sankey diagrams—empowering users to contextualise individual stories within a wider narrative of offending and sentencing. Other projects have georeferenced the archival data to visualise the historical data in space. Users on Locating London's Past (2011) can display their search results as pins on a historic map. *Convict Labour Landscapes*, *Port Arthur 1830–1877* (Convict Landscapes n.d.) is a web map that allows users to interact with how the built landscape of the Port Arthur penal settlement changed over time. Interactive elements include an adjustable timeline and spatial markers that offer further information about offences committed there (Tuffin and Gibbs 2019). Other digital approaches focus on the immersion of the user in space from a first-person perspective, as Claire Reddleman did in exploring a virtual exhibition of collages about the heritage of French penal colonies (*Ways of Seeing the Penal Colony: New Caledonia and French Guiana* 2021), or touring a three-dimensional virtual reality recreation of the colonial-era Mazaruni Prison (Moss et al. 2020).

Family and amateur historians are not just audiences for crime histories but, through technology, are increasingly becoming co-creators, whether of academic-led digital projects or their own resources. The rise of user-generated online content, known as Web 2.0, has transformed public digital crime history through community-generated resources (Foster 2014). Anyone with an internet connection can create and disseminate their research on criminal ancestry via their websites, blogs or social media accounts. Other times, family historians lead or populate digital resources whose frameworks are created by funded institutions or projects, which offer enhanced findability compared to self-created websites. For example, Convict Records (n.d.) is a project helmed by volunteers in association with the State Library of Queensland. It allows family historians to populate a web resource with their own findings to create one centralised resource for all convict records across the Australian colonies. This is accompanied by a Facebook forum for meeting and discussing with other genealogists. As of October 2021, 75,948 contributions had been made.

Australia-based crime history projects have tended to make greater use of volunteers through crowdsourcing, including Founders & Survivors, Prosecution Project and Criminal Characters (Finnane 2020; Kippen and McCalman 2016), compared to the UK. A notable exception is Transcribe Bentham's (n.d.) crowdsourced transcription of legal philosopher Jeremy Bentham's papers, totalling 80,000 pages (Causer and Terras 2014). Australian academics' openness to requisitioning volunteers' labour is likely influenced by the National Library of Australia's use of the public to correct, tag and comment on optical character recognition generated text for its Trove newspaper database (Alam and Campbell 2017; Sherrat 2019). Founders & Survivors harnessed community participation to crowdsource its transcriptions and encoding early, recruiting volunteers through articles in newspaper and family history publications, radio broadcasts, project websites and newsletters, and presentations to family history groups (Bradley et al. 2010). Similar techniques were used to attract volunteers to help create the Prosecution Project database (Finnane and Smaal 2018). New crowdsourcing platforms, such as Zooniverse, are likely to increase the number of digital humanities projects relying on the recreational labour of volunteers worldwide (J Cox et al. 2015). The involvement of highly skilled genealogists and experienced local historical society members as transcribers and encoders on academic research projects brings myriad benefits, not just in terms of expertise and effort but also encompassing direct learning experiences for volunteers.

Such direct learning experiences further shift the role of public historians 'from a position of safeguarding the "authoritative" and official versions of the past to engagement in the public sourcing of stories and interaction with public production and research' (Sayer 2015: 223). For Piper's Criminal Characters project (2020a: 207-208), citizen history is as much a part of the project mission as the resulting data: 'citizen history projects should have an ambition distinct from the crowdsourcing objective, addressing the question of why it is important to develop historical literacies among individuals not intending to pursue history professionally'. In Criminal Characters, this aim is to engage volunteers directly with questions about the meaning of criminality and develop social justice perspectives by engendering empathy with the historical subjects that participants encounter in the course of transcription work. Public historians Ashton and Hamilton have recognised that the draw of history 'is as much about

identification—about empathetic understanding and intimate connection—as it is about interpretation' (2009: 29). However, this empathetic connection can itself act as a form of interpretation and facilitate useful learning experiences. Thus, McCaw (2018) suggested that participatory culture not only has the power to educate the public about historical crime but encourages 'cognitive empathy' by engaging them in the intellectual and imaginative exercise of apprehending the conditions faced by people in the past.

The unique educational opportunities opened up by the accessibility and interactivity of digital history projects are already well recognised within classroom pedagogy in the UK and Australia. Engaging students directly with crime records online fosters a deeper engagement that can cause students to question their assumptions about crime by humanising both its offenders and victims and revealing the complex factors and circumstances usually surrounding any one criminal act (Alker 2015). For students of an online family history module run by the University of Tasmania, where researching convict ancestors was a central focus, this change of perspective was personalised and linked to the present. Students reported that 'build[ing] a comprehensive picture of our ancestors' lives' led them to 'discover more of ourselves in the future' and 'see this era in our country's past in a new light' (Harman 2018: 11).

Crucially, much of this sense of discovery was self-led and student-led through shared digital forums rather than being received solely from the top down. In other UK- and Australia-based university courses, forms of assessment focused on creating convict biographies or other histories from below, often in an online format like a wiki or blog, close the circle from consumers to creators of digital history (Alker 2015; Harman 2018; Rogers 2015). As students become producers of knowledge about the past for a public audience, they engage directly with complex questions of representation and ethics that underscore key debates in the field at large (Godfrey 2016). It also raises the question of how digital crime histories can be used as pedagogical tools beyond formal classroom settings.

## Digital crime histories as public pedagogy

In this section, we will examine the potential benefits of translating academic scholarship to community audiences when it comes to the topic of criminal justice history. This is not a call for greater efforts to engage the public in crime history. As indicated in the foregoing section, such efforts are already well advanced. The public does not need to be convinced to engage with crime histories—they are already doing so, and increasingly through participatory ways conducive to active learning experiences. Rather, we want to begin a conversation about why such engagement is important in the context of crime history specifically and what the objectives of such engagement might be. We argue in favour of shifting the focus from public engagement to public pedagogy when it comes to academics' conceptualisations of digital crime history projects so that a more purposive approach towards projects' expected outcomes for community understandings of criminal justice is established. In short, why does public engagement in crime histories matter, and what should efforts to engage the public in crime history aim to achieve?

Public engagement with and the effects of academic research have been taken increasingly seriously by universities and research funders over the last decade. In 2018, the Australian Research Council launched its inaugural Engagement and Impact Assessment to examine how well researchers were translating their findings to end-user communities (Australian Research Council 2019). The terms of reference for this assessment drew on comparable exercises overseas, including the Research Excellence Framework (n.d.) established in the UK in 2014. While offering an added inducement for academics to undertake public engagement activities, the establishment of formal means for evaluating such outputs largely acknowledges the extent to which public engagement is already a core part of the academic's role. A 2015 study found that 82 per cent of UK researchers had undertaken at least one public engagement activity in the last year, with participation in public engagement higher in the humanities, arts and social sciences (88 per cent) than in science, technology, engineering and mathematics disciplines (78 per cent) (Hamlyn et al. 2015).

However, the increased focus on formally documenting and measuring the value of public engagement by academics has led to increased discussion of what public engagement should look like within academic research broadly (Ashton and Hamilton 2009), as well as within specific disciplines, including history and criminology (Davies and Strange 2010; Sanders and Eisler 2014). A small amount of literature on public engagement within the sub-discipline of crime history has also emerged, although, to date, this has been mostly focused on the benefits of such engagement for academics, for instance, the advantages of blogging as a way of conceptualising sources, receiving feedback on ideas or establishing authority over a particular research question more quickly than traditional publishing allows (Rogers 2015; Williams 2015). Less attention has been paid to the end results of such engagement for the public or what metrics might be established for determining what constitutes a successful public engagement with crime history.

Presently, successful public engagement is often measured by audience size—by the number of visitors, page views, shares, follows or likes. Such counts tell us nothing of what the audience learnt from their experience or how transformational such learning was upon their understanding of crime and justice. Measuring such factors is not easy, although it is possible through means such as surveys (long employed by museums to gauge visitor experiences) or even content analyses of social media data (Jarreau et al. 2019). However, it is difficult to analyse whether public engagement has been successful in its learning outcomes without first establishing what those outcomes should be. For this reason, we think it is important to reframe the way we think about such activities from acts of engagement to acts of pedagogy. Public pedagogy, a term and field that 'signals that education and learning can occur anywhere' (Charman and Dixon 2021: 15), has also received increased academic attention over the past 10 years. In broad terms, its objectives have often been described as being synonymous with those of critical pedagogy (Charman and Dixon 2021: 16) in that it is concerned with 'transforming consciousness' to destabilise the types of top-down power relations that underpin colonial education systems and achieve social justice outcomes. Just as with classroom pedagogy, a public pedagogy of criminal justice history requires more discrete defined learning objectives.

Traditionally, a major impetus of public history, which Davison (1991) described as a 'new name for the oldest history of all', was to instil civic virtues by fostering a sense of national identity and values. Although perhaps a less obvious source for such discourses than political histories, crime histories can and do contribute to community understanding of a nation's past and character. This is perhaps particularly the case in Australia due to its history as a British penal colony alongside the deep embedding of bushrangers (a type of highway robber) as romantic figures within the national psyche. Research carried out by Tranter and Donoghue (2003, 2008) found that many Australians, particularly those on the political left, viewed both convicts and bushrangers as important to national heritage and sources of pride.

The Criminal Characters survey (n.d.) likewise found that when asked to describe a historical crime figure, Australian respondents predominantly mentioned convicts and bushrangers, discussing these largely in positive terms as nation-builders or victims of an unfair or overly harsh justice system, while respondents from other countries overwhelmingly mentioned famous serial killers. Although UK respondents to the survey were less likely than Australians to agree that their country's criminal justice history was unique, many expressed a sense of pride in the British legal system as having 'been at the forefront of certainly fighting crime historically speaking', with others listing innovations in policing or law they ascribed to Britain. In a comment of more ambiguous sentiment, another respondent mentioned the importance of the British legal system as a source of influence on other jurisdictions worldwide through colonialism.

The civil rights and decolonisation movements of the late-twentieth century led to a critical rethinking within the academy of the role of public history and efforts to move away from simplistic celebratory national accounts. However, the persistence of the idea that history's purpose is to foster patriotism and national social cohesion has meant that attempts to share more critical histories with the public have often met with challenges, especially in Australia, where the ongoing contestations over how the historical treatment of Indigenous peoples is remembered are commonly referred to as the 'history wars' (Clark 2016). Digital histories are already proving important tools for using data to counteract the whitewashing of controversial aspects of national history, such as the interactive *Colonial Frontier Massacres, Australia, 1780 to 1930* map, established by a research team at the University of Newcastle (Ryan et al. 2019). This map has led to increased public discussions of the scale of colonial violence, as well as the extent of the complicity of police and other authorities in such acts (Davidson 2019).

Some responses to the Criminal Characters survey highlighted these evolving public understandings by describing the colonial invasion as a crime and connecting this history of systemic violence to current levels of Indigenous over-incarceration. Colonial dispossession was, of course, not unique to Australia, and the experiences of most, if not all, nations' justice systems have been affected by race, as well as class, gender, sexuality, religion, ability and other factors. Thus, this is clearly an area where public histories of criminal justice can contribute not only to important national but international conversations. Particularly because digital histories can be accessed by audiences worldwide, positioning national histories within

a comparative global framework (Anderson 2018) may help the public contextualise the development of their own and others' nations. Thus, the first subject learning objective that digital crime histories might aim to achieve is fostering the public's critical understanding of how their own and others' communities have been shaped by interactions with the justice system.

Critical thinking skills are frequently recognised as the most important competency promoted by the humanities in its graduates (Pithers and Soden 2000) and, thus, should naturally be at the core of public pedagogy. The ability to question different interpretations of information through critical analysis is of particular importance today when the problem historians often confront is not public indifference to history but how easily the past can be contested or wilfully subverted in the post-truth world (Gudonis and Jones 2021: 11). The appeal of these narratives is their simplicity and reliance on explanations that *feel* true as a result: public histories can help to counter such thinking by encouraging an understanding of the need to acknowledge complexity when understanding the past (or present).

Crime history is particularly well-positioned to challenge the type of binary thinking that attempts to categorise complex institutions, like the law, into neat categories of *good* or *bad*. As Amato and Manuel (2012: 212) argued in their exploration of the use of historical walking tours to reorientate public understandings of urban crime, such histories can foster recognition of the multivalent understandings possible of the law as a force that can protect or empower some citizens while oppressing or displacing others. However, the tendency towards a black-and-white worldview can equally be exacerbated by crime history.

The overwhelming focus of popular crime histories on the most extreme or exceptional cases—those involving serial killers, gangsters or obvious miscarriages of justice—may encourage such viewpoints by saturating the public imagination with narratives featuring clear-cut villains and victims. The focus on the question of *who done it* can also detract from what historians and criminologists consider the more important question of why. For example, for decades, academic historians left satiating public interest in Jack the Ripper to the amateur *Ripperologists*, whose main focus was the killer's identity, with attempts to situate the story for a general audience within a wider narrative of gender violence only more recently emerging (Gray 2018; Rubenhold 2019). By reappraising accepted wisdom about known crime stories, as well as shifting public attention to the historical importance of less sensational offences, a public pedagogy of crime history can not only offer important corrections to current narratives but encourage a public that is more questioning and sensitive to situational complexities.

One simplistic type of historical interpretation that has traditionally beleaguered public histories is a positivist interpretation of the past as a continuous narrative of forward progress. In being critical of society's past, criminal justice histories need to be careful not to unwittingly reinforce the predisposition to such positivism. The Criminal Characters survey data (n.d.) suggests the general community already largely perceives criminal justice history in positivist terms. The majority of respondents described their nation's justice system as having been somewhat or very unfair in the nineteenth and early twentieth century, while most felt it was

mostly or very fair today. Almost all respondents were confident that the main cause of crime historically had been poverty but were divided on its causes today; many identified factors, such as addiction and social exclusion, which tend to carry more stigma of self-failure, though they may be equally rooted in poverty.

Discussions held on the Criminal Characters talk board by volunteers transcribing prison records likewise frequently revealed how exposure to these offenders' histories garnered largely empathetic responses, with many transcribers noting how offenders' pathways to prison were paved by class, gender and sexual oppressions (Piper 2020b). However, such observations tended to be couched within comments about how bad things had been in the past rather than the recognition of the continuing role such factors play in the justice system today. Therefore, another important learning objective for digital crime histories might be to foster public understanding of the importance of acknowledging complexity within historical interpretations and to encourage a greater degree of public scepticism towards simplistic narratives of how the past has led to the present.

Another broad objective of public history is to contribute to policy debates by placing contemporary issues within a long-term perspective for the wider community. In *The History* Manifesto, Guldi and Armitage (2014) issued a 'call to arms' for historians to take more active roles in steering public discourses on policy issues. They recognised that the rise of big data from historical digitisation projects offered increased opportunities for analysing how important social problems have been affected by shifting institutional responses over time, specifically citing legal and criminal justice digital history projects as key examples of this trend (Gaudi and Armitage 2014: 94). The potential of historical data and archives to inform criminology and related policy issues, such as parole, has attracted recent attention from scholars (Churchill 2019; Guiney 2020). The fact that more than a quarter of prisoners (c. 22,000 out of 80,660) in England and Wales still live in Victorian-era prisons makes the effects of history felt on a daily, tangible basis (Moran, Houlbrook and Jewkes 2022: 364). An interdisciplinary, carceral geography project, The Persistence of the Victorian Prison, is seeking via their website to hear the experiences of former staff and inmates of these prisons (Moran et al. n.d.). While this project demonstrates how the web can be used to collect historical and contemporary experiences from the community, there are obstacles to sharing crime archives online in ways that will contribute to a community understanding of contemporary crime and justice issues.

There are no easy means to support users in making pertinent and valid connections between past and present when they are interacting with digitised crime records directly. Some historians are wary of making such connections overt in their own interpretations, conscious that situational history does not always make for the type of neat past and present comparisons that can easily be explored within the limited confines of a blog post or curatorial commentary on an online exhibition (Lawrence 2019). However, the desirability of discouraging presentism in contemporary responses to criminal justice issues is worth the effort of tackling these challenges (Yeomans 2019). Therefore, we would urge that a key subject learning objective for public-facing digital crime history projects should be to illuminate audiences about the

continuities and disruptions observed in criminal justice responses over time and how these link to contemporary policy concerns.

Many of the digital crime history projects outlined in the first section already likely meet some of the public pedagogy objectives described above. This is not a matter of individuals at universities, libraries or museums doing more public engagement or even using different methods of public engagement to those that are already flourishing. Rather, shifting the conversation from one of *engagement* to one of *pedagogy* can help academics, in particular, to be more purposive about the objectives of such engagement and encourage the development of criteria for testing whether these have been achieved. In an era with an increased spotlight on public engagement, defining and measuring the benefits of these activities in more explicit terms can only be beneficial in ensuring institutional and funder support for their continuance and expansion.

# Challenges for digital public histories of crime

In this final section, the challenges of leveraging the digital sphere to develop a public pedagogy of criminal justice education will be analysed. This is particularly urgent as the COVID-19 pandemic has further embedded technology into our everyday existence and swelled the number of people engaging in family history research online (Queensland Government 2021). In the UK, the genealogy website Findmypast saw users double and a 60 per cent increase in the number of searches performed on the site during 2020 (Lubin 2021). On the Criminal Characters website (n.d.), the number of volunteers rose from 2500 to over 7000 from March to December 2020.

Academic and heritage organisations alike pivoted to digital platforms to bring historical programming to locked down populations, also opening them up to new international audiences (Noehrer et al. 2021). As talks and workshops have gone digital, it has become just another medium by which the public can engage with crime history online. With limitations on international travel set to remain a growing environmental concern, it seems likely that a mix of online and in-person talks will characterise future visiting lecture series. Nevertheless, as this drive towards digital forms of engagement accelerates, it is necessary to remain cognisant of the challenges of this medium.

One key challenge is the findability of material in digital repositories. Poor optical character recognition accuracy, limited knowledge of historical search terms and 'algorithm-driven discovery' can impede users from finding the information they want (Hitchcock 2013). Uneven digitisation processes also skew the types of research inquiries undertaken by scholars, as well as which communities are able to locate information on their histories. While Old Bailey Proceedings Online has emerged as an exceptional public and scholarly resource, Howard (2015: 13) pointed out that it has led to a metropolitan distortion in which ease of access to digital materials about the London courts concentrates the production of historical knowledge on this jurisdiction. The rapid pace of the digitisation of crime and legal records in the UK and Australia has also not been evenly matched by other Western nations (Robertson 2016), let

alone impoverished nations in the Global South. In this respect, Australia remains a great outlier in terms of the provision of digital public history resources in the Southern Hemisphere.

Findability favours record sets created by large, well-funded projects that can create lasting digital infrastructures. The fixed durations of standard grants often fail to cover ongoing costs or upgrades of digital infrastructures. Even the large European Research Council–funded Carceral Archipelago project's website Convict Voyages (2015) is only available via The British Library–hosted UK Web Archive for this reason. This reduced searchability of the resource is particularly disappointing considering it is a rare resource that maps convict transportation across the globe, including in places where convict ancestry remains stigmatised or lesser known.

The decline in funding for arts and humanities subjects at universities and for libraries and archives in both the UK and Australia poses a further risk to funding digitisation efforts in ways that make these historical records publicly available to all. As a result, libraries and archives have been encouraged to sell digitisation rights to commercial providers, putting public records behind a paywall. This includes The National Archives in the UK, which holds many of the key criminal justice records (Shoemaker 2018). This has meant academic projects like the Digital Panopticon have had to negotiate access to paywalled information that they can display to users in limited terms, driving traffic towards subscription genealogy websites. For websites that sell their services on the breadth of resources on offer and the ease of accessibility, there is little motivation to embed digital pedagogies in their resource design (Shoemaker 2018). Academics can cut costs and learn from the community contribution mode of Web 2.0 by collaborating to develop scholarly ecosystems capable of supporting an array of projects in the long term rather than building tools on a case-by-case basis (Godfrey et al. 2021). Part of this process means using common forms of encoding and structuring datasets, which the Australian Historical Criminal Justice Data Dataverse (Dataverse 2023) is a first attempt at, offering the opportunity for creators of smaller datasets to share research data in a verified, consistent format, effectively layering datasets for public use.

For the most part, digital repositories replicate and even exacerbate disparities in record accessibility globally. Computational analyses of digital repositories in general suggest these continue to reflect the systemic biases of most record collections in offering limited records by or about minorities—or at least not making such records readily findable—impeding efforts to study the experiences of these groups (Brown et al. 2016). The role of commercial genealogical providers compounds this issue because they cater for relatively well-off communities of family historians, ensuring that 'the new digital form of the sources...remain Western-centric' (Hitchcock 2017, p. 338). When lay people directly access historical records online, they are likely to view the records as objective records of the past. This is a problem exacerbated by digital humanities framing itself from its inception in the 1990s as 'gender, race, and class neutral' (MN Smith 2007: 4). In fact, these historical records are relics of the state's power over poor and colonised populations (Trouillot 1995; Tuhiwai Smith 2012). Though most digital crime history records offer contextual pages addressing these issues, those are not necessarily accessed by users preferring to go directly to source materials.

This speaks to a broader issue that easy access to an array of digital primary records can easily lead to misinterpretations. By removing professional historians as *gatekeepers*, the digitisation of crime records enables users to make their own inferences about the meanings of crime records but risks false interpretations and the possibility of (through blogging and social media) a proliferation of unverified, less-rigorous histories (Steinhauer 2014). As academic projects tailor their research findings into easily digestible interactive forms, the risk of misinterpretation grows. Auto-generated data visualisations represent a particular challenge, as 'even accurate information can mislead if it is presented in a way that creates false visual clues' (Theibault 2013: 177). The creators of such digital resources must ensure visualisations offer clear guidance for interpreting the results. Even trained socio-legal and history researchers often lack the necessary quantitative methods training to properly interpret big data and translate the findings for criminological audiences (Mulcahy and Wheeler 2020).

Equally, when users are *globetrotting* online, sourcing information from myriad transnational archives (Putnam 2016), there is a risk that information is decontextualised and misinterpreted. As Godfrey et al. (2021: 241-242) argued, 'digitization may have lowered the costs of conducting transnational research ... but these processes also encourage the indiscriminate targeting of data. The aggregation of disparate sources into a unified digital product has been seen as particularly problematic'. This aggregation is particularly common in digital crime history projects, combining different sources of data into life histories of offenders or drawing on reports from police, courts and newspapers to compile structured data on trial events.

Users' access to such a plethora of digitised material may have further psychological effects on the user. As Godfrey (2016: 150) argued, 'the speed and scale of more liquid forms of criminological and historical inquiry' mean the public can click through thousands of 'ruined lives' without interpretation. Godfrey further suggests this could induce a lack of empathy and 'ruinfatigue' over viewers or allow them to search for cases that support their position, whether the case was typical or not. Likewise, Gardner (2010) cautioned that increased access to primary sources might encourage members of the public to use the past to reinforce their own preconceptions and prejudices. For those researching their family's convict ancestry, *survivor bias*—whereby their ancestors are likely to be among those who desist and rehabilitate themselves—may exacerbate this (Godfrey 2019). Coupled with the white Western bias in the digitisation of records, this has the potential to distort views of the structural barriers that individuals, especially minorities, today face in their encounters with the criminal justice system (Roscoe 2022).

This is particularly concerning for the UK, which has Western Europe's highest rates of imprisonment, where Black and minority ethnic prisoners make up 23 per cent of prisoners compared to 16 per cent of the general population (Rees 2019, quoted in P Cox and Godfrey 2020; Yasin and Sturge 2020). Further, in Australia, Indigenous people are currently 11.3 times more likely to be incarcerated than non-Indigenous people, with a far smaller drop witnessed in Indigenous prisoner numbers than other groups during the fall in incarceration rates as a result of the COVID-19 pandemic (Australian Bureau of Statistics 2021). The historical complexities of postcolonial social and legal contexts that have given rise to these

contemporary inequalities are potentially productive sites to develop critical pedagogies for digital public audiences.

#### Conclusion

While in the early days of the internet, it was thought that the simple act of making research sources and data publicly available would be sufficient to empower the public with knowledge previously siloed within the academy, more recently, this belief has been called into question by digital humanities scholars (Hedges and Dunn 2018: 82). While digital technologies are encouraging more participatory, rather than passive, modes of consuming historical knowledge (Laster 1991), the quality of many of those learning experiences still relies on the guidance that audiences receive. Thinking in terms of public pedagogy, rather than merely public engagement, brings into focus the question of what learning objectives scholars should bear in mind when curating and contextualising digitised materials for public use and interaction or even when creating works for the more passive forms of knowledge consumption increasingly accessible due to the ease of online downloading (such as ebooks, podcasts and documentary streaming). Criminal justice history, a field with an already thriving catalogue of digital resources and a clamouring public audience, can be a leader in this space.

Correspondence:

Dr Alana Piper Lecturer, University of Tecnology Sydney Alana.Piper@uts.edu.au

Alana Piper ORCID – 0000000293695862

Dr Alana Piper is Lecturer at the Australian Centre for Public History at the University of Technology Sydney. A leading historian on the history of crime and criminal justice in Australia, she is currently an investigator on the ARC Discovery project 'Sex and the Australian Military, 1914-2020' (2021-2023). Her other ongoing research project, Criminal Characters, uses digital history and citizen science to chart the lives and criminal careers of Australian offenders across the nineteenth and twentieth centuries. She was previously a Postdoctoral Research Fellow at Griffith University on the Prosecution Project.

Dr Katherine Roscoe Lecturer, University of Liverpool, UK <u>karoscoe@liverpool.ac.uk</u> ORCID - 0000-0003-0964-0541

Dr Katherine Roscoe is a Lecturer in Criminology at the University of Liverpool. She is a historical criminologist with research interests centred on global mobilities, unfree labour and racial inqualities, with a particular focus on nineteenth-century crime and punishment. She led an ESRC project to create a digital resource and database of 2500 prisoners incarcerated on Cockatoo Island Prison. She recently led a Leverhulme Trust project which used digital sources to chart the role of convict labour in facilitating global mobilities through their unfree labour on dockyards.

#### References

- Alam SL and Campbell J (2017) Temporal motivations of volunteers to participate in cultural crowdsourcing work. *Information Systems Research* 28(4): 744-759.
- Alker Z (2015) The digital classroom: new social media and teaching Victorian crime. *Law, Crime and History* 5(1): 77-92.
- Amato R and Manuel JT (2012) Using radical public history tours to reframe urban crime. *Radical History Review* 2012(113): 212-224. <a href="https://doi.org/10.1215/01636545-1505002">https://doi.org/10.1215/01636545-1505002</a>
- Anderson C (ed) (2018) A global history of convicts and penal colonies. London: Bloomsbury Academic.
- Ashton P and Hamilton P (2009) Connecting with history: Australians and their pasts. In Ashton P and Kean H (eds) *People and their pasts*: 23-41. London: Palgrave Macmillan.
- Australian Bureau of Statistics (2021) *Corrective services, Australia: September quarter* 2021. <a href="https://www.abs.gov.au/statistics/people/crime-and-justice/corrective-services-australia/latest-release#data-download">https://www.abs.gov.au/statistics/people/crime-and-justice/corrective-services-australia/latest-release#data-download</a>
- Australian Research Council (2019) *Engagement and impact assessment 2018–19 national report*. Canberra: Australian Research Council. <a href="https://dataportal.arc.gov.au/EI/NationalReport/2018/">https://dataportal.arc.gov.au/EI/NationalReport/2018/</a>
- Barnwell A (2013) The genealogy craze: authoring an authentic identity through family history research. *Life Writing* 10(3): 261-275. https://doi.org/10.1080/14484528.2013.802198
- Barnwell A (2019) Convict shame to convict chic: intergenerational memory and family histories. *Memory Studies* 12(4): 398-411. https://doi.org/10.1177/1750698017709870
- Biber K (2020) Prosecution Project: archive review. *History Australia* 17(4): 743-746. https://doi.org/10.1080/14490854.2020.1840307
- Bradley J, Kippen R, Maxwell-Stewart, H, McCalman, J and Silcot s (2010) Research note: the founders and survivors project. *The History of the Family* 15(4): 467-477.
- Brown NM, Mendenhall R, Black ML, Van Moer M, Zerai A and Flynn K (2016) Mechanized margin to digitized center: Black feminism's contributions to combatting erasure within the digital humanities. *International Journal of Humanities and Arts Computing* 10(1): 110-125.
- Causer T and Terras M (2014) 'Many hands make light work, many hands together make merry work': Transcribe Bentham and crowdsourcing manuscript collections. In Ridge M (ed) *Crowdsourcing our cultural heritage*: 57-88. Farnham, Surrey: Ashgate.
- Charman K and Dixon M (2021) *Theory and methods for public pedagogy research*. London: Routledge.
- Churchill D (2019) History, periodization and the character of contemporary crime control. *Criminology & Criminal Justice* 19(4): 475-492. <a href="https://doi.org/10.1177/1748895818811905">https://doi.org/10.1177/1748895818811905</a>
- Clark A (2016) Private lives, public history. Melbourne: Melbourne University Press.
- Convict Landscapes (n.d.) *Convict labour landscapes, Port Arthur 1830-1877*. https://www.convictlandscapes.com.au/portarthur/
- Convict Records (n.d.) *Convict Records of Australia*. <a href="https://convictrecords.com.au/">https://convictrecords.com.au/</a> Convict Voyages (2015) *Home*.
  - https://web.archive.org/web/20210719145438/http://convictvoyages.org/

- Cox C and Marland H (2018) *History, arts and public engagement: prisoner health project, at the University of Warwick*. Warwick: The University of Warwick. https://warwick.ac.uk/fac/arts/history/chm/research/current/prisoners/
- Cox J, Oh EY, Simmons B, Lintott C, Masters K, Graham G, Greenhill A and Holmes K (2015) Defining and measuring success in online citizen science: a case study of Zooniverse projects. *Computing in Science & Engineering* 17(4): 28-41. https://doi.org/10.1109/MCSE.2015.65
- Cox P and Godfrey B (2020) The 'great decarceration': historical trends and future possibilities. *Howard League Journal of Crime and Justice* 59(3): 261-285. https://doi.org/10.1111/hojo.12377
- Criminal Characters (n.d.) *Home page*. <a href="https://criminalcharacters.com/">https://criminalcharacters.com/</a>
- Crone R (2009) Crime—and its fabrication: a review of new digital resources in the history of crime. *Journal of Victorian Culture* 14(1): 125-134.
- Cuffe HH (2019) Lend me your ears: the rise of the history podcast in Australia. *History Australia* 16(3): 553-569. https://doi.org/10.1080/14490854.2019.1636676
- <u>Dataverse (2023) Australian Historical Criminal Justice Data Dataverse.</u>
  <a href="https://dataverse.ada.edu.au/dataverse.xhtml?alias=australian\_historical\_criminal\_justice\_data">https://dataverse.ada.edu.au/dataverse.xhtml?alias=australian\_historical\_criminal\_justice\_data</a>
- Davidson H (2019) Digital technology helps unearth new evidence about Australia's past. *The Guardian*, 15 March. <a href="https://www.theguardian.com/australia-news/2019/mar/15/digital-technology-helps-unearth-new-evidence-about-australias-past">https://www.theguardian.com/australia-news/2019/mar/15/digital-technology-helps-unearth-new-evidence-about-australias-past</a>
- Davies A and Strange J-M (2010) Where angels fear to tread: academics, public engagement and popular history. *Journal of Victorian Culture* 15(2): 268-279. https://doi.org/10.1080/13555502.2010.491663
- Davison G (1991) Paradigms of public history. *Australian Historical Studies* 24(96): 4-15. https://doi.org/10.1080/10314619108595865
- Digital Panopticon (2020) *Tracing London convicts in Britain & Australia*, 1780–1925. www.digitalpanopticon.org.
- Emsley C (2005) Crime and punishment: 10 years of research. *Crime, History & Societies* 9(1): 117-138. https://doi.org/10.4000/chs.387
- Evans T (2011) Secrets and lies: the radical potential of family history. *History Workshop Journal* 71(1): 49-73.
- Finnane M (2020) What counts? Essays from the Prosecution Project. *Australian Historical Studies* 51(3): 245-249. <a href="https://doi.org/10.1080/1031461X.2020.1781139">https://doi.org/10.1080/1031461X.2020.1781139</a>
- Finnane M and Piper A (2016) The Prosecution Project: understanding the changing criminal trial through digital tools. *Law and History Review* 34(4): 873-891. https://doi.org/10.1017/S0738248016000316
- Finnane M and Smaal Y (2018) The Prosecution Project: using crime records to access family and other histories. *Queensland Review* 25(1): 89-101. https://doi.org/10.1017/qre.2018.9
- Finnane M, Kaladelfos A and Piper A (2018) Sharing the archive: using web technologies for accessing, storing and re-using historical data. *Methodological Innovations* 11(2): 1-11. <a href="https://doi.org/10.1177/2059799118787749">https://doi.org/10.1177/2059799118787749</a>
- Foster M (2014) Online and plugged in? Public history and historians in the digital age. *Public History Review* 21: 1-19. <a href="https://doi.org/10.5130/phrj.v21i0.4295">https://doi.org/10.5130/phrj.v21i0.4295</a>
- Founders & Survivors (n.d.) *Exploring Founders & Survivors—digitising Tasmania's past.* https://foundersandsurvivors.com/

- Frost L (2011) The politics of writing convict lives: academic research, state archives and family history. *Life Writing* 8(1): 19-33. https://doi.org/10.1080/14484528.2011.542327
- Gardner JB (2010) Trust, risk and public history: a view from the United States. *Public History Review* 17: 52-61. https://doi.org/10.5130/phrj.v17i0.1852
- Godfrey B (2016) Liquid crime history: digital entrepreneurs and the industrial production of 'ruined lives'. In Jacobsen MH and Walklate S (eds) *Liquid criminology: doing imaginative criminological research*: 140-155. London: Routledge.
- Godfrey B (2019) Prison versus Western Australia: which worked best, the Australian penal colony or the English convict system. *British Journal of Criminology* 9(5): 1139-1160. https://doi.org/10.1093/bjc/azz012
- Godfrey B, Homer C, Inwood K, Maxwell-Stewart H, Reed R and Tuffin R (2021) Crime, penal transportation, and digital methodologies. *Journal of World History* 32(2): 241-260. https://doi.org/10.1353%2Fjwh.2021.0023
- Godfrey B, Maxwell-Stewart H and Inwood K (2018). Exploring the life course and intergenerational impact of convict transportation. In Eichelsheim VI and van de Weijer SGA (eds) *Intergenerational continuity of criminal and antisocial behaviour:* an international overview of studies: 61-75. London: Routledge.
- Gray D (2018) Exorcising a demon? Why history needs to engage with the Whitechapel murders and dispel the myth of 'Jack the Ripper'. *Humanities* 7(2), Article 52. https://doi.org/10.3390/h7020052
- Gudonis M and Jones BT (2021) Who controls the past? In Gudonis M and Jones BT (eds) *History in a post-truth world: theory and praxis*: 1-30. New York: Routledge.
- Guiney T (2020) Excavating the archive: reflections on a historical criminology of government, penal policy and criminal justice change. *Criminology & Criminal Justice* 20(1): 76-92. https://doi.org/10.1177/1748895818810333
- Guldi J and Armitage D (2014) *The history manifesto*. Cambridge: Cambridge University Press.
- Hamlyn B, Shanahan M, Lewis H, O'Donoghue E, Hanson T and Burchell K (2015) *Factors affecting public engagement by researchers: a study on behalf of a consortium of UK public research funders*. TNS BMRB and Policy Studies Institute. https://wellcome.org/news/what-are-barriers-uk-researchers-engaging-public
- Harman KE (2018) The transformative power of digital humanities in teaching family history online. *Journal of University Teaching and Learning Practice* 15(3), Article 7.
- Hedges M and Dunn S (2018) *Academic crowdsourcing in the humanities: crowds, communities and co-production*. Cambridge, MA: Chandos Publishing.
- Hitchcock T (2013) Confronting the digital. *Cultural and Social History* 10(1): 9-23. <a href="https://doi.org/10.2752/147800413X13515292098070">https://doi.org/10.2752/147800413X13515292098070</a>
- Hitchcock T (2014) The Old Bailey Online: democratising access to social history. *University of Hertfordshire REF2014 impact case study*. Research Excellence Framework. <a href="https://impact.ref.ac.uk/casestudies/CaseStudy.aspx?Id=44489">https://impact.ref.ac.uk/casestudies/CaseStudy.aspx?Id=44489</a>
- Hitchcock T (2017) Digital affordances for criminal justice history. *Crime, History & Societies* 21(2): 335-342. <a href="https://doi.org/10.4000/chs.2016">https://doi.org/10.4000/chs.2016</a>
- Hitchcock T and Shoemaker R (2015) Making history online: the Colin Matthews lecture for the public understanding of history. *Transactions of the Royal Historical Society* 25: 75-93.
- Howard S (2015) Bloody code: reflecting on a decade of the Old Bailey Online and the digital futures of our criminal past. *Law, Crime and History* 5(1): 12-24.

- Jarreau Pb, Dahmen NS and Jones E (2019) Instagram and the science museum: a missed opportunity for public engagement. *Journal of Science Communication* 18(2): 1-22. https://doi.org/10.22323/2.18020206
- Johnson AJ (2015) Haunting evidence: quoting the prisoner in the 19<sup>th</sup> century Old Bailey trial discourse. The defences of Cooper (1842) and McNaughten (1843). In Arendholz J, Bublitz W and Kirner-Ludwig M (eds) *The pragmatics of quoting now and then.*Topics in English linguistics: 369-400. Berlin: De Gruyter Mouton.
- Johnson D (2018) Incarcerating the poor: interpreting poverty and punishment in British prison museums. *Law, Crime and History* 8(1): 91-107.
- Kippen R and McCalman J (2016) Crowdsourcing convict life courses, or the value of volunteers in the age of digital data. In Matthijs K, Saskia H, Kok J and Matsuo H (eds) *The future of historical demography: upside down and inside out*: 201-204. Leuven, Belgium: Uitgeverij Acco.
- Laster K (1991) History and crime. *Australia & New Zealand Journal of Criminology* 24(2): 65-168.
- Lawrence P (2019) Historical criminology and the explanatory power of the past. *Criminology & Criminal Justice* 19(4): 493-511. <a href="https://doi.org/10.1177/1748895818794237">https://doi.org/10.1177/1748895818794237</a>
- Leon SM (2017) Complexity and collaboration: doing public history in digital environments. In Gardner JB and Hamilton P (eds) *The Oxford handbook of public history*: 44-66. New York: Oxford University Press.
- Libraries Tasmania (n.d.) *Tasmania Names Index*. https://librariestas.ent.sirsidynix.net.au/client/en\_AU/names/?
- Locating London's Past (2011) *Home*. https://www.locatinglondon.org/
- Lubin R (2021) Uncover your family history as lockdown sees surge of Brits exploring genealogy. *Mirror*, 16 April. <a href="https://www.mirror.co.uk/lifestyle/family/uncover-your-family-history-lockdown-23926231">https://www.mirror.co.uk/lifestyle/family/uncover-your-family-history-lockdown-23926231</a>
- Maxwell-Stewart H (2016) Big data and Australian history. *Australian Historical Studies* 47(3): 359-364. https://doi.org/10.1080/1031461X.2016.1208728
- McCaw N (2018) Victorian murder and the digital humanities. *Humanities* 7(3), Article 82. https://doi.org/10.3390/h7030082
- Moran D, Houlbrook M, Jewkes Y, March E and Turner J (n.d.) *Home*. The Persistence of the Victorian Prison. https://victorian-prisons.com/
- Moran D, Houlbrook M, Jewkes Y (2022). The Persistence of the Victorian Prison:
  Alteration, Inhabitation, Obsolescence, and Affirmative Design. *Space and Culture* 25(3): 364-378.
  <a href="https://doi.org/10.1177/12063312211057036">https://doi.org/10.1177/12063312211057036</a>
- Moss K, Pareek M, Beyera J, Anderson C and Ifill M (2020) *Virtual reality and Guyana's prison system: control and infection prevention*. University of Leicester. <a href="https://leicester.figshare.com/articles/media/Virtual\_Reality\_and\_Guyana\_s\_Prison\_System\_Control\_and\_Infection\_Prevention/13302389/1?file=25632497">https://leicester.figshare.com/articles/media/Virtual\_Reality\_and\_Guyana\_s\_Prison\_System\_Control\_and\_Infection\_Prevention/13302389/1?file=25632497</a>
- Mulcahy L and Wheeler S (2020) 'Couldn't you have got a computer program to do that for you?' Reflections on the impact that machines have on the ways we think about and undertake qualitative research in the socio-legal Community. *Journal of Law and Society* 47(1): 149-163. https://doi.org/10.1111/jols.12217
- Nicholson LC (2018) I'm not making it up, I'm interpreting: adapting the Founders and Survivors project for drama and web-series. PhD Thesis, University of Tasmania, Hobart. <a href="https://eprints.utas.edu.au/30873/">https://eprints.utas.edu.au/30873/</a>

- Noehrer L, Gilmore A, Jay C and Yehudi Y (2021) The impact of COVID-19 on digital data practices in museums and art galleries in the UK and the US. Humanities and Social Sciences Communications 8: 1-10.
- Old Bailey Proceedings Online (n.d.) The proceedings of the Old Bailey, 1674–1913. www.oldbaileyonline.org
- Piper A (2020a) Crowdsourcing: citizen history and Criminal Characters. In Ashton P, Evans T and Hamilton P (eds) *Making histories*: 199-212. Berlin: De Gruyter Oldenbourg.
- Piper A (2020b) Digital crowdsourcing and public understandings of the past: citizen historians meet Criminal Characters. History Australia 17(3): 525-541. https://doi.org/10.1080/14490854.2020.1796500
- Pithers RT and Soden R (2000) Critical thinking in education: a review. Educational Research 42(3): 237-249.
- Plowright M (2020) Were your ancestors transported to Australia as convicts. Migration Museum, 7 December. https://www.migrationmuseum.org/were-your-ancestorstransported-to-australia-as-convicts/
- Poole S (2005) Tales from the Old Bailey: writing a new history from below. *History* Workshop Journal 59(1): 282-284. https://doi.org/10.1093/hwj/dbi027
- Prisoner Health History (n.d.) *Exploring the history of prisoner health*. https://histprisonhealth.com/
- Prosecution Project (2016) Home. https://prosecutionproject.griffith.edu.au/
- Prosecution Project (n.d.) Australian historical criminal justice data dataverse. Dataverse. https://dataverse.ada.edu.au/dataverse.xhtml?alias=australian\_historical\_criminal\_just ice data
- Putnam L (2016) The transnational and text-searchable: digitized sources and the shadows they cast. American Historical Review 121(2): 377-402. https://doi.org/10.1093/ahr/121.2.377
- Queensland Government (2021, 12 January) Surge in requests for family history records during COVID -19 https://statements.qld.gov.au/statements/91291
- Reddleman C (2021) Ways of seeing the penal colony: New Caledonia and French Guiana Online exhibition. https://www.clairereddleman.com/#/ways-of-seeing-the-penalcolony/
- Research Excellence Framework (n.d.) Research excellence framework. https://www.ref.ac.uk/2014/
- Robertson S (2016) Searching for Anglo-American digital legal history. Law and History Review 34(4): 1047-1069. https://doi.org/10.1017/S0738248016000389
- Rogers H (2015) Blogging our criminal past: social media, public engagement and creative History. Law, Crime and History 5(1): 54-76.
- Roscoe K (2020) Cockatoo Island convicts. https://cockatooconvicts.wordpress.com
- Roscoe K (2022) Radical changes: decolonizing, not just diversifying, digital crime archives. Journal of Victorian Culture 27(1): 167-173. https://doi.org/10.1093/jvcult/vcab057
- Rubenhold H (2019) *The five: the untold lives of women killed by Jack the Ripper.* London: Transworld Digital.
- Ryan L, Debenham J, Pascoe B, Smith R, Owen C, Gilbert S, Usher K, Price D, Le LH and Fairbairn H (2019) Colonial frontier massacres, Australia, 1780 to 1930. Version 3. Newcastle: University of Newcastle.
  - https://c21ch.newcastle.edu.au/colonialmassacres/map.php
- Sanders C and Eisler L (2014) The public would rather watch hockey! The promises and institutional challenges of 'doing' public criminology within the academy. Radical Criminology 4: 37-66.
- Sayer F (2015) Public history: a practical guide. London: Bloomsbury.

- Sené A L and Fuggle S (2020) Podcasts from the bagne: disease, contagion, confinement and isolation in France's overseas penal colonies. Anchor by Spotify. https://anchor.fm/podcasts-bagne
- Shoemaker B (2018) Lessons from the Digital Panopticon. In Pitcher L and Pidd M (eds) *Proceedings of the Digital Humanities Congress 2018*. Sheffield: The Digital Humanities Institute. https://www.dhi.ac.uk/openbook/chapter/dhc2018-shoemaker
- Shoemaker R and Ward R (2017) Understanding the criminal: record-keeping, statistics and the early history of criminology in England. *British Journal of Criminology* 57(6): 1442-1461. <a href="https://doi.org/10.1093/bjc/azw071">https://doi.org/10.1093/bjc/azw071</a>
- Smith B (2008) *Australia's birthstain: the startling legacy of the convict era*. Crow's Nest, NSW: Allen & Unwin.
- Smith MN (2007) The human touch software of the highest order: revisiting editing as interpretation. *Textual Cultures: Text, Contexts, Interpretation* 2(1): 1-15.
- Steinhauer J (2014) '@HistoryinPics brings history to the public. So what's the problem? Part 2', *History*@ *Work Blog*, <a href="https://ncph.org/history-at-work/historyinpics-part-2/">https://ncph.org/history-at-work/historyinpics-part-2/</a>
- Theibault J (2013) Visualizations and historical arguments. In Dougherty J and Nawrotzki K (eds) *Writing history in the digital age*: 173-185. Ann Arbor: University of Michigan Press.
- Thompson EP (1966) History from below. Times Literary Supplement 65: 275-280.
- Transcribe Bentham (n.d.). *Transcribe Bentham*. <a href="http://transcribe-bentham.ucl.ac.uk/td/Transcribe\_Bentham">http://transcribe\_bentham</a>. bentham.ucl.ac.uk/td/Transcribe\_Bentham
- Tranter BK and Donoghue J (2003) Convict ancestry: a neglected aspect of Australian identity. *Nations and Nationalism* 9(4): 555-577. <a href="https://doi.org/10.1111/1469-8219.00127">https://doi.org/10.1111/1469-8219.00127</a>
- Tranter BK and Donoghue J (2008) Bushrangers: Ned Kelly and Australian identity. *Journal of Sociology* 44(4): 373-390. https://doi.org/10.1177/1440783308097127
- Trouillot MR (1995) *Silencing the past: power and the production of history*. Boston, MA: Beacon Press.
- Tuffin R and Gibbs M (2019) Repopulating landscapes: using offence data to recreate landscapes of incarceration and labour at the Port Arthur penal station, 1830–1877. *International Journal of Humanities and Arts Computing* 13(1-2): 155-181. <a href="https://doi.org/10.3366/ijhac.2019.0234">https://doi.org/10.3366/ijhac.2019.0234</a>
- Tuhiwai Smith L (2012) *Decolonizing methodologies: research and Indigenous people*. 2nd edn. London: Zed Books.
- Watkins E (2021) Forgotten Convicts: Nineteenth-Century Pauper Emancipists. Podcast series. https://forgottenconvicts.wordpress.com/podcasts/
- Williams L (2015) Writing wayward women: why blog the history of Victorian England's female offenders? *Law, Crime and History* 5(1): 43-53.
- Yasin B and Sturge G (2020) Ethnicity and the criminal justice system: what does recent data say on over-representation? *House of Commons Library*, 2 October. <a href="https://commonslibrary.parliament.uk/ethnicity-and-the-criminal-justice-system-what-does-recent-data-say/">https://commonslibrary.parliament.uk/ethnicity-and-the-criminal-justice-system-what-does-recent-data-say/</a>
- Yeomans H (2019) Historical context and the criminological imagination: towards a three-dimensional criminology. *Criminology & Criminal Justice* 19(4): 456-474. <a href="https://doi.org/10.1177/1748895818812995">https://doi.org/10.1177/1748895818812995</a>