

He Kāhui Whakaahua – A constellation of carte-de-visite images: Reporting on the sharing of a facial recognition project at the Alexander Turnbull Library

Sheena Tawera

Background

The following article reports on the final stage of a collaborative project supported by the National Library's Business Innovation Group (BIG). This facial recognition project required collaboration and innovation across Imaging, Content Service, Digital Preservation, Curatorial, Collection Care and Arrangement & Description teams. Another article outlining the background, work, and broader context of the project is in progress.

Introduction

In 2018, the National Library of New Zealand (NLNZ) undertook a pilot Facial Recognition (FR) project with the aim of improving the discoverability of digital images held in the photographic archive. The method used biometric technology to identify 'likeness'; whereby photographs of people were scanned and compared for likely and exact matching images using specialized FR [Python](#) software. The goal was to explore processes across the Library, as well as to identify individuals across multiple images, and enable metadata and archival descriptions to be enhanced.

The project used the digitized copies of carte-de-visite portraits as a trial, because they were all outside copyright, digitized, and available to access online. It focused particularly on those titled 'Unknown'. Of these, it was a small group of carte de visite images of 19th century Māori [PA-Group-00468]¹ taken by Hawkes Bay photographer Samuel Carnell, that became a memorable desktop project for the author in 2020.



Figure 1 :

Carte de visite image of Irini Kemara

Portrait negative 1/4-022019-G
(Samuel Carnell Collection)

Displayed in Judith Binney Room,
Alexander Turnbull Library

The project

Many hands and many teams across NLNZ contributed to this pilot project. They included members of the ATL Curatorial, Collection Care; Arrangement and Description; and Imaging teams; representatives from National Library of New Zealand's Digital Preservation Group

(National Digital Heritage Archive)², Content Services, and Digital New Zealand teams. The whole cross-team approach was assisted by support from NLNZ's Business Innovation Group.

As a member of ATL's Arrangement and Description team, my contribution to the project was as follows:

- To compare, cross-check and validate 19th century carte de visite images of Māori – studio portrait sittings of Māori, some of whom remain unidentified.
- To network with other Māori librarians, beginning with composing an email to circulate amongst Te Rōpū Whakahau's membership; and text to display on the association's website.³

It was always envisaged that if the project found possible matches, the Library would reach out to try to connect with descendants. By showcasing these striking portraits to an audience of Māori librarians, it was hoped that through our combined networking channels, the names, identities, and kōrero (stories) of these rangatira and tīpuna would be rediscovered for the benefit of their descendants. The following is an account of one type of work undertaken to try to resurface the identities of these photographed Māori, from within the photographic archive.

Behind the scenes work

From Tiaki⁴, ATL's online finding aid, descriptive records can now be found by typing "Facial Recognition" into the online keyword search box. Forty-nine of these descriptive records have been identified as Māori. A spreadsheet was created to assist with the work of cross-checking and validating these forty-nine records. The table below shows three sample metadata fields from the spreadsheet, that were used to check and track any changes to the descriptive records. The fields below pertain to Irini Kemara's carte de visite portrait.

Unit ID: (Record)/ Unit ID: (EAD Level/ Component)/ Unit ID: (Unit Details)	Unit Title: (Record)/ Unit Title: (EAD Level/ Component)/ Unit Title: (Unit Details)	Citation, references (Biography, history notes)
1/4-022019-G	Irini Kemara	http://www.aucklandcity.govt.nz/dbtw-wpd/exec/dbtwpub.dll

Additional spreadsheet fields were also created relating to external contacts (iwi, hapū, whānau) and names of ATL staff who may have tribal connections to the carte de visite portraits.

The next stage of work was to cross check and validate each image against other similar images for matching likeness and to correct, enhance or update their descriptive records if required.

A few descriptive records contained typos or spelling mistakes, which were easily fixed. Names, biographical information and indexing terms attached to each of the Māori portrait records were also updated as

necessary, using citation sources such as Te Whanganui a Tara / Wellington City Library online index⁵ and Te Ara, The Encyclopedia of New Zealand⁶.

Outreach

Having identified a set of Māori portraits which had been named or otherwise enhanced through the FR project, we wanted to reach out and communicate with their descendants if possible. The first tool we tried for making these connections was Te Rōpū Whakahau, the leading national body that represents Māori engaged in Libraries.

The next stage was to identify a subset of carte de visite images for posting, and we decided to focus on those from a group of Hawkes Bay images from the photographer Samuel Carnell. These tīpuna were largely from Ngāti Kahunungu ki Heretaunga.

This was no easy task, as each of the tīpuna and rangatira portrayed had a kōrero worth telling – that is, *how* to choose amongst the images? And more so, *who was I* to choose which image (or images) should be surfaced, amongst this constellation of rangatira?

In the end, I selected seven images that I thought would best represent and illustrate the kaupapa of the project: images of men and women, both named and unnamed, young and old. My hope was that by drawing attention to these special portraits, a doorway of discovery would be opened for their descendants, in turn creating a pathway of evolving discovery and connection for other whānau to follow.

Uptake response

In July 2020 we decided to post the following message to the Te Rōpū Whakahau (TRW) Listserv:

Tēnā hoki rā tātou ngā mema me ngā kaitautoko o Te Rōpū Whakahau.

My name is Sheena Tawera. I work as an Arrangement and Description Librarian at Alexander Turnbull Library (ATL) in Wellington. I am very fortunate to be able to work with taonga held within the Alexander Turnbull Library's unpublished collections.

ATL holds a number of 19th century carte de visite images of Maori who had their portraits taken by Hawkes Bay photographer Samuel Carnell: <https://tiaki.natlib.govt.nz/#details=ecatalogue.77989>

In 2018 Alexander Turnbull Library undertook an inhouse Facial Recognition pilot project.

A sample of Samuel Carnell's carte de visite portraits of unidentified Māori were selected, scanned and matched with existing carte de visite images, using Facial Recognition Technology. A number of likely and exact match images were made, adding to the Alexander Turnbull Library's pātaka of digital images.

We are keen to find out more about the tīpuna and rangatira within the following selection of carte de visite images below: – their names, where they were from, their whānau, hapū, and iwi affiliations for our records, and for their ongoing discoverability as taonga.

If you do have information that you are happy to share, feel free to contact us at Ask a librarian.

E tino hikaka ana mātou kia mohio mai, nō wai ēnei whakaahua – nōhou pea? Tēnā, whakapā mai ōu whakautu ki te hono "Ask a librarian":

Ngā mihi nunui

Nāku iti noa, nā

Sheena Tawera

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Irina Kemara <https://tiaki.natlib.govt.nz/#details=ecatalogue.181022>

Jane (Maori woman from Hawkes Bay District) <https://tiaki.natlib.govt.nz/#details=ecatalogue.188175>

Portrait of Tangiora <https://tiaki.natlib.govt.nz/#details=ecatalogue.191337>

Maori man from Hawkes Bay District <https://tiaki.natlib.govt.nz/#details=ecatalogue.95809>

Maori woman Hawkes Bay district <https://tiaki.natlib.govt.nz/#details=ecatalogue.192101>

Wife of Te Kooti/Maori Woman Hawkes Bay district <https://tiaki.natlib.govt.nz/#details=ecatalogue.190086>

Wife of Renata Kawepo <https://tiaki.natlib.govt.nz/#details=ecatalogue.160531>.

Since this message was posted to the [Te Rōpū Whakahau](#) website⁷ in July 2020, to my knowledge unfortunately no formal feedback has been

received via the suggested “Ask a Librarian” webpage. We have heard however of some informal discussion ‘on the kūmara vine’ within Māori librarian and archivist circles about the post.

Upon reflection, it is possible that the lack of uptake and interest in the post may have been due to its timing, given at the time [Te Rōpū Whakahaui](#) readers, like all New Zealanders, were busy negotiating their way through fluctuating Covid-19 lockdown levels. A blog hosted by NLNZ’s website may have been a more effective outreach tool. Perhaps the next best step would be to reach out to whānau, hapū, and iwi contacts with Ngāti Kahungunu ki Heretaunga tribal affiliations about these special carte de visite images.

Concluding thoughts

As the timing of the FR desktop project coincided with Covid-19 lockdown restrictions across Aotearoa, it was uplifting to be able to undertake work which at its heart was about reconnection. It not only enabled collaborative project work between NLNZ team members to continue during lockdown; it also attempted to give effect to Arrangement and Description team’s whakatauaiki, or proverb:

He mihi - Acknowledgements

*Kia whakarite, kia whakamārama, kia tauhere ki te ao -
to arrange, to describe, to connect with the world.*

Selected Images from PA-Group-00468

Figure 2:

Jane (Maori woman from Hawkes Bay District)

Dry Glass Plate negative ¼-022117-G

Samuel Carnell Collection, Alexander Turnbull Library

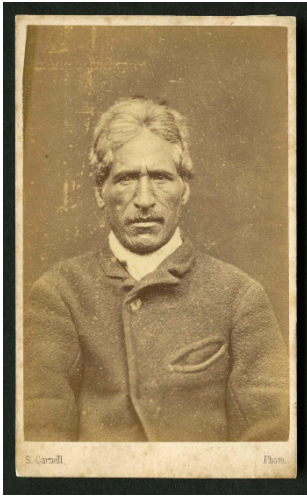


Figure 3:

Carnell, Samuel 1832-1920: Maori Man from Hawkes Bay district.

Albumen Print PA2-0392

Samuel Carnell Collection, Alexander Turnbull Library

Āku mihi nunui ki a Cellia Joe-Olsen, Ariana Tikao, Nicola Frean, me Kat Tamaira. Taputapu kē koutou katoa!

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Nāku iti noa, nā

Sheena Tawera

Ngāti Porou, Ngā Puhī, Ngāti Hine

Endnotes

1. Carnell, Samuel 1832-1920 :Maori portrait negatives. PA-Group-00468. <https://tiaki.natlib.govt.nz/#details=ecatalogue.77989>
 2. Digital Preservation'. National Library of New Zealand website. Accessed February 2021. <https://natlib.govt.nz/collections/digital-preservation>
 3. Te Rōpū Whakahau. Accessed 4 November 2020: <https://trw.org.nz>
 4. 'Tiaki'. Alexander Turnbull Library. URI accessed 4 November 2020: <https://tiaki.natlib.govt.nz/#home>
 5. Te Whanganui-a-Tara', Wellington City Libraries. Accessed November 2020: <https://www.wcl.govt.nz/maori/wellington/>
 6. Te Ara The encyclopedia of New Zealand, accessed November 2020: <https://teara.govt.nz/en>
 7. 'He kāhui whakaahua –a constellation of carte de visite images', Te Rōpū Whakahau. Accessed 4 November 2020 <https://trw.org.nz/he-kahui-whakaahua-a-constellation-of-carte-de-visite-images/>
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