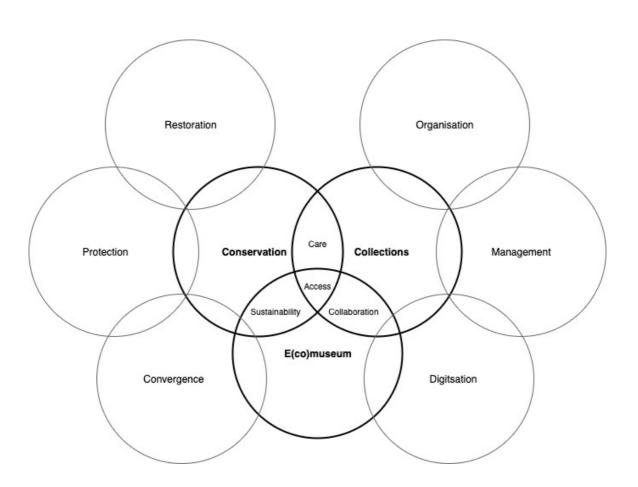
October 2022 300440778

Collections, Conservation and (E)co-museums

A concept research report for the

Waikato-Tainui and Kiingitanga Whare Taonga



Contents

Executive Summary	3
Introduction	3
Data	6
Collection	6
Analysis	7
Collections	8
Management	8
Organisation	8
Conservation;	10
Protection	10
Restoration	10
(E)co-museum	12
Sustainable Convergence	12
Sustainable Digitisation	12
Conclusions and Recommendations	14
References	16

Executive Summary

This research report examines current thinking, writing and conversations surrounding aspects of modern museology, and intends to inform Waikato-Tainui iwi and the Kiingitanga on their whare taonga in Hopuhopu which is currently in the process of being realised. Following on from previous research and conversations with Glenda Taituha and Charles Willison; this research report Collections, Conservation and E(co)museums will focus primarily on access to taonga, mātauranga; the management and organisation of collections, the restoration and protection of conservation methods, and sustainability through ecomuseums. I have chosen these three areas due to the request of Waikato-Tainui and developed sub themes through reflexive data analysis; each of which are interrelated and interconnected as displayed in the diagram. ² While I am using English words for this diagram and concept, I recognise that each of these concepts and kupu exist both similarly and differently within te ao Māori. This diagram is not intended to be static nor stasis and is simply a way of visualising and expressing my findings from the data with 'caution, depth and subtle realism' within this broader project.³ The literature used for data analysis is highly specific to each area of focus. Interview participants were chosen on the basis of experience and expertise. I spoke with three museum professionals; Awhina Tamarapa, Nirmala Balram and Sian Smith. Interviews were conversational, guided by open-ended questions, the transcripts of which will be included in the document shared with Waikato-Tainui. The third section is an analysis of the research process, reflections and a summary of the report. This research has culminated in the concept structure as seen in the diagram above, this represents the main findings and recurring themes throughout the data collected. As this is preliminary research, the primary recommendation is for further research to be undertaken, particularly that of participatory, workshop/wānanga based research. From here, the next recommendations can be instigated, such as participatory conservation, accessible collection management and sustainable collaboration. Access is at the core of the diagram which summarises the key findings and recommendations to conduct further participatory, iwi-led research and for the facility (physical building, software and governance) to be purpose built for ongoing research, collaboration and access to the collection.

¹ Convergence (co-museum), environment (eco) and digitisation (e).

² Jane Elliot, *Using narrative in social research: qualitative and quantitative approaches.* (London: SAGE Publications Ltd, 2005): 159-160.

³ Norman W. H., Blaikie and Jan Priest, *Designing Social Research: The Logic of Anticipation*. 3rd edition. (Cambridge, UK: John Wiley & Sons., 2019): 123-124, 318-320.

Introduction

This research is a continuation of a previous Summer Research Scholarship supervised by Waikato-Tainui and the Kiingitanga and Williams Sale Partnership Limited (WSP). The key aims of this research are to explore both knowledge transmission within museum institutions and more broadly the question 'what could a modern Māori museum look like?. The brief I have been asked to follow requires surveying a range of perspectives and collating these into a concept report, and fits into the 'empowering outcomes model'; one of four 'culturally appropriate' models of research in Aotearoa coined by Graham Smith. ⁴ This model provides a form of reference and accountability for myself, Waikato-Tainui and WSP and observers of this research, in that I am providing information that leaders of this project are interested in. This research is also interpretivist because it is concerned with social research and human understandings of knowledge and of each other. This methodology ensues a broad-based outcome rather than a definitive one. I chose to use qualitative methodology as this is human and narrative-based research and because it allows for a variety of perspectives and not to limit the findings; this included different designs, strategies and modes of analysis. Post-pragmatic approach fits well to the aim as I intend to provide an array of possible options and considerations to the question; what could a modern Māori Museum look like? This research is positivist and not looking for a sole answer. The research design used follows and reinterprets phenomenology or descriptive phenomenology as I am exploring multiple approaches, realities and voices to a 'what' rather than a 'how' question and because there are no clearly defined steps to this Kaupapa.⁵ I've chosen these methods and designs as they align with partnership and emancipatory research and account for and recognise my bias and privilege when working within a Māori space; these are observational in the sense that they are not my findings nor do I own any of this research. This has proven to be beneficial from an ethical point of view and aligns with the partnership and emancipatory model of research within Kaupapa Māori. A disadvantage of all of the methods used is that I am Pākehā, this is unequivocally a hindrance to the overall research and affects both my output and the output of my participants. I used a reactive methods approach to

⁻

⁴ Fiona Cram, "Developing Partnerships in Research: Pakeha Researchers and Māori Research" in *Sites* 35, (1997): 47-48.

⁵ Martin Denscombe, *The Good Research Guide: Research methods for small-scale social research projects.* 7th edition. (London: Open University Press, 2021): 132.

remain transparent about my intentions with participants and this proved to be successful as it centred them in this research. ⁶ The brief being set externally has been useful in guiding my research and process through clear expectations set by the external organisations and lead researcher. I am a co-investigator within a Māori research project, supplying information to a phenomenon that Māori want to explore, thus reflecting the empowering outcomes model.⁷

⁶ Denscombe, *The Good Research Guide*, 208.

⁷ Cram, "Developing Partnerships in Research," 47-48.

Data

Collection

The data collection of literature began in August at the beginning of the semester, this process was slow and was mostly for my personal understanding of the options and to help guide which direction to channel. I began interviews throughout October; informants were provided with information and consent sheets. Participants I spoke with were Awhina Tamarapa, Nirmala Balram, and Smith Smith and were chosen upon my pre-existing relationships with them so not to assume a right to Māori knowledge. Awhina Tamarapa (Ngāti Kahungunu, Ngāti Ruanui, Ngāti Pikiao), has worked for over 25 years as collection manager, concept developer and Māori curator at the Museum of New Zealand Te Papa Tongarewa. She has curated extensive exhibitions on kākahu for Te Papa. Nirmala Balram a highly experienced conservator at Te Papa Tongarewa of Fijian descent and who has brought considerable knowledge, skills and training to her practice since 2004. Her portfolios include conservation of Taonga Māori, Pacific, Sculpture, Natural Environment, New Zealand and International History and arche-zoology collections. Sian Smith (Ngāi Tahu, Ngāti Māmoe, Pākehā) is the Poutaki Taonga Māori Collections Manager at Ngā Taonga and has brought insight and guidance to the development of their Tiakina framework. I reached out to them via email with an information sheet and informed consent sheet attached, and recorded and transcribed our zoom conversations. One challenge I faced was not providing enough information to Sian about the theme of questions and our interview required approval from a manager to go ahead. While these had pre-approved consent from the HEC at Victoria University, I could have provided more information about the information I hoped to gain from Sian to ensure full transparency. In using prompts and probes, my questions were mostly guided by points the interviewee had touched on.⁸ Upon reflection of the previous research report I learnt to tolerate silence and let pauses increase responses so not to interrupt the flow.9

⁻

⁸ Denscombe, *The Good Research Guide*, 236-237.

⁹ Denscombe, 236.

Analysis

My analysis of the data was through digitally recording and transcribing these conversations, I used the A.I. software Descript to transcribe the bulk of the interview and proceeded to go through manually, correcting kupu Māori and errors. Due to analysing each form of data differently; through content, discourse and narrative analysis for literature and reactive methodology for interviews, I found it challenging to interpret information from interviews that did not fit into the initial structure of the report..¹⁰ This reiterated the importance of approaching the research holistically and treating interviews as my primary data. I used mostly unstructured interviews to emphasise and prioritise the thoughts and opinions of the participants; my role in this method was to introduce the topic of the research and let the conversation flow developmentally. 11 I interpreted the raw data (interview transcripts) by quoting excerpts that I saw to be relevant to each area of focus. It is also important that I recognise that conscious and subconscious bias in this processes, the responses by informants to me as Pākehā and as the role of an interviewer, with the knowledge they are being recorded will skew and affect the findings.¹² I will provide full recordings and transcripts with the report I hand over to Waikato-Tainui to allow for multiple perspectives on the raw data to be translated and share the 'control' of my research so to 'maximise the participation and interest of Māori.' To approach the data collected from a social constructivist perspective and through each of the methodologies outlined, better suits my approach and analysis of an illustration of concepts rather than finding the evidential answers to this question.¹⁴

¹¹ Denscombe, 231.

¹² Denscombe, 235.

¹³ Linda Tuhiwai Smith, *Decolonizing Methodologies : Research and Indigenous Peoples*. 3rd ed. (London: Zed Books, 2021); 248.

¹⁴ Denscombe, 243.

Collections

Management

The key findings from the data in regards to collections management was to 'interrogate the archives' – this alludes to provenance research and for descendent communities to be at the forefront of this process. Another was to prioritise user access, stressing the importance of digital literacy and a 'multivocal nature of knowledge; failing to do so would mean it simply reflects a counter-narrative, paralysing the museum's perspective and trapping it within the same colonial epistemology it hopes to escape.' ¹⁵ A useful way to consider how the collection storeroom operates is in keeping with the contemporary shift from a logic to keeping to an ethic of caring. Priya Basil, Dan Hicks and other museum authors have coined and assigned the term 'necrography' to museum collections colonial violence. ¹⁶ It is from this criticism and authorship that innovative approaches to collections management have emerged. Māori collection management accounts for tikanga, kawa, and cultural customary practice to be exercised by kaimahi and Māori museum practitioners on their own terms. Practice and choices made in collection storerooms impact greatly on the lives and deaths of their contents.

Organisation

The documentation of indigenous collections has denied room, space and platforms for interpretation of collections and ¹⁷ Should this Whare Taonga acquire taonga from historically colonial museums such as Te Papa Tongarewa and Auckland Museum, a process of cataloguing taonga and reinterpreting records with little to no provenance will arise. The inclusion of a storage facility at the Hopuhopu Whare Taonga would fundamentally change the scope of resource, time and staff needed. Digital collection management systems (CMS)

⁻

¹⁵ Gibson, "Decolonising South African Museums in a Digital Age" 254.

¹⁶ Hicks, Dan. "Necrography: Death-Writing in the Colonial Museum", *British Art Studies* 19, (2021) https://dx.doi.org/10.17658/issn.2058-5462/issue-19/conversation

¹⁷ Noémie Etienne, "Who cares? Museum conservation between colonial violence and symbolic repair." Museums & Social Issues (2022): 1

have typically been computer generated, devoid of human intervention or comprehension of objects. While CMS is useful for large scale organisation and categorisation, the language and structure of these software is largely based on and encoded within Western methods and processes of knowledge. Awhina Tamapa described the restrictive nature of CMS when caring for and organising taonga Māori as needing an overhaul,

Māori ways of thinking, it just isn't taken into consideration when you're trying to [...] search a museum database, it's all Western – [...]. It's a hard one because Māori needs to really talk about these sorts of things. [...] I think we still need to really think about those sorts of things, kupu, kupu Māori and how we describe them. Maybe the taonga pūoro kaupapa might be the closest to a Māori way thinking and in terms of describing the whakapapa of taonga pūoro in whanau. So that might be something that museums could take on board.' ¹⁹

The absence of kupu Māori restricts accuracy, dialectic variability, accurate, intangible representation of taonga and therefore tino rangatiratanga, indigenous sovereignty, autonomy and control over where taonga.

¹⁸ Bello, Rotimi-Williams and A. S. Mohamed. "Impact of technology on traditional museum collection storage and management." *International Journal of Computer Science and Mobile Computing* 7, no. 1 (2018): 46-51.

¹⁹ Una Dubbelt-Leitch and Awhina Tamarapa. *MHST506 Kōrero with Awhina Tamarapa*. Personal zoom interview. Wellington, September 14, 2022.

Conservation

Protection

There has been an overwhelming increase in and embrace of participatory conservation practice in museums. ²⁰ Conservation has been dominated by Western science in methodology, implementation and value, and has inherently denied the metaphysical qualities of objects, artefacts, ancestral remains and funerary objects, 'conservation can be a form of care or, conversely, violence wielded against the works.' ²¹ In keeping with the rhetoric that museums hold the responsibility to respond to the needs of its time, integrative conservation practice is paramount to the healing of taonga in museum care. ²² Contemporary conservation values remain to be that of safekeeping, research, prevention and protection of collections. Reflecting the concept of *akoranga*; reciprocal teaching and learning – conservation wānanga hold the power to foster a range of possibilities and outcomes that will not be realised until the moment they take place. I asked Nirmala about risk management, she stressed the importance of positive risks, such as lending taonga out to iwi, hapū and whanau,

It's okay. It adds value. It adds value because it's present at that particular event. [...] we have to make sure what are the actual risks - and if when we know the actual risk, then we, we treat the risk, not the taonga. [...] You know, the importance of the connections is much bigger than the loss of two fibres. ²³

Restoration

Minimal intervention is required to limit reintegration and to heal colonial trauma that conservation has caused through interrogation and alteration. ²⁴ This involves a reworking of the definition of conservation, with respect to sustainable and 'ethical imperatives. ²⁵ Each of

²⁰ Oana Florescu, Irina Crina Anca Sandu, Petronela Spiridon-Ursu, and Ion Sandu. "Integrative participatory conservation of museum artefacts. Theoretical and practical aspects." *International Journal of Conservation Science* 11, no. 1 (2020): 109.

²¹ Miriam Clavir, Preserving What Is Valued: Museums, Conservation, and First Nations. (Vancouver: UBC Press, 2002) 27.

²² Ashley-Smith. "The Basis of Conservation Ethics.", 19.

²³ Dubbelt-Leitch and Balram. MHST506 Körero with Nirmala Balram.

²⁴Etienne, "Who cares?" 3.

²⁵ Etienne, "Who cares?" 8.

these aspects of conservation come back to the principle of ethics, whereby the integrity of the object is placed separately as the 'other'. This has changed fundamentally, though conservation practice still inherits this treatment, reporting and interference with objects. Restorative conservation is a way forward. Nirmala Balram discussed minimal intervention being of the best benefit to the object for non-Māori conservators, for Tainui and the Kiingitanga, 'They are the makers. They're the source. They're the source of these objects and sometimes we need to step back and, and talk to them as like they are owning it.' ²⁶ Awhina Tamarapa reiterated conservation as being restrictive when an understanding of the intangible risks is denied; in reference to an example at the Auckland Museum where weavers working on the tuktuku panels in a wharenui, the 'mana of the weavers was trampled on.' ²⁷

²⁶ Una Dubbelt-Leitch and Nirmala Balram. *MHST506 Kōrero with Nirmala Balram*. Personal zoom interview. Wellington, September 27, 2022.

²⁷ Dubbelt-Leitch and Tamarapa. MHST 506 Kōrero with Awhina Tamarapa.

(E)co-museum

Sustainable Convergence

'Eco' here refers to sustainable museum practice, not only environmentally sustainable but socially sustainable.²⁸ Co-museum implies a collaboration, or collective and can also be applied to the concepts of convergence. Examples of successful convergence are the iwi-led projects and the proposed Hopuhopu Development Hub which the Whare Taonga will be a part of. The Ngāti Toa housing project Te Poupou Rautaki, have put a wealth of resources and energy into training apprentices and succession planning for sustainable social development. As a result, we see an example of iwi control over housing from the felling of trees, to the building and designing of houses.²⁹ If this same process of convergence be applied to a whare taonga, rangatahi could be trained with transferable skills, this space could explore developing relationships with the Endowed College, University of Waikato, Waikato Museum, Auckland Museum and kura Kaupapa, marae, wharenui and kainga in the rohe. Each of these institutions hold the capacity for further research and sustainable collaborative ractices, It was in reference to this concept that Awhina Tamarapa explained seeing 'whare taonga as learning space' ³⁰

Well [...] what I'd like to happen is for Māori to just own spaces in, in museums, like say the storeroom, be able to conduct their teaching and in the storeroom and feel comfortable in there and own the space, for front to house and, and having kapa haka performances and just being Māori within those different areas. That's the museum that I think is, is really vibrant and you know, operating the way that it should, according to Te Tiriti. [...] I guess that is the whole idea of mana taonga principle of having living cultures, having a connection and autonomy over their taonga that are in museums. [...] But, essentially I see whare taonga or museums as, as learning places, where there's an exchange of knowledge and knowledge is generated and taonga are kept warm.'

Sustainable Digitisation

The (E) in ecomuseums in this report refers to digital technology and seeks to look further into digital categorisation and classification. Sian Smith discussed initiatives that

²⁸ Additionally, this accounts for barriers created by White-environmentalism that focuses on individual consumerism, and a centering of individual ownership versus collective kaitiakitanga.

²⁹ Te Rūnanga o Toa Rangatira. *Ngāti Toa Housing Strategy*. Wellington N.Z.: Ngāti Toa Iwi, 2021

³⁰ Una Dubbelt-Leitch and Awhina Tamarapa. *MHST 506 Kōrero with Awhina Tamarapa*. Personal zoom interview. Wellington, September 14, 2022.

Network, Mukurtu, the copyright initiative Traditional Knowledge (TK) Labels that is being developed by the Sustainable Heritage network, Ngā Taonga's Mana Tūturu concept and their Tiakina framework and Utaina, mass digital preservation project. Sian described the benefits of these as being sustainable though complex and 'limited by not being designed for the end user,'

so whoever designed those databases aren't seeing iwi Māori as the end user, then that the, the capability to communicate Māori metadata is not necessarily going to be great. I think thinking about it from your perspective and what you know, what your project's trying to achieve. I think having, being that it is a, a whare taonga, an iwi run whare taonga, those challenges might not necessarily be at play in creating their own database. But when engaging with other archival institutions, that's [...] wanting to be able to draw links between taonga and other museums archives. ³¹

Collaborative and digital spaces place community and custodians' control back on collections, prioritise tribal perspectives about access, legitimise cultural protocols, address concerns about digital circulation and acknowledge inherent Māori sovereignty over collections and taonga tuku iho and are about 'putting kaitiaki at the centre of making decisions around how mātauranga is described and, not only that, deciding who, like deciding on appropriate access, who can access it, and when, and why, and how, and that it, all of these labels are developed around. ³²

³¹ Una Dubbelt-Leitch and Sian Smith. *MHST506 Kōrero: with Sian Smith.* Personal zoom interview. Wellington, October 25, 2022.

³² Dubbelt-Leitch and Smith: MHST506 Kōrero.

Conclusions and Recommendations

As a visitor in this space, my position is of suggestion and a facilitator of dialogue, there is a limit to what I can feasibly and appropriately recommend. This report instead promotes a 'shared framework of cultural meanings.'33 All of the data collected has been instrumental in shaping my own research practice; Awhina's investigation into and propagation of akoranga has opened my eyes into the application of mātauranga. Nirmala's expansive experience and insight into the trajectory of conservation practice reaffirmed and inspired prospective constitutional change within museums in time to come. Sian's realisation of the Tiakina framework from Sian serves as a poignant example of te Tiriti based futures. The key conclusions and recommendations are derived from the content from data collected and are an extension and summary of the key themes from that data. This report serves as a working document and is designed for future research and amendments to be made. In order for a museum to accommodate the demands of collections management, care and organisation, it must catalogue its collections in ways that centre the user and the needs of its community. The purpose of the museum informs its practice and vice versa. My sources recommend Waikato-Tainui and the Kiingitanga conduct greater research into how people engage with museums and what barriers there are to accessing digitised and physical collections. Public access facilitates the management of cultural heritage – without the integration of such into practice, museum activities remain stasis, stagnant and in keeping with their colonial legacies. Much of museum practice is inherited by way of tradition and therefore needs to reform. My research flags several issues associated with making information and images available on a separate, museum-based system while ensuring these are locally, culturally and contextually specific to descendent communities, broadening their relevance and making wider recommendations. This project certainly demands further research in this area and for this research to come from Waikato-Tainui and to be rooted within a Kaupapa Māori framework. It is important that this research takes a participatory research approach, workshop and wananga-based discussions and investigations into accessible collection management, participatory conservation practice, and sustainable collaboration. By conducting participatory research, connections are strengthened between

³³ Blaikie and Priest, *Designing Social Research*, 60.

the museum and community so that the community members do not operate as outsiders to the museum. The interviews conducted for this research exist as valuable points of supply for knowledge to be taken forward in the process of developing, creating and imaging a whare taonga that is by, for, within, with, about and embodies Waikato-Tainui and the Kiingitanga. All of the conclusions above reiterate the theme of access lying at the core of my findings.

References

- Ashley-Smith, Jonathan. "The Basis of Conservation Ethics." In Conservation: Principles, Dilemmas and Uncomfortable Truths, edited by A. Richmond, and A. Bracker, 6–24. Oxford: Butterworth-Heinemann. 2009
- Bello, Rotimi-Williams, and A. S. Mohamed. "Impact of technology on traditional museum collection storage and management." *International Journal of Computer Science and Mobile Computing* 7, no. 1 (2018): 46-51.
- Berryman, Mere, SooHoo, Suzanne, and Nevin, Ann, eds. Culturally Responsive Methodologies. Bingley: Emerald Publishing Limited, 2013.
- Blaikie, Norman W. H., and Jan Priest. *Designing Social Research: The Logic of Anticipation*. 3rd edition. Cambridge, UK: John Wiley & Sons., 2019.
- Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams, eds. The Craft of Research: Chicago Guides to Writing, Editing, and Publishing. 3rd Edition. Chicago: University of Chicago Press, 2008.
- Clavir, Miriam. *Preserving What Is Valued: Museums, Conservation, and First Nations*. Vancouver: UBC Press, 2002.
- Cram, Fiona. "Developing Partnerships in Research: Pakeha Researchers and Māori Research" in Sites 35, 1997: 44-63.
- Denscombe, Martin. *The Good Research Guide: Research methods for small-scale social research projects.* 7th edition. London: Open University Press, 2021.
- Dubbelt-Leitch, Una and Awhina Tamarapa: *MHST506 Kōrero with Awhina Tamarapa*. Personal zoom interview. Wellington, September 14, 2022.
- ______, and Nirmala Balram: *MHST506 Kōrero with Nirmala Balram*. Personal zoom interview. Wellington, September 27, 2022.
- , and Sian Smith: *MHST506 Kōrero with Sian Smith*. Personal zoom interview. Wellington, October 25, 2022.
- Elliot, Jane. *Using narrative in social research: qualitative and quantitative approaches.*London: SAGE Publications Ltd, 2005.
- Etienne, Noémie. "Who cares? Museum conservation between colonial violence and symbolic repair." *Museums & Social Issues* (2022): 1-11.

- Florescu, Oana, Irina Crina Anca Sandu, Petronela Spiridon-Ursu, and Ion Sandu.

 "Integrative participatory conservation of museum artefacts. Theoretical and practical aspects." *International Journal of Conservation Science* 11, no. 1 (2020): 109-116.
- Gibson, Laura Kate. "Decolonising South African Museums in a Digital Age: Re-imagining the Iziko Museums' Natal Nguni Catalogue and Collection." PhD diss., King's College London, 2019.
- Hicks, Dan. "Necrography: Death-Writing in the Colonial Museum", *British Art Studies* 19 (2021). https://dx.doi.org/10.17658/issn.2058-5462/issue-19/conversation
- Indrie, Liliana, Dorina Oana, Marin Ilieş, Dorina Camelia Ilieş, Andreea Lincu, Alexandru Ilieş, Ştefan Baias et al. "Indoor air quality of museums and conservation of textiles art works. Case study: Salacea Museum House, Romania." Industria Textila 70, no. 1 (2019): 88-93.
- Lucchi, Elena. "Multidisciplinary risk-based analysis for supporting the decision making process on conservation, energy efficiency, and human comfort in museum buildings." *Journal of Cultural Heritage* 22 (2016): 1079-1089.
- Lucchi, Elena. "Simplified assessment method for environmental and energy quality in museum buildings." *Energy and Buildings* 117 (2016): 216-229.
- Narkiss, Irit. "Decolonising Museum Conservation Practice: A View from the UK." Studies in Conservation (2022): 1-9.
- National Services e Paerangi. Feasibility Studies : He Rauemi Resource Guide. Wellington: Te Papa Tongarewa, 2006.
- Patton, Michael Quinn. Qualitative interviewing. London, Sage Publications, 2002.
- Salas, Megan E. "Reflections on the collaborative conservation of a basket from the Barona Cultural Center & Museum as part of the UCLA/Getty Graduate Program." *Journal of the Institute of Conservation* 45, no. 1 (2022): 69-79.
- Spiridon-Ursu, Petronela. I. Sandu, Conservation of Cultural Heritage: From Participation to Collaboration, *ENCATC Journal of Cultural Management and Policy*, 5(1), 2015, 43-52.
- Spiridon-Ursu, Petronela. Contributions regarding the integrated scientific conservation of the cultural heritage, PhD Thesis, Alexandru Ioan Cuza University of Iasi, 2017.

- Stoner, J.H. "Changing Approaches in Art Conservation: 1925 to the Present, Scientific Examination of Art: Modern Techniques" in *Conservation and Analysis Proceedings of the National Academy of Sciences*, (Sackler NAS Colloquium), 2005, 40-57.
- Te Rūnanga o Toa Rangatira. *Ngāti Toa Housing Strategy*. Wellington N.Z.: Ngāti Toa Iwi, 2021.
- Tolich, Martin. Research Ethics in Aotearoa New Zealand: Concepts, Practice, Critique. Auckland, N.Z. Longman, 2001.
- Tuhiwai Smith, Linda. *Decolonizing Methodologies : Research and Indigenous Peoples*. 3rd ed. London: Zed Books, 2021.
- Walker, Shane, Anaru Eketone and Anita Gibbs. "An exploration of kaupapa Māori research, its principles, processes and applications" *International Journal of Social Research Methodology* 9 (4) 2006: 331-344.