

Mapping the frontiers of private property in New South Wales, Australia

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Abstract

This article addresses the process and patterns by which private property has been applied on the Australian continent. Alongside both lease-holdings that are limited by term or perpetual and squatting practices, identifying and documenting private property in both individual cases and in aggregate over a large geography offers a compelling approximation of the appearance and spread of British–Australian settlement. Plots and patterns of private land ownership can be read in relation to other forms of land use and tenure each subject to specific historical legal instruments and definitions. We explore how, in particular, the first-generation alienation of private property might be constructed, represented, and theorised using a critical approach to GIS tools and practices. What technical considerations are required to identify the extent of a site and map its transfer into private hands? How far can the process of mapping the initial alienation of parcels of Crown land over time expose legacies of colonial practices in present-day methods and serve as a testbed to generate other layers that capture, for instance, patterns of informal privatisation or interact with other phenomena—most notably that of frontier violence—that likewise occur on land, in time? Such work can be located among those wrestling with problems of mapping colonial land occupation with technologies that share a heritage with the surveying tools that allowed that same acquisition and can enhance a critical approach to GIS in relation to appropriation and dispossession of Aboriginal land.

KEYWORDS

alienation, colonialism, Crown land, geographical information systems (GIS), historical geography, private property

Aborigines were dispossessed of their land *parcel by parcel*, to make way for expanding colonial settlement. Their dispossession underwrote the development of the nation. *Mabo v Queensland (No 2)* [1992] HCA 23, per Brennan J (emphasis added)

1 | INTRODUCTION

Although the techniques and practices of rendering land as private property are well documented in the colonial archive in Australia, new mapping technologies allow researchers to conceive of land ownership across more expansive geographies and timelines. The

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piecemeal creation of private property in land—as an ongoing, regulated, and systematic colonial practice—has not been fully documented as a distinct spatiotemporal phenomenon in Australia. This article explains how such a project could be undertaken. We discuss a mapping project developing a technique hypothetically able to account for each parcel of property that was alienated from Crown lands in the New South Wales colony, and thereby also able to account for records, instance by instance, where the creation of private property first occurred, when, and over what extent of territory. Taken together, the *parcel-by-parcel* creation of private property is an absent layer in our historical knowledge of modern Australia, with important contemporary relevance.

As part of the long tail of what Teela Reid (2020) has described as the “year of reckoning,” in which 2020 marked 250 years since James Cook claimed a vast swathe of the Australian continent for Great Britain, this article addresses the process and patterns by which private property came to be recognised and defended on this continent and explores a way of accounting for those patterns as well as their implications for other historical events. From shortly after the First Fleet of convicts arrived at the New South Wales colony in 1788, parcels of land were recognised as property—initially as Crown lands, and later by individuals, businesses and other entities as “private” property (Fletcher, 1976; Kass, 2019; Roberts, 1924). Over the course of two and a half centuries, much of Australia and its modern island territories have been rendered as private property and documented as such by means of legally enforceable devices, such as deeds of ownership, certificates of title, leases, and so forth (Bhandar, 2018; Blatman-Thomas & Porter, 2019; Jackson et al., 2018). The piecemeal transfer of Crown land to emancipates, free settlers and—in a small number of cases—Aboriginal people effectively covered the Australian continent in a legal patchwork of private property and Crown land that changed its patterns over the course of (now) 220 years (Fletcher, 1976; Johnson, 2016; Karskens, 2009). This article reflects on the history of the devices used to define this private property ownership and the complexities they have been shown to contain (Bhandar, 2018; Blomley, 2013; Harris, 2004). It considers how mapping tools and the digital humanities can inform new ways of understanding the history of land ownership on the Australian continent, rendering the historical facts contained in publicly accessible documents in geographical and historical terms to better understand the relationship between this phenomenon and others that relate to claiming, developing, and defending land as property (Wegman, 2020; compare Karskens et al., 2022; Leonard, 2021).

Whether granted directly by (or under the authority of) the Governor or acquired at auction through sale, the parcels of land secured by individuals from 1792

Key insights

Working with ideas associated with geographical information systems (GIS) our private property frontier map of initial territorialisation attends to the history of first generation alienation of plots of Crown land as private property. We contend that producing a fine-grained map of private property should not further render Aboriginal Country invisible in the landscape. In fact, a map tracking the plot-by-plot advent of private property should do the opposite, rendering private property an unnatural layer of governance that explicitly arranges patterns of colonial control and land based violence.

onwards moved out of Crown ownership and into private hands (Fletcher, 1976; Kass, 2019). This is a process that continues into the present day. Much, if not all, property in Australia that is not still Crown land nor held under Native Title has in one way or another been subject to a transaction that originates with this early history of what is technically called alienation—to which we will return below—and each parcel of private property has a history that can be traced through (mostly) publicly accessible documents to a first instance of this alienation (Kass, 2019).

This procedure, we contend, can be mapped in a way that tracks the spread of private property over time and space, allowing us to understand it in spatial and temporal terms, but also in relation to its effects. Many of those can be and have been represented in their historical geography, as shown most compellingly in maps of colonial frontier massacres in Australia, 1780–2022 (The Centre for 21st Century Humanities, 2022). This type of mapping might allow urban scholars to better trace the movements and interactions of two key ontological understandings of land over an extended geography and timeline; that is, colonial private property and Aboriginal Country as *everywhere-and-everywhen*, including in urbanising and urban contexts (Jackson, 1997).

Contemporary Australian society is run through with questions about the still-colonising state, the ongoing violence of alienation, and the social, political, and environmental uses and impacts of private property more broadly (Blatman-Thomas & Porter, 2019; Davies et al., 2021; Justice & O’Brian, 2022). The housing affordability crisis in many capital and regional cities is merely the most recent in a long list of effects of privatising the ownership of Australian land (Porter and Kelly, 2022). Recognising these contemporary implications, we focus on the need to reconstruct from public records a basic account of how this came to be. Our work here reflects on the nature of private property as

something that can be represented in a deed or certificate, and as something that can be represented geographically. In it we seek to define the process as enacted over time, implicating specific geographies in each instance when and where it is enacted. We present provisional outcomes and tentative reflections on a pilot project that processes how we might most effectively and equitably address the gap in our knowledge around how and where private property was first established as part of a program begun in the colonial era and which continues to the present. It locates this work and its implications among the problems of mapping colonial land occupation with tools that share a heritage with the surveying tools that allowed that same acquisition.

To grapple with these issues, it is necessary to recall some aspects of a foundational colonial history in which questions of land ownership and early practices of its privatisation are explicitly in play, and especially of “frontier” violence (Gapps, 2018, 2021; Reynolds, 2006). We are also aware of geography’s central “role in the imperial project” and in “clear[ing] the way for development,” which includes direct involvement in attempting to empty colonial landscapes of Aboriginal peoples and fill them up with new property regimes designed to enfranchise non-Indigenous people (Howitt, 2001, p. 235). “[E]arly academic geography helped build a dominant geographical imaginary which saw Australia as empty, unknown, and waiting for (white) settlement,” writes Howitt (2001, p.236).

Archival records and historical documents relating to the history of Australian land ownership are now more accessible and navigable than they have ever been (Kass, 2019). More, too, is known of the history of the colonial frontier and its consequences (Gapps, 2018; The Centre for 21st Century Humanities, 2022). Working with ideas associated with Geographical Information Systems (GIS) that have been established and tested over decades, it has become possible to conceive of an increasingly nuanced account of Australia’s built environment informed by more and more fine-grained detail and by datasets that offer new colour and complexity to existing narratives. Within these possibilities, the map of initial territorialisation we describe here attends to the history of first generation “alienation” of plots of Crown land as private property. The thinking behind this mapping work—and the maps themselves, which for being works in progress we have not shared here—is leading to new empirical detail about how colonial land theft was linked spatially and temporally with the forms of violence that sit at the centre of making home in settler societies (Kotef, 2020).

2 | NEW SOUTH WALES AS PROPERTY

Cook captained the *HMS Endeavour* on a voyage from 1768 to 1771 (Carter, 1987). Beyond missions to

establish an observatory on Tahiti to witness the transit of Venus and to support a project to record knowledge of Pacific flora, he pursued the search for a southern continent. Abel Tasman had come close to “discovering” the continent in his encounter with what he called, respectively, Van Diemen’s Land and New Zealand. Of course, what Cook “discovered” was already full of people and it was the setting of a history extending back tens of thousands of years (Reynolds, 2006). Cook charted the eastern coastline of modern-day Australia from the southern end of what he named New South Wales to the top of the continent, now called Cape York. On reaching the Torres Strait, separating contemporary Queensland from what is now Papua New Guinea, and from an island he called Possession Island, he wrote the following in his diary entry of 22 August 1770:

Notwithstand[ing] I had in the Name of his Majesty taken possession of several places upon this coast I now once more hoisted English Coulers and in the Name of His Majesty King George the Third took possession of the whole Eastern Coast from ... Latitude [38° South] down to this place by the Name of New South Wales together with all the Bays, Harbours Rivers and Islands situate upon the said coast after which we fired three Volleys of small Arms which were Answerd by the like number from the Ship. (Cook, 1770, sic, all spelling as it appears in the diary)

Cook’s declaration, accompanied by the ceremonial hoisting of flags and firing of guns and canons, served specific ends that have significant conceptual and political implications reaching down to the present day. Most significant of these, for our questions, is that the land thus possessed entered into the ownership of the British Crown, at least in the view of the Crown and its legal institutions.

As we recall below, the assumption that this land was empty and not previously owned in any way was proven incorrect (albeit in specific settings, tested in the courts). Nonetheless, the assumption underpinned the way that both Crown land and private property were conceived and managed from the first days of British invasion. That the land was inhabited was well documented and acknowledged (Gammage, 2012)—indeed, Cook took souvenirs from encounters with the Gweagal at Kamay, or Botany Bay, for instance. But the Aboriginal peoples who already lived there were understood as being untethered to particular property, and as such failed to meet the basic British criterion of landownership (Johnson, 2016); that is, exclusive possession typically established by consistently improving and maintaining land. Now-debunked Lockean ideas

about Indigenous peoples having no fixed relationship with the land, sufficient to exclude them from their land, was evidenced by their lack of evident agricultural cultivation, and was signalled by a lack, too, of permanent buildings or other forms of improvement. In British terms, property was signalled by improvements that may have included the cultivation of crops, construction of fences, raising buildings of one kind or another, or the maintenance of pathways (Fletcher, 1976; Karskens, 2009; Poiner & Jack, 2007; Weaver, 2003).

The starting point, then, for understanding the creation of private property in the New South Wales colony is the creation of Crown land. In setting sail at the head of the First Fleet of convict ships, the Instructions to Arthur Phillip (first Governor of New South Wales) dated 25 April 1787 empowered him to grant land to emancipists (SA-NSW, 2022). Both the Crown claim upon the land of the New South Wales colony and the Governor's authority to grant land to emancipists were formalised in a ceremony performed by the Judge-Advocate David Collins on the 7 February 1788 that described a wide range of powers and responsibilities. Phillip recalled the scope of the colony as formalised by Collins as follows:

By this instrument Arthur Phillip was constituted and appointed Captain General and Governor in Chief in and over the territory, called New South Wales; extending from the northern cape, or extremity of the coast, called Cape York, in the latitude of ten degrees, thirty-seven minutes south, and of all the country inland to the westward, as far as one hundred and thirty-fifth degree of east longitude, reckoning from the meridian of Greenwich, including all the adjacent islands in the Pacific Ocean, within the latitudes aforesaid of 10 degrees 37' south, and 43 degrees 39' south, and of all towns, garrisons, castles, forts, and all other fortifications, or other military works which may be hereafter erected upon the said territory, or any of the said islands (Phillip, 1789, p. 51)

Crown land, then, was at that moment all land in the colony, its extent described by this decree. From 1770 to 1788, this was maintained as something of an abstract claim of ownership by George III on behalf of the British Crown (in legal terms since *Mabo (No 2)* at least: radical title). The establishment of a settlement around the waters of Sydney Cove/Warrane rendered that abstraction concrete for those Britons who lived there, and for those who governed Sydney Town. From 1792 onwards, parcels of that land began to move into private hands as freehold title (beneficial ownership), initially through the granting of land.

Recalling the familiarity of this story in the history of Australian settlement, Terry Kass (2019, p. 19) hyperbolically recalls: "As all school children are taught, James Ruse received the first land grant of 30 acres (12 ha) near Rose Hill or Parramatta on 22 February 1792." In making this and subsequent grants of Crown land to individuals, Phillip insisted that land must have a particular use, which in the early days of the colony meant that an owner accepted responsibility to maintain part of the land, at least, for agricultural purposes, to sustain the entire colony. The individuals initially granted Crown land on these terms were primarily emancipated convicts.

Initially, ex-convicts and then free settlers who were "of good conduct and disposition to industry" were entitled to request a free land grant, a request that could be withheld (SA-NSW, 2022). The processes behind this provision were already predicated in the Instructions Phillip carried from London:

It is our Will and Pleasure that in every such case you do issue your Warrant ... to the Surveyor of Lands ... to make surveys of and mark out in Lots such Lands upon the said Territory as may be necessary for their use ... You will cause Copies of such Grants as may be passed to be preserved, and make a regular return of the said Grants to the Commissioners of Our Treasury and the Lords of the Committee of Our Privy Council for Trade and Plantation. (Phillip, 1787, pp. 19–20)

Under these instructions, each male was entitled to 30 acres as an individual, an additional 20 acres if married, and 10 acres for each child with him in the settlement at the time of the grant (SA-NSW, 2022). Women were also entitled to receive a free grant of land, and Ellenor Frazer is possibly the first woman to receive a grant, which was made for a property in the Concord Parish on 20 February 1794. The first land granted to Aboriginal people by the Crown was in 1819 when Colebee and Nurragingy secured a grant on Nurragingy's traditional lands.

Phillip had received additional Instructions dated 20 August 1789 to encourage free settlers to the colony. These Instructions allowed non-commissioned marine officers to be granted 100 acres and private soldiers to 50 acres over and above the area allowed to convicts (SA-NSW, 2022). It is notable that the act of granting land required acts of surveying, and that a central record of these grants was to be maintained in London—both requisites stipulated 5 years before the first of any such grant was made. Land grants were not always secure during this time, and land could be reverted to Crown ownership if, for instance, the landowner did not fulfil the stipulations the grant laid out. In a famous instance of this reversion, Governor Lachlan

Macquarie cancelled all land grants that had been issued during the Rum Rebellion of 1808–1809, later reinstating some to “very deserving and Meritorious Persons” (SA-NSW, 2022). Macquarie also introduced the first land speculation measure in 1812. He “had found as very prevalent practice ‘the obtaining [of their] grants for the sole purpose of selling them’” (Roberts, 1924, p. 21), to which he responded by inserting a clause into each grant that forbade the resale of the granted land for a period of five years (see, for example, William Redfern’s land grant, dated 8 October 1810, in Figure 1).

Instructions to Governor Thomas Brisbane, 17 July 1825, (SA-NSW, 2022) allowed for the sale of land by private tender from that year on. Free grants still existed at this time, but they were not to exceed an area of 2,560 acres or be less than 320 acres if in the immediate vicinity of a town or village. The Colonial Secretary Viscount Goderich brought this to an end in 1831. On 5 September 1826, an Imperial Government order had allowed Governor Ralph Darling to set the notional boundaries of the governable extent of New South Wales by naming its “limits of location” (Poiner & Jack, 2007). Settlers were permitted to take up land only within this area, being the extent of the territories over which order could be maintained from Sydney. A further Government order of 14 October 1829 extended these boundaries to an area defined as the Nineteen Counties. In a despatch dated 9 January 1831 Goderich instructed the Governor that no more free grants, except those already promised, were to be issued (SA-NSW, 2022). All land was thereafter sold at public auction, and revenue from the sale of land went toward the immigration of labourers. The sale of land under these conditions was, furthermore, limited to the Nineteen Counties. This did not, of course, prevent less formal acquisition of land further afield (SA-NSW, 2022).

3 | ALIENATION

Early acts of land surveying and allocation in the New South Wales colony facilitated a range of practices that

defined and tested what it meant for an individual to own property (Fletcher, 1976; Kass, 2019). Our larger and ongoing project (for which this serves as an early report) focuses on one of these: the alienation of Crown land through the grant of freehold title, which is to say the transfer of clearly defined parcels of land into and between private hands. In contrast to practices regulating the use of land (such as depasturing leases, which were used to regulate squatting from 1833), alienation brought about a fundamental shift in the nature of land ownership in the colony.

By transferring parcels of land from the Crown to a private owner, the first acts of alienation allowed for private property to stand alongside and in direct complement to the lands held to be owned by the sovereign and managed by their deputies. Grants of freehold title to individuals are well documented, site to site, and provide evidence of the precise moment at which Crown land was made private (through alienation), thereby rendering it alienable from that moment on as a legally defined landholding that can be owned and sold. Practices and procedures enacted to allow the transfer of land from Crown to private ownership in New South Wales were taken up, albeit with many variations, by other independently established colonies on the continent, as well as by those colonies (Victoria and Queensland) that separated from the “mother colony.” Although well documented, and understood as a recoverable layer in the ownership history of any specific site, these transfers have not, as a pattern of actions undertaken by colonial governors and governments, been fully documented as a single if complex phenomenon. As this paper explains, mapping where this first happened, when, and over what extent of land describes a hitherto absent layer in our historical knowledge of modern Australia; that is, the creation of private property in land as a regulated, systematic practice.

The importance of alienation for understanding the conflict between what Brenna Bhandar (2018) calls racial regimes of ownership was emphasised and expanded by the 1992 High Court of Australia in *Mabo v Queensland (No 2)*. Justice Brennan, whose opinion attracted the most support from the Court, explained:

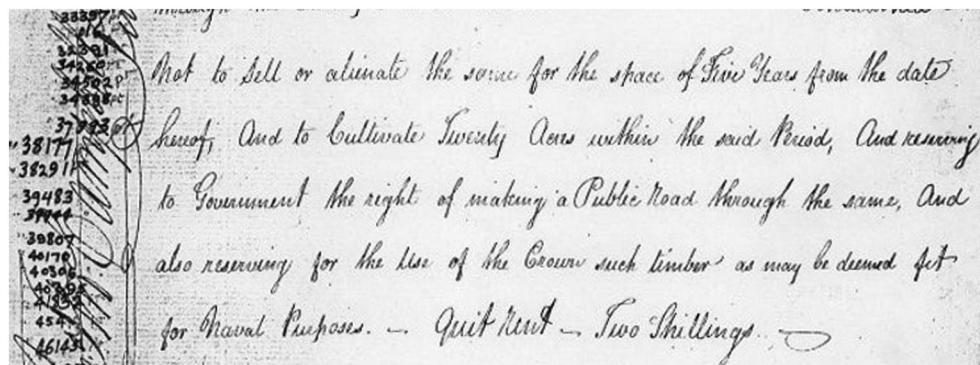


FIGURE 1 William Redfern’s land grant dated 8 October 1810

Australian Aboriginal peoples ... were dispossessed by the Crown's exercise of its sovereign powers to grant land to whom it chose and to appropriate to itself the beneficial ownership of parcels of land for the Crown's purposes. Aboriginal rights and interests were not stripped away by operation of the common law on first settlement by British colonists, but by the exercise of a sovereign authority over land exercised recurrently by Governments ... Aborigines were dispossessed of their land parcel by parcel, to make way for expanding colonial settlement. Their dispossession underwrote the development of the nation. (*Mabo v Queensland (No 2)* [1992] HCA 23)

Six of the seven judges in *Mabo (No 2)* found that the Meriam people were the traditional owners of the Murray Islands (in the Torres Strait region of modern-day Queensland, including Murray or Mer Island itself) and, subject to certain exceptions, remained “entitled as against the whole world to possession, occupation, use and enjoyment of the island of Mer.” Previous decisions had recognised the deep connection between Aboriginal peoples and their traditional lands as Country but found that the existing law did not recognise native title to land as property (*Milirrpum v Nabalco Pty. Ltd.*, [1971] 17 FLR 141). *Mabo (No 2)* found that native title was recognised by the common law, but not by overturning that precedent or by questioning British sovereignty—despite Cook's failure to comply with his sailing instructions that possession be taken “with the consent of the natives” (Nettheim, 1993, p. 223).

Mabo (No 2) was based on a rethinking, which Peter Russell (2006) describes as a “cleansing,” of the common law in view of contemporary norms in international law, particularly the recent rejection of the doctrine of *terra nullius* (Russell, 2006). If Australia was not entirely unoccupied prior to colonisation, then—as the Privy Council had recently held in Canada, India and other former parts of the British Empire—there may be existing rights and privileges held by Indigenous people in Australia that could continue after annexation.

The finding that the Meriam people retained property rights was based on a distinction between “radical” and “beneficial” title. With Cook's declaration of the sovereignty of George III over New South Wales, Britain gained only the former, which brought with it sovereign political authority over this territory. Beneficial title, understood today as property ownership, required a more specific act of dispossession. As Brennan (*Mabo v Queensland (No 2)* [1992] HCA 23) explained: “The rights and privileges conferred by native title were unaffected by the Crown's acquisition of radical title but the acquisition of sovereignty exposed native title to extinguishment by a valid exercise of sovereign power

inconsistent with the continued right to enjoy native title” (also in *Mabo (No 2)*). Although incremental acts of dispossession—grants of estates of freehold or leases, for example, or appropriation of land by the Crown to itself—had taken place over much of Australia, they had not occurred on the Murray Islands. The rights and privileges held by the Meriam people under their existing legal system could thus continue.

It is entirely possible to recover and represent the details of this process of alienation within the context of Aboriginal Country, if not its full effects, by: documenting the extent of the first instance any land within the original Crown claim of New South Wales was granted to an individual or other private entity; and by recalling the expectations and obligations placed on that grantee in accepting the land assigned (keeping specific trees, leaving room for potential roads, committing a certain proportion of the land for agricultural or other uses). Some gaps in documentation notwithstanding, these are matters of public record. As Grace Karskens has shown in *People of the River* (2020), these processes can be explained and represented in historical narrative; but as also demonstrated in her collaboration with members of the Darug Custodian Aboriginal Corporation and others in *Dyarubbin*, there is great potential in digitised mapping to acknowledge relationships between events, territory, culture, and property over time.

4 | MAPPING PRIVATE PROPERTY

Mapping is never an apolitical or neutral project, but this observation especially applies in Australia, where surveying and cartography have been fundamental tools of dispossession. As Alain Pottage (1994, p. 362) explains, land registration used cartographic technologies to “render ... property and topography commensurable, reducing each to a form of notation which could be accommodated to or superimposed upon the other.” There are dangers, no doubt, in mapping the frontiers of private property, which must be acknowledged and addressed through the research process, which we describe below. We are alert to the danger of glorifying and celebrating white colonial invasion and settlement (Moreton-Robinson, 2015), and celebrating private property itself (Blomley, 2013). Producing a map of private property frontiers should not render—or further render—Aboriginal Country invisible in the landscape. In fact, a map tracking the plot-by-plot advent of private property should do the opposite by rendering private property *unnatural* and as a layer of governance that explicitly arranges patterns of control and access to land (Justice & O'Brian, 2022). The historical process of ascribing land ownership to individuals was contingent and subjective and not always undertaken in accordance with the law. Our property system requires

ongoing maintenance (Blomley, 2013; Thorpe, 2020, 2022), and can be readily unsettled by demonstrating the fragility that characterised its inauguration in Australia.

Mapping is, furthermore, built around processes of delineating, bounding, excluding, and claiming that are often incompatible with Indigenous ideas of land and custodianship (Blomley, 2003; Harris, 2004). It addresses specific needs grounded in historically defined projects in relation to land and its value as capital. Ontological understandings of land, of course, are not fixed, but change over time (Justice & O'Brian, 2022). We can map the movement of these ontological understandings of land over time, too, such as when Aboriginal Country and settler-colonial land systems intersect and change. The claim of Country as Crown land is one change that had clear significance for the British Crown while affecting the relationship of Aboriginal people with Country in a largely abstract way—even as it permitted the more violent forms of dispossession that would follow. The alienation of parcels of this land as private property comprised one form of this violence (as deracination) and led to others (physical violence and execution) (Blomley, 2003; Gapps, 2018; Harris, 2004; Reynolds, 2006). To begin the work of accounting for this spread of private property and understanding its effects through comparative mapping, the project we describe initiated the mammoth task of documenting the pace and extent of the creation of private property in colonial Australia, testing assumptions and trialling procedures. We begin with the hypothesis that, with enough resources, or sufficient popular engagement, it is possible to map the first instance of alienation of all private land in modern day Australia, spatially and temporally, and to track to the present day changes to the extent of private landholdings over time (further instances of alienation in transactions between private owners). However, in practice (Kass, 2019), this process needs to start in a limited way, both to test our methods and to understand the scale of resources required to conduct this research at a state or national scale.

Without the systematic and centralised register of ownership the Torrens system¹ would introduce in the mid-nineteenth century, in the early years of colonial New South Wales the precise bases of land ownership can be difficult to recover, and for the first two decades of this colonial history the ownership of private property is both granted and rescinded (as noted above) as the first surveys attempted to regularise the landscape of land grants and transfer. Within this history, there are important distinctions to be made between Crown land use (both authorised, as with grazing licences, and informal, as in squatting) and legal forms of ownership. These mechanisms are clearly predicated on colonial acts of possession. Aboriginal scholar Aileen Moreton-Robinson (2015, p. xiii) calls for greater attention to

these acts when she writes, “cities signify with every building and every street that this land is now possessed by others; signs of white possession are embedded everywhere in the landscape.” Understanding the pace and pattern of first-generation private property ownership is vital for understanding the pace and pattern of alienation from Aboriginal Country in its broader sense of deracination and violent removal. This history is one of a general violence by which Aboriginal Country and its guardianship is delegitimised and replaced by a concept of land first as Crown possession and then as private property. The process of mapping makes visual and coherent an incredibly complex history which casts long shadows over the present, by systematically tracking and representing, for the first time, a single but crucial mechanism (and conceptual reassignment) of land in private ownership.

Mapping and surveying are essential tools in asserting property rights over land and are therefore deeply implicated in the dispossession of Indigenous people globally (Blomley, 2003; Harris, 2004). “Mapping and surveying the landscape around the encampment at Sydney Cove” was a critical step in taking possession of Sydney (Gapps, 2018, p. 36). In the contemporary context, GIS technologies, much like maps, have their genesis in and underpin modern military operations and their destructive capacities (Smith, 1992), and therefore are important tools in ongoing efforts to dispossess peoples of land and resources.

Our approach to mapping is informed by a theory of critical GIS, which aims to both challenge the positivist ways of thinking that are often embedded in GIS and quantitative approaches, and to challenge the (neo) colonial power asymmetries created through mapping itself (see O'Sullivan, 2006). Critical GIS aims to insert more radical ontologies into the construction of maps to challenge the very colonial knowledge and power structures that mapping epistemologies and mapping ontologies have been built upon. We build on work by Wood and Fels (2008) who suggest that maps can exercise a kind of narrative power because they imply an ability to assert an intrinsic factuality about the “real world.” This power is, of course, socially constructed, yet it is often unchallenged. In this sense, maps and mapping are not concerned with representing the real world so much as the construction of a proposition or argument about the world, which opens a space for political action through mapping (Wood & Fels, 2008). That idea was in part born out of the Detroit Geographical Expedition, and published under the title Fitzgerald, in which a group of activist scholars worked with black communities to contest white power and expose systemic racism and inequality through mapping one square mile in Fitzgerald, Detroit (Bunge, 1971). More recently this approach has been described as “counter mapping,” which seeks to incorporate critical social theory with bottom-up or participatory approaches to knowledge formation

(Byrne, 2008; Dalton & Stallmann, 2018). We build on these critical approaches to mapping to contest the very processes through which the colonial frontier and the creation of private property occurred in New South Wales.

5 | DEVELOPING THE METHODOLOGY

To summarise the preceding pages, this project explores how and at what pace the Australian land that was claimed for the Crown in 1770, following Cook's navigation, entered private ownership. It recovers and represents Australia's "territorialisation" as a settler-colonial state by describing the pattern, pace and extent of private property acquisition as distinct from the general Crown claim made in 1770 and formalised in 1788. Despite the capacity for that research approach to tell us much about property over time, as a necessary limit, the first dataset constructed explores first generation private property ownership in New South Wales, and specifically within Cumberland County.

New South Wales was historically composed of Eastern, Central, and Western divisions. In total, the Eastern and Central divisions comprise 141 counties, which are subdivided into 7,459 parishes. At the time of data collection, the only free access to the Crown Plans is in the viewing room at the NSW State Archives and Records. Many County, Town, and Parish maps from 1825 are digitally linked to the Historic Land Records Viewer (State Library of NSW holds some editions not digitised by NSW State Archives and Records), which is managed by the NSW Lands Registry and provides free access to charting maps and land certificates. The Historic Land Records Viewer has 141 County and 7,459 Parish maps digitised. Parish maps also exist for the Central and Eastern divisions of NSW. The Western division has only county maps (each covering about 100 km²), and these maps are neither compiled nor systematically digitised.

The Parish maps record the first transfer of land from the Crown to individuals, and these are a key resource for the project. The NSW State Government has recognised the significance of this collection, and NSW State Archives and Records has created the Parish Map Preservation Project, digitising over 35,000 editions of Parish, Town, Municipal, County and pastoral maps in their collection. It notes that "Native Title investigations highlighted the need to preserve and provide convenient access to early edition parish maps" (SA-NSW, 2020). The Crown plans and Parish maps are used as a starting point for the research because they record the original land grants and sales. However, different records and data, such as land grant registers discussed below, are needed to create the GIS land alienation dataset for the map, because the Crown and Parish maps do not include *all* the land grant data.

In any GIS mapping project, the first decision a team needs to make is selecting the features of the basemap. In GIS, the term basemap refers to a collection of GIS features, data and orthorectified imagery that form the background setting for a map. The function of the basemap is to provide the basis and background detail that is necessary to orient the viewer to the location of the map. Typically, both GIS data and imagery make up the layers for a basemap, and these often include features like streets, land parcels, and government survey boundaries including county and parish boundaries. For this project the question of the GIS basemap was more complicated because it relates to the question of Aboriginal Country as the *context of all contexts* for land theft in Australia (Jackson et al., 2018). Aboriginal Country was never extinguished by the colonial land claim, nor was it extinguished by private property (Moreton-Robinson, 2015). The land was never ceded by Aboriginal people. Therefore, Aboriginal Country *is* the basemap for any land focused GIS project in Australia. We admit to the necessary artifice of relating surveyed landholdings to a topography that is likewise captured either in surveys or (early on) in narrative descriptions of territory by grantors. Our work addresses this by decoupling the instruments of land ownership from physical topography and Country to render property explicitly as one layer of a multi-layered account of land, the events it witnesses, and its meaning.

With the artificial basemap in place, the next step was to overlay the old parish maps, specifically containing boundaries of the first land grants. In 1835, Cumberland County was subdivided into 57 parishes, and these are the parish maps that constitute the corpus of land alienations documented in this first round of data entry (see the 1840 Cumberland County map in Figure 2). Once we had georeferenced all the parish maps, the next task was to trace the boundaries of each land grant. Some of the initial land grants were large holdings, such as John Harris's grant of 1,000 acres. Yet other grants were small holdings of between 20 and 470 acres. With the parish maps and the land grant boundaries digitised, the next step was to collate and map three other pieces of data: (1) the grantee's name/s, (2) the grant acreage as defined by its documented boundaries, and (3) the date of the grant. We retrieved these data through detailed archival work that required us to integrate such records as the colonial land and land grant registers, and a suite of maps.

With these data we can track the transfer of specific plots of land from Crown to private ownership; in its aggregate form, we can describe the emergence of the private property frontier at the county level and through each individual grant at the parish and land grant level. This database is constructed to allow us to connect the map to others of various granularity (local and national) and will allow for comparison with other datasets such

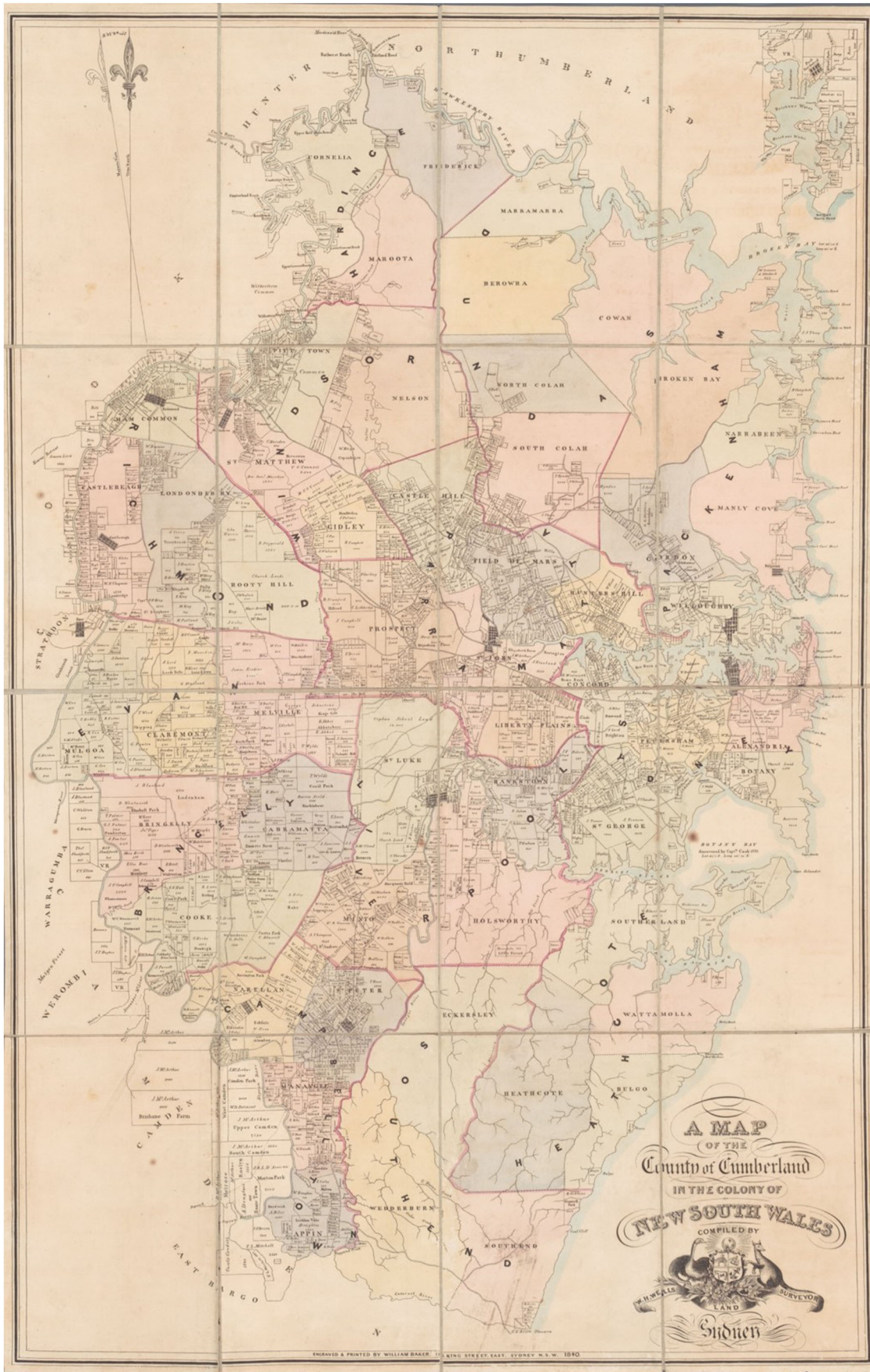


FIGURE 2 1840 Cumberland County map

as the establishment of infrastructure (for example, roads, rail, post, and telegraph), population movement and settlement, Ausstage records of oral histories and corroboree performances, human movement and building during gold rushes, and so on. The map unsettles the idea that private property is a natural and neutral relation to the land and landscape in Australia; it also forces the user to confront the realities of creating and maintaining private property in Australia.

6 | WORKING WITH FRONTIERS

The idea of colonial frontiers is best known from the work of Frederick Jackson Turner (1893) and his analysis of the colonial frontiers moving across the nineteenth-century North American landscape. For Turner, the significance of the colonial frontier lay in its relationship with American nationhood, and to understand one was to understand the other. We might say the same about the frontiers of private property in Australia. There, the frontiers of private property are implicated with other frontier practices and events. The frontiers of colonial invasion and settlement can be broken down into at least four intersecting categories of colonial violence, namely physical, psychological, biological, and ontological frontiers. Importantly, the emergence of private landed property was always contested by Aboriginal resistance (Reynolds, 2006), and has been extensively researched and mapped by scholars such as Stephen Gapps (2018, 2021).

The first thing to observe in this regard is that the pattern of private property ownership does not comprise a frontier in a conventional sense, which is to say a boundary that moves relentlessly forward across a terrain, transforming (“modernising” and “civilising”) all it passes. Turner’s so-called “frontier thesis,” in which “savagery” was ostensibly overcome by “civilisation” through a process of violent struggle, is part of an attempt to interpret the history of the American nation in triumphalist terms. Clearly, this interpretation of the frontier is unsustainable, both in North America and Australia. More recent scholarship has therefore sought to revise our understanding of frontiers as historically and politically specific conditions (Reynolds, 2006). Timothy Mitchell, for example, has argued that the frontier must be understood as a space in which expressions of sovereign power are tied to the broader social order of the political community: “The production of this new territorial power,” Mitchell (2002, p. 12) argues, “also makes possible the making of the nation.” Prevailing theories of modern sovereignty have stressed the political life of the frontier as an extra-legal spatial condition that the state seeks to subsume using diverse administrative techniques. What we name the “private property frontier” is one such technique. According to Scott (1995), p. 206, “the very concept of

the modern state is inconceivable without a vastly simplified and uniform property regime that is legible, and hence manipulable from the centre.” Juergen Osterhammel (2014, p. 107) is similarly unequivocal: “No state is ‘modern’ without a land registry and the legal right to dispose freely of real estate.” But if modern sovereignty is anchored by an administrative logic intent on reducing uncertainty over who owns and has access to particular pieces of land, these formulations still leave us without any further clarity as to the lived reality and historical specificity of the colonial frontier.

To such ends, Lauren Benton (2014, p.4) has suggested that, rather than stable and fixed lines, colonial frontiers instead tended to take the form of highly differentiated legal zones that “dotted the landscape” in narrow bands, enclaves and irregular pockets of space, sometimes contiguous with others, sometimes entirely isolated or surrounded by other kinds of ownership conditions, but all designed to provide security and economic stability for colonists. In its inverse, Benton’s variegated frontier functioned as what Tracey Banivanua-Mar (2007, p. 93) describes as “a net of bureaucracy designed to both contain and exclude” Indigenous people from the political community of the colony, whether through institutionalisation or both state-sanctioned and illegal forms of bodily violence. The alienation of Crown land as first-generation private property could happen anywhere that a “settler” was prepared to settle and build and where a governor or government was prepared to grant or sell land. This fact means that any settlement frontier defined by urban or agricultural creep is historically complicated by sites of alienation that negate that logic and establish logics of their own as industries take hold and others are drawn to the original site. (This is the logic by which a squat like Wee Waa in Narrabri Shire in New South Wales, was transformed into a township in the 1840s, entirely dislocated from other formal frontier conditions [Ewan, 1854].) Any attempt to engage with the history of the colonial frontier must therefore be attuned to its double life as both an unstable limit condition in the practical implementation of sovereign power, as well as a highly disaggregated set of sites in which this power was variously expressed through forms of physical, institutional or bureaucratic violence.

Notwithstanding the observations made above, in contemporary Australia our understanding of the colonial frontier remains emergent, both within academic scholarship and in the public consciousness. The first tranche of what we would call “uncritical” scholarship on the frontiers of colonial settlement in Australia was undertaken by scholars such as Thomas Melville Perry (1963), whose *Australia’s First Frontier* is foundational. His account of the “spread of settlement” rendered Aboriginal Country completely invisible. “As the frontier expanded across the Australian continent, seemingly

inexorably,” suggests Anna Clark (2022, p. 180), “so too was there a collective sense of that continent as one nation. And as that national consciousness emerged, it required a historical consciousness of its own origin.” Perry’s (1963) work, like many others of *its* time (Roberts, 1924), is written entirely from the colonists’ perspective. His historical material is taken from the colonial archive, covering themes such as physiography, major geological formations, climate, vegetation, and soils. In other words, uncritical accounts furnish histories in which colonial settlement is represented as the inevitable outcome of processes of cultural and economic development, constrained by the physical geography of the landscape. “It must be said that the silencing of Indigenous histories was not for want of material,” Clark (2022, p. 181) continues, “yet because the frontier was a source of terrible, violent misdeed, and because Indigenous histories were not recognized as such, Indigenous perspectives operated outside the logic of Australian History well into the twentieth century. It was a stunning dishonesty.” To think of frontiers entirely in terms of the alienation of private property would, of course, perpetuate other forms of dishonesty and to reinforce what Bird Rose (1997) describes as a colonial timeline that takes 1770 or 1788 as a Year Zero. This historical layer of private property, constructed as what Bird Rose (1997, p. 28) calls “a rolling Year Zero that is carried across the land cutting an ontological swathe between ‘timeless’ land and historicised land,” must be made to interact with other “disjunctive” events to establish alternate frontiers based on other modes of ontological rupture: claims on water, biological violence, Aboriginal resistance, language, and so forth (Rogers, 2022).

Accounting for each parcel of property that is alienated from Crown lands is to acknowledge a small part in a long colonial process bound to the private ownership of land *and* to set a Year Zero for each specific site as it moves from radical to beneficial ownership in legal terms, and hence from a state of timelessness to one of historical contingency and accountability.

7 | CONCLUSION

The mapping project described above was originally conceived in conversation with the digital humanities project “Colonial Frontier Massacres, Australia, 1780 to 1930,” now in its third version, and was initially developed as a layer of the Time Layered Cultural Map of Australia (TLC-Map) 2.0. The wider GIS project uses digital mapping to describe historical phenomena in geographical and temporal terms, and to gather data and evidence to be documented in the TLC-Map 2.0 *Gazetteer of Historical Australian Places* to demonstrate the historical complexities of any specific site. From the beginning, then, our ambition to establish the

parameters and procedures for mapping the alienation of Crown land as private property has been to understand both the nature and the effects of the frontiers created by this technique of governing property. It required little imagination to relate the historical patterns of British settlement to instances of frontier violence. But the work done to locate the advent of new private property frontiers with historical and geographical precision allows us to locate this violence more precisely among existing forms of historically documented violence that include construction upon and cultivation of unceded Country to variously meet the needs of the colony and the nation it seeded.

Settler-colonial homemaking takes place—in the past, and into and beyond the present—at the expense of the colonised in settler-colonial societies. The “home” in the settler colonial state—that is, individual settler homes—is a site and political technology of structural settler-colonial violence (Kotef, 2020). The seemingly “neutral” and “rational” legal systems that regulate and control private landed property in Australia have deep colonial roots that attempt to disappear Indigenous land practices and storytelling. The land stolen by the Crown claim was turned piecemeal (rather than wholesale) into property, and in the process the land was re-storied in ways that rendered any conflicting land stories or claims invisible. Henry Reynolds (2013, p. 248) describes it as “involving the seizing of control of one of the world’s greatest landmasses.” The Australian state continues to use the legal systems on which this seizure relied, and settlers in Australia continue to benefit from these property systems and regimes. Including as it does the acquisition and improvement of a property, homemaking is, in Hager Kotef’s terms, a form of violence operative at both the level of the individual (for example, stealing land and making home) and collective (for example, the founding of Australia and the forms of capitalism that comprise its foundations). Thus, our current work on the Private Property Frontier is focused on recording and documenting property and improvements as devices of violence. Kotef’s (2020) work indeed destroys the fantasy of home as a place of safety, shelter, stability, and peacefulness—the very values celebrated in the colonial home and pioneer homestead. She locates home as a place of violence and settler-colonial homes as technologies of violence that push outward across the landscape.

Located across the fields of historical geography, cultural geography, and property history, we hope the Private Property Frontier Map contributes to the emerging field of critical GIS, which seeks to confront notions of western cartographic “expertise” and the exclusionary processes of positivist geospatial data collection and map-making that stem from this orientation to cartographic knowledge production (Wegman, 2020). As Moreton-Robinson (2015) has argued, “improvements”

such as fences, dwellings, and agricultural structures that the white possessive demands defined a form of spatial production while also serving, too, as material correlates of dispossessive legislation and lands acts. In the same way that critical geography is often concerned with producing and maintaining power and social inequalities, we seek to use the critical thinking that sits behind this *more-than-maps* approach to GIS to contest the basis of the ongoing appropriation and dispossession on Aboriginal land.

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ENDNOTE

¹ The Torrens system of land title registration, developed in South Australia in 1858, is fast becoming the most popular system of land conveyancing and administration in the world. The Torrens system takes its name from Robert Torrens (1814–1884). Torrens advocated for and then introduced the private member's bill that enacted the *Real Property Act 1858* in the Province of South Australia in 1858. This was the first version of the Torrens system enacted in the world. The Torrens system removed the need for a 'chain of title', which traced the title of a piece of land back through time via a series of documents. In its place, the Torrens system introduced a

'title by registration' system, making the appearance of title on the Torrens register determinative. With almost no exceptions, this system works to hide the land's unregistered history, including Indigenous histories, making these histories disappear from legal view. Listen to this podcast with Sarah Kennan for a more detailed discussion about the Torrens system of land title registration: <https://cityroadpod.org/2017/12/04/land-and-cities/>.

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