# Digitisation and Mātauranga Māori

### Abstract

In 2007 the New Zealand Electronic Text Centre undertook the digitisation of H. G. Robley's *Moko; or Maori Tattooing* along with associated contextual material. This project prompted much thought and debate within the Centre about the propriety of making such material freely available online and highlighted a number of issues which are likely common to most cultural and heritage organisations looking to undertake the digitisation of Māori-based material.

Throughout periods of colonisation indigenous knowledge has been collected by ethnographers, anthropologists, and others, and much of this has found its way into the collections of libraries and archives. This is true in New Zealand as it is overseas. However, despite the existence of this material and a national digital strategy that promotes the benefits of online access to cultural and heritage material, the numbers of organisations who have digitised representations of Mātauranga Māori are few.

Within the contexts of both international discourse on indigenous knowledge and the NZETC project this paper addresses these issues which fall into the categories of ownership, control, access, and consultation which we also attempt to frame using the corresponding Te Ao Mārama concepts of rangatiratanga and kaitiakitanga, mana and putanga, and kōrerorero whānui. Questions arise in terms of ownership of not just the physical objects themselves but also the knowledge encoded within them, issues of who has the right to control that knowledge and determine who may access it and who may not, as well as discovering who it is appropriate to consult with and how institutions may respond to the results of consultation. We ask whether these issues act as barriers to digitisation of Mātauranga Māori material and consequently whether they provide an explanation for the relative scarcity of these types of projects. Finally we identify opportunities that organisations can gain from undertaking such projects.

**Keywords:** digitisation; mātauranga Māori; indigenous knowledge; culture; heritage.
**Primary Audience:** Managers; heritage librarians.

### Introduction

> *Whāia e koe ki te iti kahurangi, kia tāpapa koe, he maunga tiketike.*

> Follow your treasured aspirations, if you falter,
> let it be because of insurmountable difficulties [Mead & Grove, 2003, p. 422]

Cultural and heritage institutions face a range of complex issues when considering the digitisation of representations of Mātauranga Māori. In this paper we argue that, although challenging, they are not insurmountable.

We have understood Mātauranga Māori to be defined as information and knowledge that was and is generated by Māori and encompasses a Te Ao Mārama viewpoint[1]. As Szekely and Weatherall reported in 1997, there is a wealth of historical representations of Mātauranga Māori in New Zealand libraries, archives, museums and galleries in the form of books, newspapers, manuscripts, archives, pictures, maps, photographs and sound recordings.

> Maori enthusiasm for literacy in the nineteenth century resulted in a large amount of manuscript and printed material. This material was written in the Maori language, by the Maori people, and documents both colonial and precolonial experiences. Much of this material is now housed in the nation's libraries and archives. [Szekely & Weatherall, 1997]

This material is a core part of New Zealand's documentary heritage. Access to it is important for many different groups and to support such diverse endeavours such as historical enquiry, te reo Māori revitalisation and study [Johnston, 2007], artistic and literary inspiration, Treaty claims resolution, and whakapapa research. In practice accessibility is often constrained by the limitations of the physical artefact – one or only a few copies may exist and preservation concerns may necessitate restricted handling.

The National Library of New Zealand's [2007] *Digital Content Strategy* argues that digitisation is both a useful tool to remove such constraints and vital to our understanding of our history:

> Digitisation is a powerful means of unlocking content for wider access and use …The scale of New Zealand content relevant to our national and cultural identity is vast, and yet will be lost to searchers if it is not digitised [pp. 26-27].

Digitisation can remove barriers to access in terms of physical fragility, geographic and time zone location as well as language and format. Digitised content that is created according to international accessibility standards can be made cheaply and easily available to print-disabled communities.

Given the wealth of Mātauranga Māori-based material held in culture and heritage institutions, the identified information need for access, the recognised benefits of digitisation and the fact that several national policies encouraging digitisation exist, it is notable how few projects have taken place in this space. Those included in the list below are the most significant of which we are aware.

- *Te Ao Hou*[2] was a Māori Affairs Department bilingual publication, published from 1952 to 1976 (National Library of New Zealand).
- *Timeframes*[3] is a database of digitised heritage images sourced from the Alexander Turnbull Library and boasts over 42,000 digital objects. There are over 900 images that can be found by searching for the keyword term 'Maori' (National Library of New Zealand).
- The *Niupepa Māori*[4] collection covers over 90 years (1842-1932), 34 different publications and is written predominantly in te reo Māori (University of Waikato Library).
- The online version of *Fletcher's Index of Maori Names*[5] makes available an index "from an unpublished manuscript compiled about 1925 by the missionary Rev. Henry James Fletcher (1868-1933). In its original form it was 987 pages long, a vast index of Māori names referred to in books and journals, including the names of boundaries, Māori individuals, canoes, trees, landmarks and geographical locations." [University of Waikato Library, 2007] (University of Waikato Library)
- John White's *Ancient History of the Maori* was a government commissioned compilation covering, in Māori with English translations, Māori knowledge, tradition and history from a number of iwi from around the country. It consists of 7 published volumes and a number of previously unpublished manuscripts (University of Waikato Library).
- *He Taonga Mokemoke*[6] is an online collection of digitised photographs that have been donated to the Hocken Collections. It is a relatively small collection (less than 100 photographs) and all are of people, either in formal portraits or more informal settings (University of Otago Library).
- The NZETC's *Moko Texts Collection* project (this is outlined in more detail below).

All successful digitisation projects have to consider and meet certain challenges: producing high quality resources with limited time and budget; understanding and unpicking copyright issues; determining if there is a likely audience for the material; deciding how material can best be presented and made accessible; and ensuring sustainability. What is it, in addition to these issues, which results in so very few digitisation projects explicitly focussed on representations of Mātauranga Māori?

This paper identifies three sets of issues: ownership, control and access, and consultation (Fig. 1).
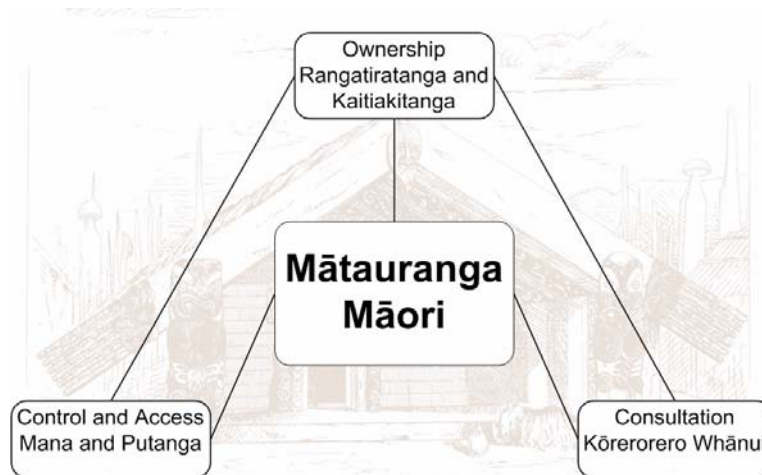
Figure 1. Issues surrounding the digitisation of Mātauranga Māori

In the following discussion we attempt to frame these using the corresponding Te Ao Mārama concepts of rangatiratanga and kaitiakitanga, mana and putanga, and kōrerorero whānui. We believe this enables us to explore why certain aspects of digitisation – such as who has the right to digitise a resource and make it freely available online – are more complex for Mātauranga Māori-based material than for other types of resources but we acknowledge our status as only very early learners of te reo Māori with a partial understanding of tikanga Māori.

**Ownership, Rangatiratanga and Kaitiakitanga**

The concept of ownership is well established in the Western paradigm and is defined as: "the fact or state of being an owner; proprietorship, dominion; legal right of possession" ["Ownership," 2008]. Indigenous understandings and models of 'collective ownership' and custodianship differ in both essence and practice from such a definition. 'Rangatiratanga' is perhaps the nearest approximation to the Western concept of ownership but with particular reference to ideas of oversight, responsibility, authority, shared control, and collective sovereignty.

In New Zealand the most obvious consequence of the non-trivial difference between ideas represented by 'ownership' and 'rangatiratanga' is the years of debate and litigation, particularly around land, which have ensued since the signing of the Treaty of Waitangi. However, the underlying gap in understanding has additionally significant ramifications for the treatment of intangible assets such as information. Also relevant is the term 'kaitiakitanga', which means guardianship or preservation – with rangatiratanga or ownership comes a responsibility to protect that which belongs. In the cultural heritage context there is a sense that although *direct ownership* of Māori-generated information may have been passed from Māori sources to Pākehā collectors, it still *belongs* to those sources and that the source community collectively retains a responsibility to respect the mana, wairua and tapu of the knowledge and protect it from misuse.

The history of how indigenous artefacts and representations of knowledge came into the possession of cultural heritage organisations is well-documented [Szekely & Weatherall, 1997]. During heavy periods of exploration followed by intensive colonisation, two things became apparent to the colonisers: one, that the indigenous peoples encountered had often radically different cultures and cultural expressions from their own; and two, that the cultural products of indigenous peoples, including representations of their knowledge, might be collected and preserved for the edification, curiosity and eventually the commercial prosperity of the colonisers [Nakata, 2002].

Māori were studied under the practice of salvage ethnography by Westerners who took ownership of the knowledge by publishing it under their own names in journals such as the *Transactions and Proceedings of the Royal Society of New Zealand* and the *Journal of the Polynesian Society*, frequently without acknowledging the indigenous source of the information

recounted. Māori were treated often as subjects rather than sources able to tell their own stories. The consequences of these experiences – 'being documented' and having traditional knowledge appropriated and disseminated by self-appointed authorities - has ongoing ramifications for source communities and those who now hold the physical containers in which the representations of knowledge now sit.

Museums, libraries and archives now hold collections of these items – legally own them as physical artefacts – and their content is in the public domain as defined by current copyright law. They could therefore be considered to have the legal right to digitise this material and distribute it online. However the history of how this material was obtained and a recognition of the layers of collective ownership and ongoing kaitiakitanga involved mean that such institutions must also consider what moral rights apply. In 1991 six iwi submitted the WAI 262 claim to the Waitangi Tribunal which claims, amongst other things, that the Crown has failed to protect the exercise of tino rangatiratanga and kaitiakitanga over Mātauranga Māori [Waitangi Tribunal, 2006]. This attempt by a federation of indigenous groups to address their claims within the Western legal paradigm is part of a wider, global movement to have indigenous knowledge and heritage protected by intellectual property rights. Article 31 of the United Nations [2007] *Declaration on the Rights of Indigenous Peoples* states that

> 1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.

However this is a non-binding declaration which New Zealand voted against and until the WAI 262 claim is resolved formal guidance for culture and heritage institutions on their responsibilities within New Zealand's current intellectual property laws is lacking.

It is therefore unclear how the moral rights of source communities and the responsibilities of holding institutions to provide access should be balanced. Such uncertainty and a lack of assured authority can partly explain why some Māori-based material has been passed over in selection processes in favour of less controversial texts.

**Control and Access (Mana me Putanga)**

The primary objective of most documentary heritage digitisation projects concerned with textual works is to increase access to the material[7]. Access to digitised resources is most commonly provided through web-based delivery which provides full and unrestricted access to the material. No identifying information is gathered about the user and no part of the resource is suppressed. While some institutions may attempt to control the use of the material through copyright on the digital resource, watermarking, or the provision of only low-quality access images, others may impose no restrictions on the sharing and reuse of the resource, explicitly giving such rights away through the use of a Creative Commons license or similar.

When dealing with the digitisation of resources which can be considered to represent aspects of Mātauranga Māori, such an open approach to access and freedom of use is not always appropriate.

> Although digitization is ideal for sharing, exchanging, educating and preserving indigenous cultures, it also creates ample opportunities for illicit access to and misuse of traditional knowledge. It is essential that traditional owners be able to define and control the rights and access to their resources, in order to uphold traditional laws; prevent the misuse of indigenous heritage in culturally inappropriate or insensitive ways; and receive proper compensation for their cultural and intellectual property [Hunter, Koopman & Sledge, 2003]

There are many examples of misappropriation of Māori cultural products[8] and the need to take into account legitimate concerns over misuse and exploitation can act as another barrier to libraries and others embarking on Māori-based digitisation projects. Ceding control over the access to resources to 'traditional owners' may be difficult for several reasons. Firstly, it may be hard to identify those owners. As discussed above, exactly who 'owns' a resource or has the authority to exercise power over a resource (power such as re-distributing to a global audience via the web) is not always an easy question to answer. Secondly, suppressing or restricting access to content may go against an institution's own deeply-held principles of open, democratic access to knowledge. Finally, implementing the sort of technical infrastructure required to provide multi-tiered access to online resources will be more expensive than developing a simple open system.

From a Te Ao Mārama perspective, 'mana', in a simplistic sense, is a term that has meanings that overlap with that of control, namely that of exercising power over an object or person and having the authority to so. This mana, authority, sets the conditions for a second term, 'putanga', which might best be equivalent to that of 'access' and is used to denote movement through a barrier via a gateway. The nature of the putanga can take various forms including provision of context, stipulation of terms and conditions of use, access and restriction or suppression. To minimise unintentional misuse by those with little knowledge of Māori the gateway can provide information that helps viewers of digitised material to contextualise the information about Māori that they receive. Providing context for material can reduce the risk of users with little understanding of the material using it in ways which fail to respect its importance.

> Maori share with other indigenous peoples a legitimate concern and apprehension when uninitiates enter their cultural world. Not only is there a need for respect, but also for caution about the dangers inherent in 'getting on the bandwagon but starting at the top' without having first served an appropriate apprenticeship in learning about the culture, its history, cosmogony, customs and language. Too often, the lack of these attributes has led to subsequent misuse and even abuse of superficially acquired knowledge, thus reinforcing the reluctance of many Maori to share their knowledge with the uninitiated. [Roberts, Norman, Minhinnick, Wihongi & Kirkwood, 1995, pp. 1–2]

The *He Taonga Mokemoke* digital collection of the University of Otago Library is an example of mediated access which includes contextual information and a stipulation of terms of use.[9]

For some types of resources providing context may not be enough. Where material is particularly tapu there may be reasons to limit access to only those for whom it is appropriate[10]. A requirement for such restrictions can be a barrier to undertaking digitisation in the first place because most web-based delivery systems lack the functionality to provide multi-layered access control. Implementing such an infrastructure would require both knowledge and programming resources which may not be available.

An alternative method which does not require the same level of technical infrastructure change is to suppress all access to sensitive material (see case study below). This allows full access to material which is deemed suitable for public consumption but does not allow those who may have a legitimate right of access to view suppressed material. If not done transparently such suppression may also result in a set of digital resources which contain unexpected and unexplained gaps.

Where there exists a requirement to suppress access to some or all material, a project may conflict with organisational priorities such as free and open access. The majority of culture and heritage institutions are in the business of promoting open access to the collections that they have; they are not storehouses of inaccessible information. Though some may have restricted special collections, permission can often be requested to access some of the material contained therein. Investing in a digitisation project that has a limited audience and/or requires costly infrastructure development may be hard to justify to general funding bodies such as local or university councils. Such bodies typically have limited funding available and an overwhelming need to make most digital products of use to the widest user group possible. This barrier to digitisation of representations of Mātauranga Māori can be compounded by a fear of appearing

too politically correct. Being seen to 'privilege' Māori is a risk that some cultural heritage institutions may be uncomfortable with.

It is at this point that we can look at the medium in which most digital collections have been made available to the public in the last decade or so. Unlike traditional print technology which was introduced, fully developed, to Māori as a means to introduce them to Western ideologies [Rogers, 1998], the Internet has been growing and developing in a time when many indigenous peoples have the ability to be involved from the early stages. Not only have they had a say in what is being said about them, they have had the opportunity to say it themselves, to create and grow online communities that connect those in the cities to those still living on their ancestral land, and to build linkages to their material that may be contained within the collections of cultural and heritage institutions all over the world. Rather than just a tool for instruction imposed fully formed by another culture, the World Wide Web is a tool that allows for development by multiple societies and cultures to meet their own needs and to realise the ability to connect easily with their members wherever they might be. In addition to the World Wide Web, other information technology tools are being developed for indigenous peoples to allow them to provide digital access to materials at differing levels of access [Hunter, 2005].

Therefore providing access to Māori-based material via the Web can be an acceptable way to widely increase access. However, depending on the material being digitised, the open nature of the Internet, and the possible unknown costs of providing restricted access to representations of Mātauranga Māori, digital objects might be made available to users offline. Digitised collections provided offline might also address the issue of little or no Internet access in some indigenous communities (although there are initiatives, especially in public libraries, to provide Internet access[11]). But this approach would also conflict with institutional priorities of free and open access and so may not be seen to be an attractive choice in selecting collections for digitisation.

**Consultation (Kōrerorero Whānui)**

Given the complex issues and range of stakeholders outlined above it is clear that most digitisation projects concerning Mātauranga Māori-based material would benefit from close engagement with those who retain a kaitiakitanga role with regard to the material. These kaitiaki are best informed as to the mana of the material and therefore are best able to inform the design of the putanga to the digitised versions of the items.

Consultation is a process of proposing, presenting, listening, considering and deciding. Kōrerorero whānui (literally broad conversation) is a common practice within many Māori communities and the principles of rangatiratanga and kaitiakitanga are reflected in often extensive and widespread discussion through hui.

Despite being an established practice within many Māori communities, a number of barriers exist to successful engagement with them by those with proposed digitisation projects. These can be summarised as: uncertainty as to who should be involved in the consultation; the potentially large scope of work and difficulty in obtaining consensus; the time and effort required; and the chance of uncertain outcomes.

Although there may be demonstrably collective ownership it is not always under a pan-Māori banner – iwi and hapu groupings may be more relevant. Futhermore groups which might be considered to be representative of Māori views within the Information Management sector, such as Te Rōpū Whakahau or Te Komiti Māori (National Library of New Zealand), are often unable to give interested organisations clear 'yes' or 'no' answers on questions of whether to digitise. They themselves would have to undertake the likely extensive and possibly costly consultation themselves and so the direct and opportunity costs would be passed onto them by consulting institutions.

Even if provenance linking an object, text, or collection with an established iwi, hapu, or whānau exists, a lack of established relationships can making opening up a dialogue difficult. Furthermore, in many cases multiple groups will have claim to rangatiratanga of the representations of the mātauranga. This is frequently the case for material gathered about Maori by early European immigrants, such as John White's [1887] *Ancient History of the Maori*.

Using distributed communication tools such as blog discussions and online surveys is one way to facilitate engagement with as wide a group as possible, including those outside cohesive, established groups such as iwi, but the time and effort required to undertake a successful process should not be underestimated.

Consultation requires not only relationship building but also relationship *maintenance*. Consultation is unlikely to be successful when undertaken in a way where there is no benefit for those Māori consulted with. A sense of reciprocity, of balance, is a well understood and appreciated kaupapa and so an understanding that relationships not only have to be built but also *maintained*, with all the required time investment, is needed. This investment is one which should be encouraged, as closer relationships to local iwi and hapu can increase understanding, on both sides, about cultural practices; make cultural and heritage institutions more accessible; and provide opportunities to develop other programs with Māori.

After consultation there may be questions of how to act upon the results and who may act upon them. If the response has been in favour of digitisation then the project may go ahead, with whatever decided levels of access, and perhaps in a state of collaboration as members of iwi or hapu provide further guidance or contextual information. If the response is not in favour then an institution might digitise anyway and face any fall-out from consulted communities. Of course, this is not ideal and it would seem unlikely that anyone would go ahead in the face of a negative response to digitisation. If, during consultation, it appears that a consensus cannot be reached, then the consulting institution is left with the decision of whether to digitise or not. Hopefully, however, they will be able to approach this decision from a more informed point of view governed by the issues and responses revealed during the consultation process. Whatever the outcome, it makes sense not to commit too heavily to a particular vision of a project prior to consultation.

Demonstrating that you have entered into conducting kōrerorero whānui in good faith means that you may have to accept that your planned result for a project may not be acceptable. Where there are cases for which digitisation for the Web is not at all appropriate, there may yet be a desire to have digital access to a taonga that is retained by an institution. Institutions that undertake consultation must be open to a variety of options including digitising for a community-based collection providing no or limited access to the general public.

Although organising kōrerorero whānui may prove difficult, the gains from following through on the consultation process are worthwhile. This sort of time and money investment by cultural and heritage organisations is exactly what is required to 'add value' to a potential digital item and the wider collection and consequently are resources well spent. Going to source groups and asking them what they need, as in the *Te Ara Tika* project [Szekely, 1997], fits within the current focus of libraries as being user-centric.

A great deal of information about the issues and barriers outlined above was discovered through a scoping of the literature but much of it was also derived from our own experiences while undertaking a digitisation project at the New Zealand Electronic Text Centre.

### Case Study: NZETC's Moko Texts Collection

The NZETC's *Moko Texts Collection*[12] was an instructive project for us at the Centre. Despite the recognised importance of Horatio Gordon Robley's *Moko; or Maori Tattooing* as a significant part of New Zealand's documentary heritage [Simmons, 1997], we were aware that the mātauranga represented within it belonged to a wider Māori community. Providing unrestricted internet access to it, and the images of mokamokai (smoked heads) and ancestral remains it contained, was something that we knew should not be undertaken without consultation.

We also realised that we would need to provide context to support readers' understanding of the book, the author, Ta Moko and the process of creating mokamokai. To provide this context we also digitised six other texts as well as providing a small bibliography of online resources drawn from our own collection, *Te Ao Hou*[13], the *Transactions and Proceedings of the Royal Society of New Zealand*[14], as well as other sites on the Web.

### Consultation[15]

For consultation we wanted to discuss the project, and all the possibilities that surrounded its digitisation, with as many communities and in as broad a scope as possible. We consulted with potential user groups such as academics, librarians and the general public as well as source groups, Māori, and Ta Moko artists. We wanted to:

- know how they felt about digitising *Moko*, presenting the images of people and mokamokai as well as issues of access and restriction and;
- use the information gathered to develop a *Moko Texts Collection* as well as a policy outlining how we would respond to requests from descendents of those displayed in the content.

We presented a number of possible digitisation options ranging from presenting everything online, to providing access to only the text, to providing access to only the contextual material that we gathered. We consulted via email, presented at hui, engaged in discussion at committee meetings and posted to message boards on Māori community websites. There were a wide range of responses received: some supportive of digitisation, with or without restrictions in terms of access; some ambivalent; and some strongly against digitisation of the text at all. The range of responses found through our consultations was to be expected and included a number of suggestions on how, if digitisation were to go ahead, online presentation of *Moko* could be undertaken that would be respectful and minimise the chances of misuse and exploitation.

### Decisions

The majority of responses we received were supportive of our proposed project but recommended at least some level of restriction to the visual material. Based on consultation responses and our understanding of the issues involved we decided to present the text with all associated images except those depicting mokamokai or human remains. The same approach has been applied to all other texts within our collections. We have included a placeholder where the suppressed images would have been that provides a description of the image, usually derived from the image caption, the reason for suppression as well as links to our consultation paper and our suppression policy.

Our suppression policy provides avenues by which people can place general feedback (via links to the message boards) or contact us directly. If whānau want to discuss with us suppressing images of their tupuna then we are prepared to do so. Alternatively, if they had information that they would like placed with their tupuna's name, then we are able and willing to add it.

### *Conclusions and Recommendations*

The issues outlined above are complicated. Dealing with them involves direct costs, in terms of funding, and opportunity costs, in terms of staff time and the possibility of needing to restrict digital access or discovering that some material may not be advisable to digitise at all. Although dealing with them may be problematic, by ignoring them we risk perpetuating an imbalanced perspective of New Zealand's heritage and identity. Significant parts of New Zealand's documentary heritage remain relatively unknown and ignored. By seeing the issues and barriers as insurmountable, we also leave the doors open to large scale digitisers, such as Google Books, to digitise print material, either fully or partially, with no context and no consultation with source groups at all.

Anderson [2005] states that, "What…[such]…projects…have highlighted is that the only way to work through the issues…is to get them out on the table and make a start" [p. 36]. These barriers are not lofty mountains to which we should bow our heads in defeat.

### *Acknowledgements*

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of Wellington Library, for her help with regards to framing the issues, as well as the other NZETC staff for their willingness to debate the issues.

### Glossary of Māori Terms

Provided below is a glossary of Māori terms, not in common use, that have been used throughout this paper. All equivalent English terms provided here are drawn from Learning Media's online Ngata Dictionary (http://www.learningmedia.co.nz/ngata/). Please note that the majority of the provided English terms are simplistic and do not necessarily provide an idea of the full meaning of some Māori terms.

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|---|---|
| Te Ao Mārama and also, Te Ao Māori | The World of Light and also, The Māori World |
| Atua | god |
| Katiaki(tanga) | guardian, custodian, keeper |
| Kaupapa | idea, principle |
| Kōrerorero | converse, discuss |
| Mana | authority, control, prestige |
| Mātauranga | knowledge |
| Putanga | access, gate |
| Rangatiratanga | ownership, prosperity, wealth |
| Tapu | hallowed, inaccessible, inviolable, sacred |
| Tikanga | culture, custom, ethic |
| Tupuna | ancestor |
| Wairua | spirit, soul |
| Whakapapa | family tree, genealogy |
| Whānui | broad, extensive, wide |

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[1] See Glossary of Māori Terms.

[2] http://teaohou.natlib.govt.nz/journals/teaohou/index.html

[3] http://timeframes.natlib.govt.nz/

[4] http://www.nzdl.org/cgi-bin/niupepalibrary?a=p&p=about&c=niupepa

[5] http://www.waikato.ac.nz/library/resources/nzc/fletcher/index.shtml

[6] http://digital.otago.ac.nz/results.php?collection=He%20Taonga%20Mokemoke

[7] See, for example, the digitisation selection policies developed by the New Zealand National Digital Forum, the National Library of Australia and the University of Oxford. Although digitisation primarily for preservation is more common when dealing with sound or moving image formats, it is generally a secondary effect of the digitisation of print or manuscript material whereby the creation of a digital surrogate can reduce the handling of a fragile original artefact.

[8] Recent examples include: the Lego Bionicles toys that were named after Polynesian/Māori atua; or the use of Tame Iti's face, well-known for his intricate facial Moko, on an advertisement for security systems. Ta Moko designs have often been taken by those with little understanding and used in ways that can be regarded as offensive: a famous haute couturier had quasi-Moko designs painted on his models and an artist in the United States made versions of mokamokai for sale under the impression that Māori, like Vikings, were from the long distant and dead past.

[9] See http://digital.otago.ac.nz/results.php?collection=He%20Taonga%20Mokemoke.

[10] See http://www.iritja.com or http://www.mukurtuarchive.org/ for Australia-based examples.

[11] In New Zealand this is being done by the Aotearoa People's Network, see http://www.peoplesnetworknz.org.nz/ for details.

[12] Which can be found at http://www.nzetc.org/tm/scholarly/tei-corpus-moko.html.

[13] http://teaohou.natlib.govt.nz/journals/teaohou/index.html

[14] http://rsnz.natlib.govt.nz/

[15] A full account of the consultation process can be found at http://www.nzetc.org/tm/scholarly/tei-MokoDiscussionPaper.html.