

## From 'stones and bones' to Songlines and Dreamings

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### Introduction

Let's start by flying over a sparkling blue ocean in Northern Australia. To fly across it as a tourist, the sea appears deserted, a tropical paradise with white sandy beaches. A fisherman would think clean, green, pristine waters, perfect for a fishing lodge. A geologist may point to the wide rivers, wasted water flowing through empty lands into a featureless ocean, dropping silt across the untapped potential of the rich seam of manganese deep below the sea. This is how colonial settlers saw the lands and seas of Australia, of New Zealand, of the Americas, as *terra nullius*, uninhabited lands, and *mare nullius*, uninhabited seas. The colonisers brought with them concepts of the 'law of the seas' or *mare liberum* (freedom of navigation) and Enlightenment mindsets that regarded the land and seas as blank slates to be discovered, tamed and civilised (Salmond 2017; Sharp 2002).

For Aboriginal people, the land and seas are not empty spaces but full landscapes (Howitt & Jackson 2000), sentient beings that pulse with the spirits of the ancestor beings who created them and the lore of the elders. The seas contain navigational markers, family group boundaries and natural resources that provide sustenance and traditional economies such as fishing. People's knowledge of these seas is captured in "Songlines", which may be invisible and incomprehensible to an outsider but which are the heart, soul and law that binds Aboriginal people to their ancestors, their kin, their country and the plants and animals that have sustained survival for thousands of years (Bradley 2007; Burarrwanga 2013; Sharp 2002).

So how does impact assessment incorporate concepts that may be invisible to a Western, perhaps culturally blind, scientific eye? Based on a literature review for the Northern Territory (NT) Government (Munday 2017), this paper draws on a case study of proposed seabed mining to show how different worldviews may collide when it comes to exploiting resources in seas criss-crossed by Songlines.

### Why cultural impact assessment?

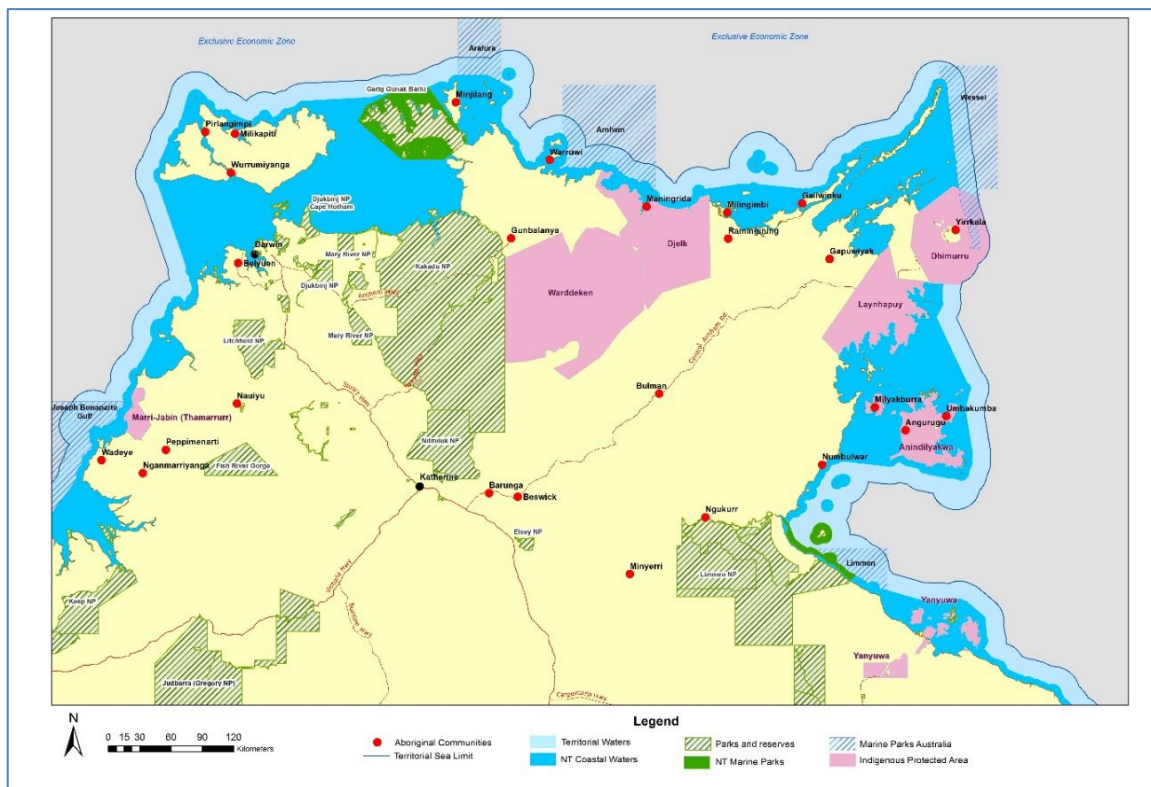
Although impacts on culture are included in the IAIA Principles and Guidelines (Vanclay 2003; Vanclay et al. 2015) for Social Impact Assessment, it is rare to find meaningful analysis of the impacts of projects on the cultural values of Aboriginal peoples. A literature review suggests cultural impacts are more likely to be considered outside regulatory assessment processes - such as the 1977 Berger inquiry into the proposed Mackenzie Valley Pipeline in Canada, the Stewart Inquiry into the Kakadu Conservation Zone (1991) – or commissioned by Aboriginal organisations to supplement regulatory studies.

Consideration of culture may be subsumed into social impact assessment or the 'stones and bones' or 'footprint fetish' (Gibson et al 2008) of archaeological heritage studies, leading to gaps in understanding the intangible impacts of projects and 'recognising how different cultural groups define, use, value and construct meaning in the same cultural space in different ways' (Howitt & Jackson 2000, p.269).

This paper defines culture as ‘a way of life, a system of knowledge, beliefs, values and behaviours passed down to each generation’ (Mackenzie Valley Environmental Impact Review Board (MVEIRB) 2009, p.6). Cultural impacts may affect norms, values and beliefs including traditional knowledge, commonly held values such as respect for elders, oral history, spiritual practices, language, physical heritage resources, traditional dances and songs, place names, spiritual sites, traditional land use and inter-generational relationship patterns (MVEIRB 2009).

### Seabed mining case study

The Northern Territory of Australia’s vast coastal and marine areas (Fig. 1) rich in natural resources that support a range of regional and local economies and livelihoods. About 85 per cent - or 6050



kilometres - of the coastline is covered by the *Aboriginal Land Rights Act 1976* (Northern Land Council, nd). The Anindilyakwa Archipelago in the Gulf of Carpentaria to the east, includes Groote Eylandt and is home to 14 clans. BHP began exploring for manganese in 1962. In 1964, after being granted a special mining lease in return for royalty payments, BHP began mining on the island. The first application for seabed mining in the Territory was lodged by Groote Resources to extract manganese from shallow waters off Groote Eylandt. In 2012, the Northern and Anindilyakwa Land Councils (NLC and ALC) formed an alliance opposing any mining with significant cultural, environmental and social impacts on Aboriginal people. Anindilyakwa people prepared a map of their to help explain the complexity of their ties to the land and sea. In March 2012, the NT Government imposed a moratorium on exploration and mining in coastal waters until 2015 (now extended to 2021).

Fig 1: Map of the Northern Territory's coastline. Copyright Northern Territory Government, (Munday 2017)

Seabed mining challenged regulators partly because Indigenous ontology lacks the clear distinction between persons and things that underpin western notions of property (Altman & Kerins 2012) and

because the concept of 'sea rights' is still novel. While there was reference to sea rights in the 1992 Mabo native title decision, the 1998 Federal Court judgment in the Croker Island Seas case (*The Commonwealth v Yarmirr; Yarmirr v Northern Territory 2001*) was the first entirely sea claim to come before an Australian court (Sharp 2002). Justice Olney determined that native title existed in relation to the sea and seabed but that these rights were non-exclusive. In 2008, the High Court of Australia (*Northern Territory of Australia v Arnhem Land Aboriginal Land Trust*) found that water lying over Aboriginal land should be treated no differently to the land itself. Essentially, it found that tidal areas were private land, that this overrode the common law right to fish and outsiders, including recreational fishermen, must seek permission from Aboriginal Land Trusts to enter.

Seabed mining is relatively new for Australia, driven in part by a growing demand for mineral resources (Boughen et al. 2010), and has mainly covered sand and shell sand extraction (NT Environment Protection Authority 2012). Internationally, there has been controversy surrounding applications in Papua New Guinea and the Pacific Islands. In Namibia, where offshore diamond mining is well-established, an application for phosphate mining was refused over fears of impacts on fishing grounds (Benkenstein 2014). New Zealand's Environmental Protection Authority (NZEPA) has considered applications for oil and gas and seabed exploration and mining in the country's Exclusive Economic Zone. Two of three seabed mining applications have been refused (one was later approved but remains subject to appeal) on the grounds of uncertainty, impacts on benthic habitats and cultural impacts, including on Maori traditional fishing activities (NZEPA 2017).

### **Cultural impacts of mining**

Social impact assessment traditionally covers the costs and benefits of projects, how an influx of workers and mining activity can disrupt a community's social fabric, wellbeing and social infrastructure and the implications for people of biophysical impacts. When it comes to cultural impacts, there are additional considerations. As noted by Lewis and Scambary (2016), a key sociocultural impact of mining is 'the collision of interest' where ore bodies tend to coincide with places of cultural significance to Aboriginal people. Features of the landscape are often instantiations of the bodies, bodily essences or 'shades' of creative ancestors, who moved through the landscape, giving it form and meaning, preparing it for human habitation and imparting and depositing their spiritual essence into the landscape. Moral codes for kinship, marriage, law and order and other social behaviour are maintained and reproduced through myth, song and ceremony, which are in turn embedded in the landscape and sacred sites. As Lewis and Scambary (2016) note, damage to sacred sites may be akin to ripping out a page in an inherited book, never able to be shown to grandchildren.

One of the few detailed studies of the cultural impacts of mining in Northern Australia was commissioned for the Kakadu Conservation Zone Inquiry (Stewart 1991), including the Coronation Hill mine site. The proposed gold, palladium and platinum mine was an increasingly contested project. A central issue was fears by Jawoyn elders that disturbing *bula* - regarded as the most dangerous being in Jawoyn cosmology - through earthmoving or explosives would result in global catastrophe. The concept of 'sickness' country' suggested the influence of a *bula* site extended for several kilometres so disturbance at one site would trigger a reaction at others. The inquiry found that Aboriginal cultural values should be respected. Despite the mining company spending \$13 million on exploration over six years, providing jobs for many Jawoyn people and arguing that the proposed mine was a 'valuable

resource for the nation', the project was overturned by Prime Minister Hawke in 1991 and the site incorporated into Kakadu National Park (Munday 2017).

The study highlighted conflicting values within Aboriginal communities. Some Jawoyn families wanted to access market economies in the shape of jobs, cash and consumer goods. Others placed a higher priority on culture, kinship and connectedness to country, a reminder of the divisions that can be provoked between and within communities faced with decisions over economic development. There may be intergenerational conflict, with new norms and values absorbed through education, modern technology and socialisation with outsiders or conflict based on a raft of complex cultural and historical factors. There may be intrapersonal conflict from trying to reconcile discrepant values and live between 'two worlds' (Lane et al. 2003).

Impacts of mining that might be covered by a cultural impact assessment, as outlined by Gibson et al. (2008) include fewer opportunities for traditional hunting, camping, foraging, bushfoods and bush medicine gathering; reduced opportunities to pass on knowledge; anxiety by custodians with responsibility for the care of country, fear of being blamed; dilution of cultural leadership, strength of culture; time in the workplace reducing ceremonial activities, language use and family time; and feelings of loss of control or reduced self-esteem.

### **Cultural impacts of seabed mining**

Similar to mining on land, seabed mining may destroy sense of place and disrupt traditional economies, destroy turtle feeding grounds, pollute waters and lock people out of hunting areas (Taylor 2016). For the people of Australia's northern coasts and islands, ancestral creator beings from the sea shaped their landscapes, law and culture. The sea and islands are full of signs of the past and continued presence of these ancestral beings. Some are visually impressive while others may have no visible markers. Some may extend hundreds of kilometres, connecting people who do not share bloodlines (Bradley 2007). So how does a geologist consider the impacts of seismic tests or putting an exploration drill through an invisible songline? Or even begin to understand the emotional distress such disturbance may cause?

A culturally sensitive response to understanding these issues would incorporate Aboriginal-controlled studies. It would require multiple evidence-based approaches that incorporate Aboriginal protocols about how knowledge is produced and shared so findings build bridges to understanding (Austin et al. 2017). It would be premised on Aboriginal people providing free, prior and informed consent. Respectful cultural impact assessment may incorporate ethnographic approaches premised on time-intensive immersion (Satterfield et al. 2013) to determine how resource extraction and industrialisation of the land and seascape might be experienced by Aboriginal peoples and impact on community wellbeing and the resilience or vulnerability of communities to impacts. Such studies would contribute to culturally-sensitive decision-making, incorporate diverse knowledge systems and capture a plurality of opinions and complexity of kinship obligations that extend to living in harmony with the land and all its creatures.

### **Conclusion**

Cultural impacts may be intangible, but that makes them no less profound. It is suggested that assessment of cultural impacts requires specialised community-controlled studies to support self-

determination as outlined in the 2017 Aashukan Declaration (IAIA 2017). This will give status to intangible spiritual impacts and ensure risk is considered from the perspective of Aboriginal peoples. A project such as seabed mining may be a novel industrial experience or it may be incorporated into the development aspirations of communities. Privileging diverse knowledge systems will help affected peoples make this determination. Giving status to cultural impact assessment will require cultural awareness by proponents; a greater mandate, skills and resources for regulatory institutions, policies and systems; and greater self-determination by Aboriginal peoples. It is time for dedicated cultural impact assessments to become mainstream.

### Bibliography

- Altman, J. & Kerins, S., 2012. *People on Country: Vital landscapes, Indigenous futures*. 1st ed. Sydney: The Federation Press.
- Austin, B. et al., 2017. *Mobilising Indigenous knowledge for the collaborative management of Kimberley Saltwater Country*, Broome: Kimberley Indigenous Water Science Project Working Group, Western Australian Marine Science Institute (WAMSI).
- Boughen, N. et al., 2010. *Seafloor Exploration and Mining in Australia: Stakeholder Reactions, Expectations and Desired Level of Engagement*, Sydney: CSIRO.
- Bradley, J., 2007. *Barni-Wardimantha Awara Yanyuwa Sea Country Plan*, Borroloola: Mabunji Aboriginal Resource Association.
- Burarrwanga, L., 2013. *Welcome to my country*. 1st ed. Sydney: Allen and Unwin.
- Gibson, G., O'Faircheallaigh, C. & MacDonald, A., 2008. *Integrating Cultural Impact Assessment into Development Planning*, Yellowknife: MacKenzie Valley Environmental Impact Review Board.
- Howitt, R. & Jackson, S., 2000. Social Impact Assessment and Linear Projects. In: L. Goldman, ed. *Social Impact Analysis: an Applied Anthropology Manual*. Oxford: Berg, pp. 257-294.
- International Association for Impact Assessment, 2017. *The Aashukan Declaration*. [Online]. Available at: <https://aashukan.com/2017/11/03/the-aashukan-declaration/> [Accessed 4 March 2018].
- Lane, M., Ross, H., Dale, A. & Rickson, R., 2003. Sacred Land, Mineral Wealth, and Biodiversity at Coronation Hill, Northern Australia: Indigenous Knowledge and SIA. *Impact Assessment and Project Appraisal*, 21(2), pp. 89-98.
- Lewis, G. & Scambary, B., 2016. Sacred bodies and ore bodies: Conflicting commodification of landscape by Indigenous peoples and miners and Australia's Northern Territory. In: P. McGrath, ed. *Right to Protect Sites: Indigenous heritage Management in the Era of Native Title*. Canberra: AIATSIS Research Publications, pp. 221-252.
- Mackenzie Valley Review Board, 2009. *Status Report and Information Circular Development Cultural Impact Assessment Guidelines*. [Online] Available at: [www.reviewboard.ca/upload/ref\\_library/may\\_2009\\_cultural\\_impact\\_assessment\\_guidelines\\_status\\_report\\_1242859917.pdf](http://www.reviewboard.ca/upload/ref_library/may_2009_cultural_impact_assessment_guidelines_status_report_1242859917.pdf) [Accessed 13 July 2017].
- Munday, J., 2017. *The social and cultural impacts of seabed mining: Report to the Department of Environment and Natural Resources*, Darwin: unpublished.
- New Zealand Environmental Protection Authority Exclusive Economic Zone, 2017. *About the Exclusive Economic Zone and Continental Shelf*. [Online]. Available at: [http://www.epa.govt.nz/EEZ/about\\_eez/Pages/default.aspx](http://www.epa.govt.nz/EEZ/about_eez/Pages/default.aspx). [Accessed 15 July 2017].
- Northern Land Council, nd. *Sea Country Rights*. [Online]. Available at: <https://www.nlc.org.au/our-land-sea/sea-country-rights> [Accessed 20 May 2017].
- Northern Territory Environment Protection Authority, 2012. *Interim Report: Seabed Mining in the Northern Territory*, Darwin: NTEPA.
- Roche, C. & Bice, S., 2012. *Anticipating Social and Community Impacts of Deep Sea Mining*, Melbourne: Mineral Policy Institute.
- Salmond, A., 2017. *Tears of Rangī*. 1st ed. Auckland: Auckland University Press.
- Satterfield, T. et al., 2013. Culture, intangibles and metrics in environmental management. *Journal of Environmental Management*, Volume 117, pp. 103-114.
- Sharp, N., 2002. *Saltwater people: The waves of memory*. 1st ed. Sydney: Allen & Unwin.

Stewart, D., 1991. *Kakadu Conservation Zone Inquiry*, Canberra: Resource Assessment Commission, Commonwealth of Australia.

Taylor, S., 2016. *Anindilyakwa Indigenous Protected Area Plan of Management*, Alyangula: Anindilyakwa Land Council.

Vanclay, F., 2003. International Principles for Social Impact Assessment. *Impact Assessment and Project Appraisal*, 21(1), pp. 5-12.

Vanclay, F., Esteves, A., Aucamp, I. & Franks, D., 2015. *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*, s.l.: International Association for Impact Assessment.