Indigenous Engagement: Towards a Culturally Sensitive Approach for Inclusive Economic Development

K. N. Penna, E. J. Hoffman, T. R. Carter

Abstract—This paper suggests that cultural landscape management plans in an Indigenous context are more effective if designed by taking into consideration context-related social and cultural aspects, adopting people-centred and cultural-based approaches for instance. In relation to working in Indigenous and mining contexts, we draw upon and contribute to international policies on human rights that promote the development of management plans that are co-designed through genuine engagement processes. We suggest that the production of management plans that are built upon culturally relevant frameworks leads to more inclusive economic development, a greater sense of trust, and shared managerial responsibilities. In this paper, three issues related to Indigenous engagement and cultural landscape management plans will be addressed: (1) the need for effective communication channels between proponents and Traditional Owners (Australian original Aboriginal peoples who inhabited specific regions), (2) the use of a culturally sensitive approach to engage local representatives in the decisionmaking processes, and (3) how design of new management plans can help in establishing shared management.

Keywords—Culture-Centred Approach, Holons' Hierarchy, Inclusive Economic Development, Indigenous Engagement.

I. INTRODUCTION

THE Pilbara is a large, dry and lowly populated region in the north of Western Australia. The region is known for its Indigenous peoples and their enduring connection to land and culture, its rich cultural heritage, unique biodiversity, and its substantive mineral resources, particularly iron ore. The Pilbara region generates more than half of the value from West Australia's annual resource production. Ongoing development to sustain and grow production from the region is key to the economic prosperity of Western Australia. However, resource extraction and development in the region have historically failed and remain challenged in achieving balance between land development impacts and preservation of its cultural landscape assets. Similarly, the aspirations of commercial operators and communities to achieve shared benefit from developments have failed to be truly realised.

Rio Tinto are one of the world's leading producers and exporters of iron ore. In the Pilbara region of Western Australia, Rio Tinto own an integrated portfolio of iron ore assets: an integrated network of 16 mines, four independent port

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terminals, a 1,700-kilometre rail network and related infrastructure [17] designed to allow the company to respond rapidly to changes in market demand for iron ore. Rio Tinto continually invests in its operations in the Pilbara, to deliver greater efficiency, lower production costs and improved health, safety, community and environmental performance and sustain and grow its production to meet market demand.

In 2020, following the tragic destruction of culturally significant rock shelters in Jukkan Gorge, and the deep impact of this on the Puutu Kunti Kurrama and Pinikura people, other Traditional Owners of the lands on which Rio Tinto operates, Indigenous Peoples and its own employees and other stakeholders in Australia and beyond, Rio Tinto was forced to confront legacy and underlying issues of the way it had approached its economic developments and Indigenous engagements. Following this incident, Rio Tinto committed to listening, learning, showing greater care, and taking new approaches designed collaboratively with Indigenous Peoples to manage and protect cultural heritage and social values in is mine developments and operations for the shared benefit of all. This change requires theoretical, methodological and practical shift in the way the company approaches Indigenous engagements. A case study highlighting how this change is occurring at Rio Tinto is presented here.

II. METHODOLOGY: SETTING THE STUDY

A. Social Ethnography

This study applied a social ethnographic approach as a qualitative methodology, used to emphasise the importance of understanding the meanings of human behaviour and the social-cultural context of social interaction. Social ethnographies promote the development of empathetic understanding based on subjective experience, where the main purpose of the study is understanding the connections between personal perceptions and the focus group behaviour. This approach is helpful for understanding social relations and cultural practices through critical analysis [1]. Gaining knowledge from the context and understanding phenomena through the meanings local people ascribe to them, is an essential feature of high-quality consultations.

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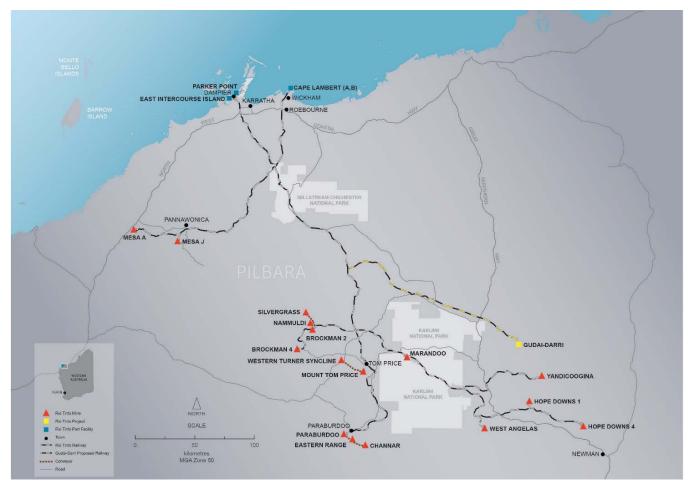


Fig. 1 Map of Western Australia and the Pilbara Region [4]

Field techniques such as participant observation, in-depth conversations, field notes, and case studies were applied to portray the local Indigenous world as understood by themselves, trying to avoid Westerner pre-conceived social frameworks of thinking. The chosen approach demanded a high level of cultural sensibility to deal with the multidisciplinary aspects of local people and their contexts [3].

B. Ethnographic Methods

The aim was to use ethnographic methods to conduct a relevant, meaningful, understandable, useful, reliable, and believable consultation, which led to a thick description of the context. Thick descriptions are comprehensive, holistic portrayals of the social and cultural dimensions of the context [2]. They provide a level of detail that allows readers to draw informed conclusions and compare one context to others. The ethnographic methods used in the study were:

Semi-structured interviews: They are conversations with a purpose, helpful for understanding and putting into a larger context the interpersonal, social and cultural aspect of the environment [2]. Semi-structured interviews are guided by a set of basic questions and issues to be explored. With Indigenous people in Pilbara, the open-ended informal conversations consisted of direct references from people concerning their experiences, opinions, feelings, and

knowledge.

- Participant Observation: The data from this type of observation emerge in the field from direct contact with the focus group, and encompass detailed descriptions of day-to-day activities, participants' behaviours, and the full range of human interactions that can be part of their social experiences [3]. Observational data portray the big picture of the context, providing depth and detailed data. Also, for skilled observers, the observations enable reading of nonverbal messages, and what cannot be said in interviews.
- Life Histories: this method relies on gathering life experiences from the focus group participants. By generatively listening local people stories, the researcher can understand particular aspects of the context, understanding cultural insiders' perspectives [4].
- Problem-oriented ethnography: this is a focused ethnographic approach directed to specific question [5].
 For the case of Pilbara Indigenous peoples, the focus was the effects of the mining project on local social surroundings.
- Ethnology (cross-cultural comparison): this is a technique employed by cultural anthropologists in order to understand the similarities and differences among cultures [6]. This rich comparison was helpful to better understand

the processes of adaptation of the local culture in facing the cultural landscape changes.

III. THEORETICAL FRAMEWORK

A. Culture-Based Approach

This study was conducted within the framework recommended by the Policy Guidance of Heritage and Sustainable Development Goals [7]. This guidance states that human-rights based and culture-based approaches are essential for effective cultural heritage management, where respecting every people's cultural identity and freedom is fundamental to facilitate intercultural dialogue, foster participatory governance and political inclusion.

The human-rights based approach recognises the importance of Indigenous knowledge and practices in preserving biodiversity and ensuring the protection, rehabilitation and sustainable use of the land. This approach supports and encourages the active involvement of Indigenous peoples in environmental negotiations for exercising their right to sovereignty and to free, prior and informed consent [7].

The culture-based approach understands cultural heritage values (aesthetic, environmental, social, cultural and economic) as inseparable, entangled and interrelated. For this reason, a cultural landscape constitutes a living heritage where culture, nature and communities connect in a physical and spiritual way [8]. This interrelationship is usually ignored, neglected or misunderstood by the predominant Western perspective, which tends to separate the cultural and natural domains [9].

B. Cultural Sensitivity and Cultural Awareness

Although most document analysis conducted for this study approach the concepts of Cultural Awareness and Cultural Sensitivity as being the same, it is important to clarify the different practical applications between these two concepts.

Cultural awareness is understanding the differences that exist between different cultures. This involves cultural diversity recognition, respect and potentially social or technical involvement in actions that can nurture the unique cultural identity of a people.

Cultural Sensitivity is the use of this consciousness in effective communication with members of another cultural group. This involves trust and credibility building, a certain level of intimacy to establish strong, long-lasting relationships, interpersonal skills to understand and safely meet others' needs, expectations and inherent rights [10]. It means working from the cultural perspective of the other person, not from your own.

Becoming culturally aware of the social and cultural differences that exist between cultures is not sufficient to reach a full understanding of a given people and its context. It also means being prepared to guard against imposing your own behaviours, beliefs and actions as the norm for developing plans, policies and projects accepting.

IV. CONTEXTUAL BACKGROUND

The mining development project to which this new engagement approach is being applied has been in feasibility study since late 2019, with the change in engagement approach introduced in late 2020. The potential ore from the project's development would expand operations to sustain production from an existing mining operations hub for the next 15 to 20 years as ore from the other mine in the hub are depleted. The project is currently designed as mining areas along a range and a crusher and conveyor to transport the ore to the existing mine processing plant and rail infrastructure.

The project represents an important part of the future of Rio Tinto's production profile through sustaining annual output from the mining hub into the company's regional production. Additionally, the project development would also sustain the viability of a proximate regional town primarily operated by the company through maintaining the existing residential workforce levels in the town.

V. FORMER ENGAGEMENT STRATEGY

Rio Tinto's former engagement strategy in the Pilbara was underpinned by methods built from archaeological processualism and ethnoarchaeology approaches and the associated compliance framework defined in West Australian heritage law. The approach had several underlying issues but core to these was that it overlooked or ignored the social-cultural context of the development resulting in a development approach that focused solely on protection or mitigation of individual objects or places based on a scientific concept of these places value.

No consideration was given to non-place bound aspects of socio-cultural values in land management or development. This engagement strategy has underpinned the last few decades of Rio Tinto Iron Ores Indigenous Engagement in the Pilbara with only minor modification or devices from this approach during this time. During this time, company culture placed much emphasis on business performance and not enough focus on our relationships with the Indigenous communities on whose lands we operate. The new approach came at the expense of recognizing the gaps in this approach to meet the aspirations of the regions indigenous peoples, communities, and our business to achieve mutually beneficial and economically inclusive development.

As a company, Rio Tinto has made commitments to its people, Traditional Owners and the general public to partner on developing best practice approaches for Indigenous Engagement. Authority has been given to its people to rebuild its approaches and ensure Indigenous voices are heard right across our organisation.

VI. TRANSFORMING CONVENTIONAL MANAGEMENT IN A COLLABORATIVE PROCESS

A. The Conventional Management System

By analysing the outcomes reported in documents and existing assessments in Western Australia, both private and public, the current conventional design for cultural heritage management doês not seem to guarantee the effective involvement of traditional communities an active part in a shared management system. Firstly, the majority neglects the

fact that social, cultural and environmental policies are designed for addressing human needs, and thus should adopt a broader approach in order to cover multidimensional societal aspects. Second, in existing instruments and plans, traditional communities and their cultural traditions and knowledge are a part of, not the centre of, policies. In addition, the conventional management perspective generally develops from the global to the local, not vice-versa, where attending to inhabitants' demands comes after economic and political matters. This means that often context-related sociocultural factors are not, or are only partially, considered.

In general, although Indigenous people are heard, it is notable that not all professionals are ready to talk to or interview Traditional Owners in the field. Many professionals are not prepared to fully understand peoples' needs given the lack of a culturally sensitive approach for engagement. This creates a communication barrier between those professionals and the Indigenous people. This is problematic as these professionals are responsible to report peoples' needs to the industry or government. As consequence, the holistic picture that would emerge from the engagement effort during field surveys and assessments can be compromised.

Along with norms and decontextualised public policies, there are real-life examples emerging from new, effective practices and approaches in addressing socio-environmental pressures. New management designs have been proven to be highly effective in proper preserving local people's values. These designs adopt a holistic, integrated approach to the preservation of the cultural landscape values and consider the spiritual connection between traditional people and their land [14]. Usually, shared management is a key factor to achieving successful common initiatives.

B. Shared Management

Globally, finding ways to develop better social and cultural heritage management structures has been a top priority on the agenda of institutions, planners and professionals. In that sense, shared management [11] has emerged as a useful managerial approach used to guide the engagement and discussions between Indigenous people and Rio Tinto representatives about mining projects.

Focusing on reaching inclusive economic development, Rio Tinto has initiated with Traditional Owners a process of designing a shared management plan for identification, assessment, and mitigation of impacts caused by the mining projects on local cultural landscape values. Inclusive economic development is a development that favours a people-centred economy, making macroeconomic growth and equity compatible, as measured in terms of employment, income, and welfare.

First outcomes from engagement consultation using a culturally sensitive approach have shown the amplification of social participation and integration of local representatives' in participatory governance. The strengthening of participatory channels and engagement forums from the second semester of 2021 was notable, incorporated increasing local social actors in debates and decision-making processes in a more effective and

productive way than in the past years. Difficult discussions and negotiations resulted from this process, which is expected when different interests have to be reconciled to reach one single common goal in a complex context. However, the respectful, safe, open, flexible negotiation environment created, led to collaborative, rather than adversarial, behaviour among Traditional Owners. This is an ongoing process of coconstructing a new system to manage the mining impacts on the landscape. The creation of this new fruitful negotiation channel has been essential to reach a joint management design that is economically socially sustainable. inclusive. environmentally responsible. That is the fundamental base of successful shared management.

C.A Different Way to Understand Hierarchy: The Holons Relationship

The complexity of social systems requires non-linear design methods to absorb and comprehend the subjective, immaterial aspects of the cultural landscape values. The expanding concept of heritage and the increased importance of how heritage places relate to their surroundings mark an important shift in thinking how heritage places have to be managed. For cultural landscape management, mining development activities cannot be isolated from social changes that will be occurring on the local society dynamic. For this reason, the "social denomination" has been added to cultural heritage management plans worldwide, to allow a wider scope of heritage perspectives, leading to include many more players or stakeholders being involved in its management. Within this context, the projects' approval process for the Pilbara region requires the development of a comprehensive social and environment impact assessment named Social Surroundings - ruled by the Environmental Protection Authority (EPA) in Western Australia. According to the Environmental Protection Act (Subsection 3.2), "the social surroundings of man are his aesthetic, cultural, economic and social surroundings to the extent that those surroundings directly affect or are affected by his physical or biological surroundings" [12].

The approval process also requires the development of a Social and Cultural Heritage Management Plan - SCHMP, a tool presenting an assessment of the potential impact of the proposed mining activity on the cultural landscape values. This plan includes a mitigation strategy to manage, safeguard, monitor, assess, improve and promote the local natural and cultural values. For Indigenous territories, it is important that this plan outlines measures to be taken before, during and after a project development activity to manage and protect Aboriginal cultural heritage in the activity area [13]. Inclusive economic development — including a healthy relationship between local people and project developers, and capacity build to improve participatory governance - is the core goal of the SCHMP.

For reaching an effective integral management system of cultural landscapes in Pilbara, Rio Tinto's heritage and community and social performance teams are developing an integrated managerial system connecting the local SCHMPs - designed for each specific project and its respective landscape -

with a regional Cultural Heritage Management Plan - CHMP. For reaching an effective integral management system of cultural landscapes in Pilbara, Rio Tinto's heritage and community and social performance teams are developing an integrated managerial system aiming at connecting local SCHMPs - designed for each specific project and its respective landscape - with a regional CHMP. The CHMP provides the framework for a broader, holistic, shared management to be done in agreement with Indigenous People, ensuring an inclusive, coordinated approach, aligned with the local legal framework, to local SCHMP.

The holons' hierarchy was adopted for designing the interrelationship between an CHMP and a proposed SCHMP. According to Koestler [14], holons are self-reliant, independent entities that can be considered a self-complete whole, an autonomous unit. At the same time, holons can be viewed—within a hierarchic structure for example—as dependent of other whole, as a subsystem within a larger system. In this context, a holon can be simultaneously an evolving, self-organised, dissipative structure while also a part of a greater system composed of other holon(s).

The SCHMP has the Social Surroundings as its internal independent holon. The Social Surroundings work as a dissipative form that interacts dynamically with the SCHMP. A dissipative system is an open system which is operating out of, and often far from, equilibrium in an environment with which

it exchanges information. Dissipative systems stand in contrast to conservative systems as they may be affected by the whole system context [15]. The dissipative system is a concept applied in general in mathematics and physics, that was adapted in this case to the social field. The subjective nature of Social Surroundings led to an innovative design of its structure, where its canonical form was transformed into an open system – an inverted circle.

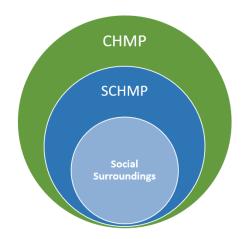


Fig. 2 CHMP and SCHMP Holonic Hierarchy [18]

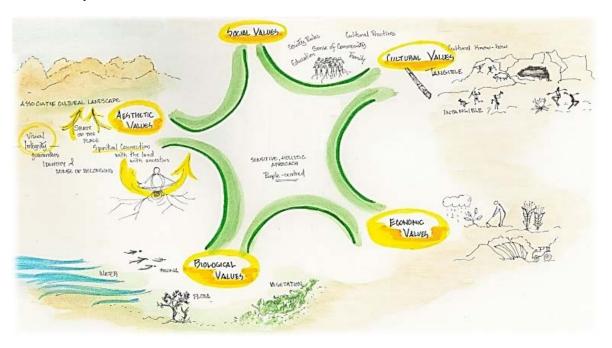


Fig. 3 Transformed form of the conventional holon structure: inverted circle [18]

The sketched map shown in Fig. 3 was used during the engagement workshops with Yinhawangka people to assist in understanding and identifying cultural landscape values of their country.

As a dissipative holon, the Social Surroundings can have a strong relationship with the larger whole system (CHMP-SCHMP) to a point that, when the SCHMP's point of focus moves, the whole hierarchical structure moves as well, providing the clear perception of how the three holons can interact in a co-dependent way to each other [16]. This property ensures that even as autonomous holons, each one can provide context for the proper functionality for the larger whole.

VII. FINAL NOTE

This is an ongoing study leading to a SCHMP system design and implementation based on comprehensive and credible information. This whole management system aims to be open, interactive, dynamic, holistic and should contain detailed descriptions of all project stages; analysis of major processes as well as participatory actions and monitoring based on constant engagement with the Traditional Owners.

VIII. CONCLUSION

The Pilbara landscape is a common Australian heritage and as such its landscape conservation encompasses a broad range of values including cultural heritage places, flora and fauna, visual integrity, natural habitats, water catchments and the spiritual significance of material and immaterial values like yinda (water) to local people. Therefore, it is important that environmental protection and cultural heritage preservation tools such as the SCHMP and CHMP, are produced in a joint effort between local native title holders, industry and the public sector - generating agreements, protocols and interconnected actions, based on a shared management system. It is moving beyond speeches and remediative actions of conservation towards healing and caring about the country.

The development and implementation of plans and policies under new management designs would be a breakthrough for the implementation of the purposes of manifestos, charters and local and international discussions published around the world. The most important point is not to do the same things better, but to do different things for different situations. Each social scenario, even if adopting the same management design, requires a specific local approach that can take into consideration context-related factors generating impacts on a certain development envelope.

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REFERENCES

- P. C. Taylor and M. Medina, "Educational Research Paradigms: From Positivism to Pluralism". College Research Journal, 1(1), 1-16 (Philippines: Assumption College of Nabunturan, 2011).
- [2] D. A. Erlandson, Edward L. Harris, Barbara L. Skipper, and Steven D. Allen, "Doing Naturalistic Inquiry: A Guide to Methods", Newbury Park, CA: Sage, 1993.
- [3] F. J. Riemer, "Ethnography Research", in Qualitative Research: An Introduction to Methods and Designs, ed. Stephen D. Lapan, Marylinn T. Quartaroli, and Francis Riemer, San Francisco, CA: Jossey-Bass, 2008.

- [4] N. Bonvillain, "Cultural Anthropology", 2nd edition. Upper Saddle River, NJ: Prentice Hall, 2010
- [5] Bonvillain, Nancy. 2010. "Cultural Anthropology"
- [6] G. Welz, "Ethnology", International Encyclopedia of the Social & Behavioral Sciences, pp 4862-4865, 2001, https://doi.org/10.1016/B0-08-043076-7/00861-5
- [7] S. Labadi, F. Giliberto, I. Rosetti, L. Shetabi, and E. Yildirim, "Heritage and the Sustainable Development Goals: Policy Guidance for Heritage and Development Actors". 2021, Paris: ICOMOS.
- [8] United Nations, "United Nations Declaration on Indigenous Rights" 2013
- United Nations Educational Scientific and Cultural Organisation UNESCO, "Convention for the Protection and Promotion of the Diversity of Cultural", 2005
- [10] N. Rice and W. O'Donohue, "Cultural Sensitivity: A Critical Examination", New Ideas in Psychology, V 20 (1), pp 35-48, 2002, https://doi.org/10.1016/S0732-118X(01)00011-3
- [11] UNESCO, International Centre for the Study of the Preservation and Restoration of Cultural Property - ICCROM, International Council on Monuments and Sites - ICOMOS, and International Union for Conservation of Nature - IUCN. 2013. Managing cultural world heritage. UNESCO: Paris. Retrieved from http://whc.unesco.org/uploads/activities/documents/activity-703-1.pdf.
- [12] Environmental Protect Act WA 1986
- [13] Government of Victoria (2021) Cultural heritage management plan for the purposes of the Aboriginal Heritage Act 2006. Retrieved from https://www.aboriginalvictoria.vic.gov.au/cultural-heritagemanagement-plans
- [14] A. Koestler, "The Ghost in the Machine", 1967
- [15] E. Marks, 2003, "A Brief Story of the Concept of Holons", Integral World
- [16] V. Černý and J. Hrušák, "Non-linear observer design method based on dissipation normal form" Kybernetika, Vol. 41, 2005, No. 1, Pp. 59-74, Persistent URL: http://dml.cz/dmlcz/135639
- [17] Rio Tinto website, Pilbara (riotinto.com)
- [18] Drawings by Karla Penna (2021)

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