Visions of Extraction: Maps, Law and the Ocean

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'…this is my
earth
she's the colour of
blak
my blood is both the ocean
and the tree
it can be whipped into anger
or move like tranquillity
clay is my words
the stone my friend
the sea my market
and trees my weapon
this is my earth.' (Moreton 2004)

1 Introduction

As I sit at my computer and open Australia's 2004 submission to the Commission on the Limits of the Continental Shelf ('the Commission'), I am immediately struck by the extensive use of maps. There are 21 bathymetric maps in total provided by Australia as

evidence of the physical location of the outer limits of the continental shelf.[2]

In 2004, Australia was the third country to make a submission to the Commission, following Russia and Brazil. Australia's application sought to extend the continental shelf beyond 200 nautical miles in nine oceanic areas: the Argo region, the Great Australian Bight, the Kerguelen Plateau, Lord Howe Rise, Macquarie Ridge, Naturaliste Plateau, the South Tasman Rise and the Wallaby and Exmouth Plateaus (Commission on the Limits of the Continental Shelf 2012).

Under article 77 of the *United Nations Convention on the Law of the Sea*, coastal states, such as Australia, have exclusive rights to explore and exploit natural resources on the seabed and subsoil of their continental shelf (*United Nations Convention on the Law of the Sea* 1982). Coastal states may also submit to the Commission to have the limit of the continental shelf extended up to a limit of 350 nautical miles.[3] For Australia, with one of the largest coastlines, extending the continental shelf would incorporate vast areas of the seabed that were previously beyond national jurisdiction into Commonwealth jurisdiction. An extended continental shelf provides states with a larger possible area for offshore exploration, mining and petroleum extraction.

Scrolling my cursor over the PDF images on the screen, my gaze lingers on the last map which depicts a large marine area off the coast of Western Australia. According to its title, the map shows 'the outer limit of the continental shelf of Australia in the Wallaby and Exmouth Plateaus' (Commonwealth of Australia 2004).[4] On this map, the seabed is depicted as a multicoloured space with colours ranging from orange, yellow, green and blue. The areas coloured in orange represent where the seabed is closer to the surface of the water, while dark blue patches represent where the seabed is more than 6 kilometres underwater. Looking at this, and the other maps used to support Australia's submission to the Commission on the Limits of the Continental Shelf, I wonder about the relationship between mapping, law and extractive practices. Specifically, I wonder: how do maps operate as an instrument of law to authorise extractive practices?

To answer this question, this article will consist of two parts. The first section examines two maps made two centuries apart, *Insulae Moluccae* and *Nuove Scoperte.* Through a close reading of these maps, I examine how cartography was used as a tool of colonialism. *Insulae Moluccae* was commissioned by the Dutch East India Company in 1594. Almost 200 years later, *Nuove Scoperte* was published to advertise James Cook's invasion and so-called discovery of the land referred to as Terra Australis. Both maps visually represent the ocean as little more than an empty space. This strategic abstraction of the ocean laid the conceptual ground for colonial law to enter, and with the colonisation of what would become known as Australia, legitimised the violent theft of Indigenous land and resources. The second section focuses on the use of bathymetry in negotiations for the United Nations Convention on the Law of the Sea and in Australia's 2014 submission to extend the continental shelf. Examining these two uses of bathymetry reveals similarities with the early colonial maps *Insulae Moluccae* and *Nuove Scoperte.* Despite differences in representation, early colonial cartography and contemporary bathymetry mapping were similarly deployed to assert colonial law, and in turn authorise relations of extraction.

2 Mapping Empire: The Fiction of an Empty Sea in the So-Called 'Spice Islands'

Legal theory has long acknowledged that maps play a key role in asserting colonial law (Ford 1999, Dorsett and McVeigh 2012, Miles 2018, Layard 2021). Scholars such as Richard Ford have identified the central role of mapping in representing territorial jurisdiction. According to Ford, the representation of boundary lines on maps 'made the production of precisely demarcated legal territories possible' (Ford 1999: 845). This identification of maps as a technology of law is echoed by Shaunnagh Dorsett and Shaun McVeigh in their writing on jurisdiction. According to Dorsett and McVeigh, maps give form to law by visually representing jurisdiction (2012: 54). In delimiting the space of law, mapping 'configures lawful relations' (Dorsett and

McVeigh 2012: 58). In other words, mapping does not only represent jurisdiction, it also 'engages the ways people, places and events become subjects to lawful relations' (Dorsett and McVeigh 2012: 65).

It is this power of maps to both represent jurisdiction and order people and places that resulted in cartography becoming a central tool of European colonisation (Edney 2018b, 2018a, Ford 1999, Layard 2021, Winichakul 1997). Thongchai Winichakul, writing on the influence of colonial maps in the creation of Siam, observes that modern cartography 'was the only geographical language the West would hear and only a modern map could make an argument' (Winichakul 1997: 121). Specifically, for Winichakul, it was the invention of the Mercator projection which shifted how European powers saw and then governed the non-European world. Dividing the world into grids of longitude and latitude, the Mercator projection framed the world as 'full of bank squares waiting to be filled in' (Winichakul 1997: 114). The visual representation of the non-European world as empty supported colonial expansion by imagining the world outside of Europe as empty and therefore open for European laws and people to enter.

One example of the use of maps to assert European jurisdiction is *Insulae Moluccae* [Figure 1] (Plancius 1617). Known also as the Spice Map, *Insulae Moluccae* was first published in 1594 and reprinted in 1617 (King 2016). Made by Dutch cartographer and founding member of the Dutch East India Company, Petrus Plancius, the map represents Dutch maritime trade routes across the Indian Ocean and specifically the Molucca Sea (Miles 2018). Corresponding with the Mercator projection, rhumb lines crisscross the map to indicate direct shipping routes for Dutch vessels to navigate to the islands of Borneo, Seram, New Guinea, Java and the Banda archipelago. These Dutch trade routes appear to cross a blank sea. In contrast to the vibrant depictions of island coastlines and spices, the sea is left uncoloured. The ocean is the literal backdrop upon which large ships sail over the Indian Ocean. Alongside Dutch ships, mythical sea monsters emerge from the deep sea. The inclusion of sea monsters was commonplace in colonial cartography during this period and represents the anxieties and fears

of the Dutch mariners travelling over unfamiliar waters (Miles 2018). Yet, despite these fantastical fears, in the world view represented on *Insulae Moluccae,* the ocean is for the Dutch.

Figure 1: Insulae Moluccae by Petrus Plancius

By the early 17th century, the Dutch emerged as a maritime power and sought to challenge Portuguese control of the so-called East Indies spice trade. As Ileana Porras details, Dutch trading companies 'had become significant players (and therefore competitors) in the business of trade, plunder, and settlement in both the new world and the East Indies' (Porras 2014: 652).

In 1609, fifteen years after *Insulae Moluccae* was first published, Dutch jurist Hugo Grotius anonymously published *Mare Liberum* (Porras 2014). Grotius's *Mare Liberum* challenged Spanish and Portuguese assertion of jurisdiction under the *Treaty of Tordesillas.*

Signed in 1494, the *Treaty of Tordesillas* claimed to split the world into Spanish and Portuguese hemispheres granting Spain and Portugal 'full and free power, authority and jurisdiction' over their respective hemispheres (Schnakenbourg 2020). Under the *Treaty of Tordesillas*, all but lands with a 'Christian king' were imagined as open to colonisation. *Mare Liberum* sought to provide a universal law of nations (*jus gentium*), and in doing so asserted Dutch jurisdiction over the Indian Ocean (Porras 2014: 652–53).[5]

This assertion of Dutch jurisdiction set the legal foundation to legitimise Dutch commercial interests. Underpinning this assertion, as Porras identifies, was a belief in 'a natural right to engage in commerce' (Porras 2014: 659). Grotius' focus on commerce is unsurprising given that *Mare Liberum* was commissioned by the Dutch East India Company. The company had asked Grotius to justify the Dutch seizure of the Portuguese-flagged Santa Catarina in the Molucca Sea (Porras 2014, Mawani 2018). As Martine Van Ittersum details, Grotius challenged Portuguese control over the ocean by arguing that the Portuguese could not own the whole ocean (Van Ittersum 2006). Grotius argued that as the ocean was 'unmeasurable and infinite… [t]he Pope could not give away what had never been his' (Van Ittersum 2006: 328). However, while *Mare Liberum* argued that the sea could not be owned, the ocean could still be 'subject to control and to the jurisdiction of imperial powers' (Benton 2009: 34). Grotius' argument in *Mare Liberum* proved effective and led to the vast expansion of Dutch power across the Indian ocean.

The natural right to commerce argued in *Mare Liberum* was predicated on a view of the environment as commodifiable. In her account of the law of nations, the precursor to modern international law, Porras writes that jurists such as Grotius *were not focused on the natural world per se*.

> Only when it could be imagined as serving to fulfil the needs of Europeans did the natural world become visible, and then only as property. Thus, while nature-as-such was absent in the law of nations, reduced to property, the material world became visible in the form of nature-as-commodity, ready to enter the stream of commerce. In this

> way, the early authors of the law of nations participated in the production of a world-view, which subsequently became dominant, of a material world whose value depended on the potentiality of ownership (Porras 2014: 647).

Looking at *Insulae Moluccae* from my computer more than 400 years after it was first published, this map clearly accords with the imagining of nature-as-commodity under *Mare Liberum*. *Insulae Moluccae* visually represents this world view in vibrant detail. While the ocean is an empty undefined space on the map, the coastlines of the islands are highlighted in bright yellow, green and pink. The colours used to define the coastlines match the colours used to depict sandalwood, nutmeg and cloves which appear oversized at the bottom right of the map. Visually linking the coastlines to the spices found on the islands, *Insulae Moluccae* clearly communicates the map's purpose: to assert Dutch jurisdiction over the Indian Ocean region and advertise the region as open to European investors eager to exploit its valuable resources (Miles 2018: 250).[6]

A English Invasion and the Violence of the Map

The Dutch were not alone in weaponising mapping. Alongside the Dutch, the English used maps to assert jurisdiction over the Indian and Pacific Oceans to access so-called frontiers. One frontier was 'Terra Australis.' As early as 1606, surveying and mapping were undertaken by Dutch and British so-called 'explorers' seeking to reach the land referred to by Europeans as Terra Australis or the Southern Land (Moreton-Robinson 2015, 33). Terra Australis can be seen on *Insulae Moluccae.*

On the bottom left side of the map, there is a small landmass with a yellow coastline titled 'Beach' [Figure 2]. According to Robert King, Beach was the name given to the northernmost point of Terra Australis and was first represented in an earlier map by Plancius. This early map was based on information from Marco Polo's book *Travels,* which referred to a kingdom where gold was 'so plentiful that no none who did not see it could believe it' (King 2016: 46). In later editions of Polo's book, the kingdom was changed from Locach to Boeach meaning 'very great and rich' (King 2016: 46).

Figure 2: Excerpt of Insulae Moluccae by Petrus Plancius

This preoccupation with discovering Terra Australis continued into the 18th century when James Cook, Captain of the British ship the Endeavour, was tasked with secret instructions to document Terra Australis as part of his navigation across the Pacific Ocean. The 1776 map titled *Nuove scoperte fatte nel 1765, 67 e 69 nel Mare del Sud 1776* (*Nuove Scoperte*) by Italian cartographer Antonio Zatta [Figure 3] documents Cook's navigation over the Pacific and Southern oceans (Zatta 1776). Unlike the map produced by Plancius, this map was not intended to aid in any navigation but rather was created solely to advertise Cook's so-called exploration throughout the Pacific and along the east coast of the continent of Terra Australis (Barr 2016, Dorsett and McVeigh 2002, King 2016, Moreton-Robinson 2015).

Figure 3: Nuove Scoperte or New discoveries made in 1765, 67, 69 in the South Sea by Antonio Zatta

On *Nuove Scoperte,* red lines zigzag across the map. The lines indicate the passage taken by Cook on the Endeavour. Additional green lines are included on the map marking the routes taken by fellow British naval officers and so-called explorers Philip Carteret, John Byron and Samuel Wallis. In a similar style to *Insulae Moluccae*, the ocean is colourless – the same colour as the paper on which the map was printed. However, on *Nuove Scoperte* there are no sea monsters. There are only the routes of English colonisers that move over gridded lines of longitude and latitude. According to the visual representation of *Nuove Scoperte,* the ocean is under the control and jurisdiction of the English.

This representation of the ocean as the jurisdiction of the English supported English invasion and theft. Taking up a large portion of the

bottom right of the map, a red and green-coloured drawing depicts plants and seeds at an unidentified location. Next to the botanical illustrations, an exaggerated depiction of Cook's ship is drawn. This vignette is bordered by Cook's route line, emphasised in a matching red colour. Looking at this illustration on *Nuove Scoperte*, I think about the work of Kwakwaka'wakw scholar Sarah Hunt/ Tłaliłila'ogwa. Writing about settler colonialism, Hunt/Tłaliłila'ogwa identifies how the colonial concept of the frontier relies on representations of Indigenous lands 'as empty, unoccupied wilderness with rich resources freely available for the taking' (Hunt/Tłaliłila'ogwa 2021: 214). For Aileen Moreton-Robinson, a Goenpul woman of the Quandamooka people, in the context of the colonisation of Australia, maps strategically supported the fiction of *terra nullius* and legitimised the 'taking control and ownership of the environments [the English] encountered' (Moreton-Robinson 2015: 35).

On 22 August 1770, the continent of Terra Australis was illegally taken by the English. Cook claimed possession over the whole east coast naming it New South Wales (Dorsett and McVeigh 2002, Keenan 2020, Moreton-Robinson 2015, Watson 2015). This proclamation of English possession occurred without Cook physically travelling across the vast and diverse continent (Dorsett and McVeigh 2002, Barr 2016). Rather, this proclamation occurred on the island of Bedanug, Thunadha and Bedhan Lag Tuidin (named egregiously by Cook as Possession Island). Furthermore, this declaration of possession did not occur on empty lands but on the unceded lands of the Kaurareg, Gudang Yadhaykenu and Ankamuthi clan groups (National Museum Australia, n.d.). Under the law of nations, Cook had three options available to him: acquisition, cession or settlement (Barr 2016, Ford 2010, Keenan 2020). Cook decided to lie and reported that the lands on which he had claimed for the English were empty (Ford 2010, Keenan 2020). This is despite, or maybe because of, Cook's awareness of Aboriginal clans and nations that stretched the east coast of the continent. This included the Kamegal and Gwegal clans whose Country Cook had previously trespassed upon when he arrived at what would be renamed 'Botany Bay' on April 28, 1770.[7] As Moreton-Robinson details, the Gwegal

had made it clear that they did not want Cook and his entourage to enter their Country:

> [T]wo Gwegal warriors…threw spears at them while shouting in their language Warra Warra Wai, meaning "go away." Cook's crew retaliated by firing muskets and wounding one of the Gwegal warriors. The warriors retreated, leaving their spears and shields behind on the ground. This encounter was never interpreted as an act of Indigenous sovereignty by Cook as he made his way up the eastern coast of Australia. Instead, he rescripted us as living in a state of nature with no knowledge of, or possession of, proprietary rights (Moreton-Robinson 2015: 35–36).

On 26 January 1788, Captain Arthur Phillip established the first British settlement in the colony of New South Wales on the lands of the Gadigal, Gwegal and Bidjigal peoples (Barr 2016). Due to the genocidal frontier violence perpetuated by Phillip and his entourage, more than half of the population of Cadigal, Gwedal and Bidjigal peoples were murdered or killed through the introduction of smallpox. Yet *Nuove Scoperte* does not represent this violent reality. *Nuove Scoperte* rather represents a colonial fiction depicting the continent as empty of Indigenous people and their laws. In the words of Aboriginal scholar Tony Birch, colonial records such as *Nuove Scoperte* are intended to entrench 'the erasure, amnesia and history of terra nullius' (Birch 2023: 20).

This section examined two maps, *Insulae Moluccae* commissioned by the Dutch East India Company in 1594 and *Nuove Scoperte* published by the English in 1776. Both maps visually represented the ocean as little more than an empty space over which European powers crisscrossed. This strategic abstraction of the ocean laid the conceptual ground for colonial law to enter, and with the colonisation of what would become known as Australia, legitimised the violent theft of Indigenous land. The next section focuses on the use of bathymetry in negotiations for the United Nations Convention on the Law of the Sea and in Australia's 2014 submission to extend the continental shelf. Examining these two uses of bathymetry reveals similarities with the early colonial

maps *Insulae Moluccae* and *Nuove Scoperte*: while the representation of the ocean on early colonial maps legitimised the brutal and unlawful invasion of Aboriginal land, the use of bathymetric mapping in the twenty first century shifted the colonial gaze from the horizon to the ocean's depths, imagining the seabed as the next frontier for mining and petroleum extraction.

3 Moving from the surface to the seabed

By the late 19th century, the seabed was no longer seen merely as the submerged space over which trade routes passed. Instead, it began to be viewed increasingly as a space for extractive practices in its own right (Ranganathan 2019: 574). This shift was informed by technological developments. The emergence of drilling technologies enabled large quantities of petroleum to be extracted from the seabed for the first time. In 1896, the first offshore drilling point was established off the coast of California (Jones 2022: 58).

Alongside technologies for accessing offshore resources, technologies for representing the seabed were also developing rapidly during this period. As Ram Prakash Anand details:

> [T]remendous developments in marine technology revealed a new world under the sea with a 'landscape' not much different from land. It had valleys and mountain ranges, sea-mounts and deep sea trenches, and a continental margin (shelf and slope) extending from land to the abysmal depths (Anand 1982: 215).

In the 1920s, the United States commenced geodesic surveys of underwater canyons off the east coast of the United States. By 1933, the director of the Scripps Institution of Oceanography, Thomas Wayland Vaughan, emphasised the key role of mapping when he said that 'information about the seafloor was "virtually useless" until put on charts' (Doel, Levin, and Marker 2006: 607). However, the most significant developments in bathymetry were led by the work of American geologist and oceanographic cartographer, Marie Tharp.8

In 1957, Tharp and her research partner Bruce Heezen produced a

bathymetric map of the Atlantic (Doel, Levin, and Marker 2006, Lambach 2022). Tharp and Heezen's map identified ocean ridges, canyons and mountains and was produced by single-beam and multi-beam sonar fitted directly under the research vessel. In 1977, Tharp and Heezen published the first comprehensive map of the world's seabed [Figure 4][9] (Berann, Tharp, and Heezen 1977). Unlike *Insulae Moluccae* and *Nuove Scoperte*, which depicted the ocean as a blank colourless space, the vast Pacific, Atlantic and Indian Oceans are represented in vibrant detail. On Tharp and Heezen's *Map of the World's Seabed,* continental ridges are represented by thick dark purple marks which seem to rise up from the map. According to Stephen Hall, the ocean in Tharp and Heezen's map appears 'as if someone had pulled the plug on a globe-size bathtub, draining all the water from the world's oceans and revealing hidden features of the earth's surface' (*The New York Times* December 31 2006). This way of seeing the seabed would support the developing international law of the sea under the *United Nations Convention on the Law of the Sea*.

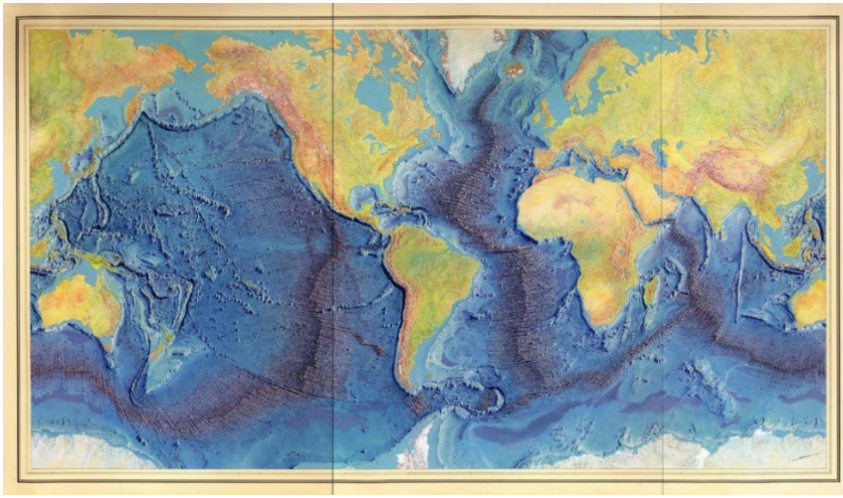

Figure 4: Manuscript painting of Tharp and Heezen's Map of the World's Seabed 1977

A Negotiations on the Limits of the Continental Shelf

The *United Nations Convention on the Law of the Sea* (UNCLOS) was negotiated over three conferences held between 1958 and 1982. One of the aims of the conferences was to develop regimes to govern the seabed both within and beyond national jurisdiction (Oxman 2006). It is beyond the scope of this paper to closely examine the negotiation process during the development of UNCLOS. Rather, I wish to pay attention to two key moments when bathymetry enters the negotiations: the first is the mention of ocean mapping during an address at the UN General Assembly by the Permanent Representative to Malta, Arvid Pardo. The second is the use of bathymetric maps during negotiations to develop the regime for the continental shelf. Attending to these two moments helps to see how bathymetry supported the development of an international legal regime primarily concerned with securing coastal states' rights to explore and extract natural resources from the seabed and its subsoil.

Arvid Pardo's speech at the UN General Assembly is one of the most cited events in the negotiations for UNCLOS. On 1 November 1967, Pardo, the Permanent Representative to Malta, addressed the United Nations General Assembly. Pardo urged member states to consider how to govern the seabed, subsoil, and their resources outside of national jurisdiction (Ranganathan 2019). Interestingly for this paper, Pardo's speech detailed how the seabed, both within and beyond national jurisdiction, was an emerging space for mining and petroleum extraction. Pardo's understanding of the economic potential of the seabed was informed by new cartographic representations provided through bathymetry.

Although seabed mining, particularly of tin, diamonds and phosphorite, had increased since the second world war (United Nations 1967), Pardo stressed that there remained vast untapped resources under the seabed. In the United States alone, Pardo estimated that petroleum reserves could provide more than 100 billion barrels a year and even higher quantities of gas were within continental shelves globally. Despite the abundant resources on and underneath the

seabed, according to Pardo, the material reality of the ocean presented a barrier to access:

> The dark oceans were the womb of life: from the protecting oceans life emerged. We still bear in our bodies – in our blood, in the salty bitterness of our tears – the marks of this remote past. Retracing the past, man, the present dominator of the emerged earth, is now returning to ocean depths. His penetration of the deep could mark the beginning of the end for man, and indeed for life as we know it on this earth (United Nations 1967: 2).

However, for Pardo, this barrier to accessing the riches located on the seabed could be overcome by ocean mapping technology. According to Pardo:

> [o]cean floor photography and deep submergence vessels with near-bottom capability now enable us to acquire an ever-increasing store of knowledge about the seabed and the abyss, although we must remember that vast areas still remain to be mapped (United Nations 1967, 2).

Pardo's speech detailed the seabed as the next frontier of extraction and ocean mapping held the promise of overcoming the physical limitations of the ocean, enabling access to resources on and beneath the seabed. As with Cook's claim of jurisdiction over so-called Terra Australis, mapping enabled jurisdiction to attach to land without ever having to go there. Before the seabed could be grabbed under international law, it needed to emerge through the technology of bathymetry.

Almost 11 years after Pardo's speech, bathymetric maps formally entered the UNCLOS negotiations to support the development of the continental shelf regime (United Nations 1976). During the third and final conference, it was agreed that large scale bathymetric maps of the Atlantic, Pacific, Indian and Arctic oceans would be produced to help guide delegates.[10] Australian delegate, Keith Brennan, was a supporter of the use of bathymetric maps and argued that bathymetric maps would be necessary to inform future negotiations on the formula for determining the outer limit of the continental shelf. During a plenary meeting, Brennan stated that '[i]f the map…was not ready in good

time for the consideration of article 76 [on the continental shelf] at the resumed session, its absence might delay the negotiations (United Nations 1976).

Under UNCLOS the seabed is divided into national jurisdiction (continental shelf) and international jurisdiction (the Area). According to article 76, coastal states have the sovereign right to explore and exploit natural resources on the seabed and subsoil on the continental shelf extending out to 200 nm. The continental shelf is assumed to exist regardless of whether a coastal state has a geological continental shelf that extends to that distance or not (Ranganathan 2019: 585). The assumed existence of the continental shelf under the 'distance criteria' was first introduced in 1958 at the International Law Commission and was supported by 'interested actors' such as the US and the National Petroleum Council (Ranganathan 2019: 582). The enclosure of vast areas of the seabed within national jurisdiction under the continental shelf regime is an example, according to Surabhi Ranganathan, of law's grabbing of the seabed (Ranganathan 2019: 596). For Ranganthan, this 'ocean floor grab', which has its origin with the unilateral claim to the continental shelf by US President Truman in 1945, had two desired effects: firstly, it juridically separated the seabed from the water and secondly, it configured 'the ocean floor into a series of extraction sites' (Ranganathan 2019: 578). In the case of negotiation for the continental shelf regime, the conquering gaze of bathymetry moved to the seabed and an extractive legal imaginary followed.

If we return to Australia's submission to the Commission on the Limits of the Continental Shelf, we can see this legal imaginary continue, once again supported by bathymetric maps.

B Australia's Application to Extend the Limits of the Continental Shelf

I click again on my browser tab to view Australia's 2004 submission to the Commission on the Limits of the Continental Shelf ('the Commission'). Australia was the third country to make a submission to extend the continental shelf with the Commission.[11] Australia sought the extension of the continental shelf in nine regions: the Argo,

the Great Australian Bight, the Kerguelen Plateau, Lord Howe Rise, Macquarie Ridge, the Naturaliste Plateau, the South Tasman Rise and the Wallaby and Exmouth Plateaus (Commission on the Limits of the Continental Shelf 2012). Bathymetric maps, produced through sonar technology, were provided as key evidence of the limits of continental shelf beyond 200 nm in the nine regions (Commission on the Limits of the Continental Shelf 2012).

On the pages of the 2004 submission, the seabed is represented in vivid detail with lines marking the existing and proposed limits of the continental shelf. A faint lime green line loosely following the shape of the western shoulder of the continent indicates the then current limit of the continental shelf, 200 nautical miles from the coast. Starting from a similar point at the bottom of the map, a pink line juts out to extend further seaward. This line depicts the proposed extension of the continental margin. In this representation, the seabed is enclosed within national jurisdiction and ready to grab.

The area within the pink line of national juridiction includes the Wallaby and Exmouth Plateaus. Since 1977, the Wallaby Plateau has been earmarked as a region with vast petroleum resources (Symonds and Cameron 1977). The Carnarvon Basin, within which the Exmouth plateau is located, has been a site of vast oil and gas extraction. Since 1953, 754 exploration wells have been drilled in the Carnarvon Basin producing more than 145 gigalitres of oil and 52 gigalitres of condensate gas (Geoscience Australia 2023).

In a press release from the then Howard Government following Australia's submission to the Commission, the reasons to extend the limit of the continental shelf were clearly stated. According to the government, it was in 'Australia's interest to gain legal certainty on the outer limits of these areas, which [would] give Australia exclusive rights to explore, exploit and conserve the natural resources of the relevant seabed areas' (*Associated Press* 16 November 2004). In the case of the Wallaby and Exmouth Plateaus, as with all the areas indicated in Australia's submission, an extended continental shelf provided the Commonwealth government with increased access to

natural resources on, and beneath, the seabed. On 9 April 2008, the Commission on the Limits of the Continental Shelf provided their recommendations (Commission on the Limits of the Continental Shelf 2012). The Commission held that Australia's continental shelf extended beyond 200 nm in all nine regions (Commission on the Limits of the Continental Shelf 2012). Following the Commission's recommendations, Woodside, BHP and other oil companies began operating in the Exmouth Plateau and 'discovered significant oil columns' (Loro et al. 2015).

The representation of the seabed in bathymetric maps, supported by the continental shelf regime, imagines the seabed as 'socio-culturally, economically and ecologically disembodied' (Ranganathan 2019: 577). That is, as Ranganthan observes, an imagining of the seabed 'as remote, insulated and lacking local constituencies or pre-existing systems of meaning and practice' (Ranganathan 2019: 577). We can see this in bathymetric maps, such as Tharpe and Heezen's map, which informed the bathymetric maps used in the UNCLOS negotiations and Australia's submission to the Commission. On such bathymetric maps, the ocean is represented as a stable topography. It is not a fluid moving space. Furthermore, this legal imaginary of the seabed fails to reflect that the seabed is intrinsically connected 'to the way of life of the state's various coastal communities' (Ranganathan 2019: 578). This is especially true for First Nations communities. Goernpil and Bundjulung poet Romaine Moreton reminds settlers that despite international law's attempts to legally disembody the seabed, it can never be separated. It will always be connected to the ocean, land and people as part of unceded sovereign Blak Country:

…[T]his is my
earth
she's the colour of
blak
my blood is both the ocean
and the tree
it can be whipped into anger
or move like tranquility
clay is my words
the stone my friend
the sea my market
and trees my weapon
this is my earth (Moreton 2004).

4 Conclusion

In this article, I connected the early colonial maps *Insulae Moluccae* and *Nuove Scoperte* with modern bathymetric maps relied on in the UNCLOS negotiations and Australia's 2014 submission to extend its continental shelf. In doing so I detailed the way in which mapping practices are implicated in colonial ways of seeing, knowing and relating to the ocean. Early colonial maps depicted the ocean as an empty expanse over which maritime routes crisscrossed. This conceptualisation of the ocean sought to legitimise the brutal and unlawful invasion of the continent now known as Australia. By the 20th century, bathymetric maps shifted the colonial gaze from the horizon to the ocean's depths, imagining the seabed as the next frontier for mining and petroleum extraction. Examining both colonial cartography and contemporary bathymetry, this article argued that, despite differences in representation, these mapping practices were similarly deployed to authorise relations of extraction. By critically engaging with the ways maps shape a particular vision of the world, it is my hope that we can begin to challenge and unsettle dominant colonial perspectives, moving toward accountability for the violent consequences of these ways of seeing.

Endnotes

1 Melbourne Law School, University of Melbourne, kijama@student.unimelb.edu.au. I wish to sincerely thank the thoughtful and constructive feedback from the two anonymous reviewers and the academic friendship and support of Julia Dehm, Kathleen Birrell and Martin Clark. I would also like to extend my thanks to my supervisors Shaun McVeigh and Cait Storr.

2 In this paper, I use the term maps rather than charts to describe cartographical representations of both land and sea. This follows the language used by Australia in the submission to the Commission on the Limits of the Continental Shelf.

3 See *United Nations Convention on the Law of the Sea* art.76.

4 Due to copyright restrictions, maps used in Australia's submission to the Commission on the Limits of the Continental Shelf unfortunately cannot be reproduced. The map of the Wallaby and Exmouth plateaus within Australia's submission can be accessed here: <https://www.un.org/depts/los/clcs_new/submissions_files/aus04/Documents/aus_doc_es_web_delivery.pdf>.

5 Mare Liberum was originally a chapter in Grotius' unpublished *Commentary on the Law of Prize and Booty* (See Grotius 1605).

6 The full title in the cartouche at the top right of the map further emphasizes the Indian Ocean region as a space for resource extraction. In English, it reads: 'The Moluccas Islands are renowned for the vast quantities of spices sent from there to the entire world' (State Library of New South Wales nd).

7 As Gemma Pol (Wiradyuri, Ngemba and Paakaniji) writes: 'Country is a term used by First Nations peoples to refer to the lands, waters and skies to which they are connected through ancestral ties and family origins…. Country is a word that holds many different meanings for First Nations people, especially given the diversity of First Nations across the continent. But there are certain concepts and ideas about Country that many First Nations people share. For instance: Country is alive. Country is timeless. And Country is us.⁋ Country is a proper noun, which is why it is usually capitalised. We often refer to Country in the same way we would a person. For example, Country is sick. Listen to Country. Country needs time to heal' (Common Ground 2021).

8 Bathymetric maps represent the underwater topography of the seafloor and are produced by sonar technology. The time it takes for the sound to travel down to the seafloor and return to a transducer is used to calculate the depth of the water. These measurements are then used to create a depth profile which is then represented on a bathymetric map.

9 This map has been reproduced under Creative Commons Licencing. The Manuscript painting of Tharp and Heezen's Map of the World's Seabed 1977 was created by Heinrich Berann and can be accessed at https://commons.wikimedia.org/wiki/File:(Manuscript_painting_of_Heezen-Tharp_World_ocean_floor_map_by_Berann)_2.jpg

10 The bathymetric map was first requested by the Bulgarian delegation at the 103rd plenary meeting. See A/CONF.62/SR.106 and A/CONF.62/C.2/L.99.

11 The Commission on the Limits on the Continental Shelf is one of three commissions established from the LOSC and is comprised of 21 members who are experts in the areas of geology, geophysics, and hydrography. The Commission has two main functions. The first is to decide on a coastal State's application for an extension of their continental shelf up to 350 nautical miles. Decisions made by the Commission are provided in the form of recommendations that are binding in their nature. The second is to provide scientific and technical advice to coastal States in their application. These two roles, as decision maker on the one hand and advisor on the other demonstrate, as Suzette Suarez observes, a 'blurring of the legal and the scientific in the context of the Commission' (Suarez 2010: 132).

12 The baseline is the low water mark from where maritime boundaries are measured under Article 5 of LOSC.

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