Who was New Zealand's First Female Photographer?

Jill Haley

Canterbury Museum, 11 Rolleston Avenue, Christchurch 8013, New Zealand

Email: jillhaley1969@gmail.com

Women's contributions to photography in New Zealand have largely been overlooked by historians. When women are considered, it is often to find the first female photographer. However, what a photographer is can be open to definitions ranging from camera operator to studio owner. This article investigates three women who have been put forward by photo historians for the distinction of being the first: Elizabeth Pulman, Eliza Leaf and Jane Smith. A previously unknown photographer, Emma Meluish in Dunedin, offers a fourth candidate. When thinking beyond conventional definitions of what a photographer is, Eliza Grey offers yet another possibility. However, focusing on the search for the first female photographer overlooks the myriad of other roles women had within photography studios and the impact they had on the development of photography in New Zealand.

Keywords: Auckland, Christchurch, Dunedin, Eliza Grey, Eliza Leaf, Elizabeth Pulman, Emma Meluish, Jane Smith, New Zealand, nineteenth century, photographer, photography, women

Introduction

Historians like the challenge of finding "firsts" (and the credit for being the first to find one) and indeed humans place great significance on this concept. Our first step, our first word, our first birthday, our first kiss - all these firsts become milestones in our personal history. We then apply this concept of firsts more broadly to historical events to ascribe significance. The Ministry for Culture and Heritage's website, nzhistory.net, features a page titled "Famous Firsts" that lists milestones such as the first female Māori MP, the first flight across Cook Strait and even the first movie to be shot in New Zealand. Prominently displayed at the top of this page is an image of Elizabeth Pulman who is described as "quite possibly New Zealand's first female professional photographer." On a list filled with provable firsts, why is the wording for this one so ambiguous? Was Pulman New Zealand's first female photographer? The answer to this simple question is quite complex. This paper seeks to explore this complexity and suggests that there is no single answer to this question.

The starting point for this discussion is a

definition of the word photographer. The simple dictionary definition is a person who takes photographs and several dictionaries add that this is usually done as a job or profession. Most people will find this description satisfactory and not question it. However, this needs further clarification. It assumes that a single individual is responsible for taking a photograph. While this might be correct in some situations such as when I take a photograph of my dog on my phone, what about large professional studios where a number of people are involved with the production of a photograph? The person who operates the camera is customarily called the photographer, but there might be someone who controls the lights and someone else who develops the film or manipulates the digital image. What if there is an artistic director who manages the photo shoot? If many people are responsible for the finished photograph, is it only the individual who operates the camera who is the photographer? Or can it be argued that it is in fact the studio? If it can be agreed that the camera operator is the photographer, what



Figure 1. Elizabeth Pulman. Unknown studio. Alexander Turnbull Library 1/2-057611-F

about selfies taken by animals? In 2008, British nature photographer David Slater set up cameras that enabled macaques to take photographs of themselves. Are the macaques who pressed the camera buttons the photographers or was the photographer Slater who set up the camera and engineered the situation? Is the photographer the camera operator or the creativity behind the photograph? When closely examined, the definition of photographer is actually quite muddy and makes the identification of New Zealand's first female photographer a complicated exercise. Taking into account these definitions, several women could be considered the first.

Elizabeth Pulman

Who is Elizabeth Pulman and why does nzhistory.net consider her to "quite possibly" be New Zealand's first female professional photographer (Fig.1)? The website cites the entry on Pulman written by Phillip D Jackson from the Dictionary of New Zealand Biography, now accessible through Te Ara - the Encyclopedia of New Zealand. Te Ara states, "She was among New Zealand's early photographers, and was possibly the first woman professional" (Jackson 1993). This entry cites a short piece printed in the New Zealand Herald when Elizabeth Pulman died in 1900, presumably written with information supplied by her son Frederick, which describes her as having been a photographer for 39 years (New Zealand Herald, 5 February 1900: 5). Elizabeth and her husband George arrived in Auckland from England in 1861. George, who trained as a draughtsman, turned his hand to photography, first working as an agent for the Fairs and Steel studio and then establishing his own commercial studio, probably after a fire in May 1866 that resulted in the destruction of his offices (Giles 2007). When George died in 1871, Elizabeth retained control of the business and ran it under her own name. When she married John Blackman in 1875, he became involved in the studio, but it continued to operate under the name E Pulman, later Pulman and Son when Frederick joined the studio (Fig. 2). George Steel, who was a friend of Elizabeth's first husband, was employed as a photographer (Giles 2007).

The Pulman studio was one of a large number of professional studios operating throughout New Zealand in the nineteenth century. In the appendix to *New Zealand Photographers: A Selection*, Hardwicke Knight lists over 1,100 studio names and their variants (Knight 1981). Elizabeth's name was one of several listed female photographers or studio owners that include Emily Cazneau, Harriet Cobb and Priscilla Bartlett. So why has Elizabeth's name become so familiar to make her a contender for possible first female photographer? Most general histories of New Zealand photography



Figure 2. Rewi Manga Maniapoto. E Pulman studio, 1879. Canterbury Museum 19xx.2.3828

include examples of the Pulman studio's work (Main and Turner 1993: 12; Eggleton 2006: 17; McCredie 2015: 33, 174).2 It might be because her name is associated with a significant event in New Zealand's photographic history - the first court case related to a breach of New Zealand's Fine Arts Copyright Act 1877 with regard to photographs (Haley 2021). On 23 August 1882, Charles Henry Monkton was charged with illegally copying and selling a photograph of the Māori King Tāwhiao, Tūkaroto Matutaera Pōtatau Te Wherowhero that had been registered for copyright by the Pulman studio. The case was reported extensively in the newspapers. This wasn't the first time that Elizabeth had fought photographic piracy in the public arena. Shortly after her first husband's death in 1871, Elizabeth found that a photograph of a map produced by him was being copied and sold by a third person

without her permission. This event pre-dated New Zealand's photograph copyright legislation, so her only recourse was the court of public opinion. She wrote to Auckland's Daily Southern Cross newspaper and begged the public not to buy a copy, which was one of her principal sources of income for supporting herself and her six young children (Daily Southern Cross, 9 June 1871: 2).

Clearly, Elizabeth Pulman was involved with studio photography, but to what extent was she a photographer? The branding on photographs produced by the studio read "Photographed by E. Pulman" (Fig. 2). But does this indicate that she was a photographer in the strict definition of a person who takes a photograph? Catherine Bishop has shown how many colonial wives assisted their husbands with their business (Bishop 2019) and it is likely that Elizabeth assisted George in his studio. She probably learned a great deal about photography from him and could operate a camera. However, having her name on the studio branding with the wording "Photographed by" did not necessarily mean that she was the photographer of the image. Although the photograph of Tāwhiao that Monkton illegally copied bears the E Pulman branding, we know from the copyright court case that George Steel, who worked in the Pulman studio, took the photograph. In fact, there is no guarantee that a photograph was taken by the studio whose name is printed on it. Before photographic copyright legislation was passed, it was common practice for photographers to copy the work of other photographers and apply their own branding. Monkton had done this and with the profits that the sale of popular photographs such as Tāwhiao's and other Māori "celebrities" could earn studios, the practice was incredibly lucrative. Canterbury Museum holds an example of this copying practice with two photographs of Tomika Te Mutu, the original one attributed to John Nicol Crombie's studio in Auckland (Fig. 3) and the other a copy by the Hamburg studio C Dammann (Fig. 4).

For photographic historians, the fact that the name printed on a photograph is not a

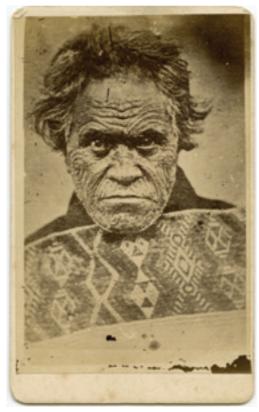


Figure 3. Tomika Te Mutu. John Nicol Crombie (attributed), c1860. Canterbury Museum E161.50

reliable indicator of the person who took the photograph, and finding out who the person was is an almost impossible task, has meant that "photographer" has generally been defined as the studio business rather than an individual. Photographic historians such as William Main, John B Turner and David Eggleton have asserted that Elizabeth Pulman was a photographer on this basis (Main and Turner 1993: 12; Eggleton 2006: 17). Although George Steel testified in the case against Monkton that he was the photographer, his name is usually not credited to that photograph and the Pulman studio or Elizabeth Pulman as the owner of the studio is applied instead. One exception is the Christchurch Art Gallery Te Puna o Wai Whetū which credits George Steel as the photographer and Elizabeth Pulman as the studio proprietor and publisher (Hall and Pohio).

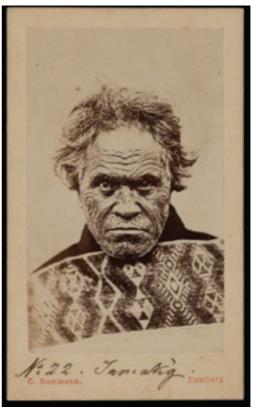


Figure 4. Tomika Te Mutu. C Dammann studio. Canterbury Museum PIC88/48.3

Eliza Leaf and Jane Smith

If we accept that Elizabeth Pulman was at times a camera operator or define her as a photographer based on the studio carrying her name, was she New Zealand's first female photographer? The answer is no. If she had been a photographer for 39 years as the newspaper report at the time of her death indicated, she would have started in 1861, the year she and George immigrated. This seems unlikely as evidence suggests that George did not set up a photography studio until about 1866 and it is doubtful that Elizabeth would have had her own independent photography business. The latter half of the 1860s is a more likely point for her to possibly have begun taking professional photographs as his assistant. The earliest year the studio bore her name was after George's death in 1871. There are other earlier



Figure 5. Unidentified Man. R Leaf studio. Canterbury Museum 19xx.2.2683

examples of female photographers, both in terms of operating a camera or running a studio bearing their name.

Keith Giles argues that Eliza E Leaf should be considered a candidate for New Zealand's first female photographer (Giles 2004). Eliza was listed as a professional photographer in England in the 1861 census along with her 18-year-old son Robert. The Leaf family immigrated to Auckland in 1862 and at some point between that year and 1866 Robert had established a photography studio (Fig. 5). Given the level of support that family members gave to family businesses, it is reasonable to assume that Eliza Leaf contributed her photographic skills to her young son's studio. What is certain is that in 1862 Eliza arrived in New Zealand with professional photography experience.

Mrs R Smith in Christchurch, identified by Ioan Woodward, is another contender for New Zealand's first female photographer (Woodward 1987). "Mrs R Smith" is listed as a photographer on High Street in the 1865 Southern Provinces Almanac (published in 1864).

Ken Hall has identified her as Jane Smith, wife of Richard Smith (Hall 2019: 30). Jane and Richard emigrated from England in July 1859 and by May 1860 Richard had established the New American Portrait Gallery (Lyttelton Times, 26 May 1869: 5). As with Elizabeth Pulman and Eliza Leaf, Jane likely assisted Richard in the business. Hall speculates that when Richard joined the partnership of Jones and Smith (painters and paperhangers), Jane ran the studio. Whatever the situation, "Mrs R Smith" is the earliest directory listing for a female photographer or studio operator in New Zealand.

Emma Meluish

In my own research on women and photography, I have found evidence of a professional female photographer who was a camera operator in Dunedin in 1861, Emma Meluish (also Melhuish). Emma and William Meluish arrived in Wellington from England on 12 October 1858 on the Robert Small (Wellington Independent, 23 October 1858: 2) and settled in Nelson. By 3 November, less than one month after arriving, William advertised that "For a few days only" he would be taking likenesses from premises on Bridge Street (Nelson Examiner and New Zealand Chronicle, 3 November 1858: 2). William went from arrival to working photographer in such a short time indicating that he was already trained in the trade and, not knowing what would be available in the colony, had probably brought photographic equipment with him. In the United Kingdom's 1851 census, the Meluishes were listed as living in Bristol with William employed as a trunk maker and Emma as a carpet bag maker. Given their two similar professions and the fact that Emma was a married woman working in a trade suggests that they ran a business together. The Meluishes disappear from the record between the census in 1851 and their arrival

PHOTOGRAPHIC ROOMS, OPPOSITE WAKATU HOTEL, BRIDGE-STREET.

MR. MELUISH, late of the Crystal Palace, having JUST RECEIVED a LARGE STOCK of GOODS, will CONTINUE TAKING PORTRAITS in the first style, with new improvements, for a FORTNIGHT LONGER. A perfect Likeness from 5s.

Pictures copied; Portraits, Residences, and Views taken on paper by a new process, for easy transmission by letter.

Nelson, February 25.

MRS. MELUISH has just arrived from Melbourne with a PARCEL of GUIPURE and other PATTERNS of SLEEVES, COLLARS, &c., for Embroidery, of the newest fashion, to which she invites the attention of the ladies of Nelson. Bridge-street.

Figure 6. Advertisements by William and Emma Meluish. *Nelson Examiner and New Zealand Chronicle*, 26 February 1859: 2. National Library of New Zealand (Papers Past)

in New Zealand in 1858. In one of the Nelson studio advertisements, William states he is "late of Crystal Palace" (*Nelson Examiner and New Zealand Chronicle*, 26 February 1858: 2), but this could be a marketing ruse to imply he was a London-trained photographer. Photographer Arthur J Meluish was working in London during the 1850s, but no connection between him and William has been found. Information on where and when William became a photographer remains elusive.

In 1859, Emma and William placed adjacent advertisements in the newspaper (Fig. 6). Emma advertised that she had just arrived from Melbourne with guipure (lace) and patterns that could be purchased from Bridge Street, the same location as the Meluish studio (Nelson Examiner and New Zealand Chronicle, 26 February 1859: 2). It is possible that Emma assisted William in the studio and, as a side venture, sold haberdashery from there. One of the jobs that Emma might have done is hand colouring portraits, which the studio advertised that it did (Nelson Examiner and New Zealand Chronicle, 17 November 1858: 2). Colouring, along with retouching and finishing, was common and respectable work for women and many studios specifically advertised for female help (Evening Post, 13 March 1873: 3; Evening Post, 16 December 1876: 2; Auckland Star, 28 April 1879: 3; Skidmore 1996: 127). The Dunedin studio Clifford, Morris and Co advertised that Mrs Clifford (Janet, wife of one of the studio's owners Robert Clifford) and an assistant did the studio's tinting and hand colouring (Evening Star, 9 August 1873: 3) and Josiah Martin employed Miss Helen Stuart who earned a reputation for her photograph hand colouring in arts society exhibitions (Observer, 22 October 1881: 89; New Zealand Herald, 14 April 1886: 5).

In 1860, the Meluishes moved to Dunedin where William became one of the earliest professional photographers in the settlement, operating a studio on Princes Street. Photographic historian Hardwicke Knight described him as the "father of Dunedin photography" because of his important body of photographic views that record Dunedin's growth in the early 1860s (Knight 1981). William's negatives were taken over by Daniel Mundy when he purchased the studio in 1864. Frank A Coxhead then acquired the negatives and reprinted them as a series titled "Dunedin 1860". Other later studios that reprinted William's images include R Clifford, Burton Bros and Muir and Moodie.

There are clues in the Meluish studio's photographs of Dunedin that Emma had a role in the business. In one photograph that captures Princes Street looking south in 1863, Emma can be seen leaning out from the Meluish studio building off to the left side, shielding her eyes from the early afternoon sun to look at the photographer, presumably William (Figs 7A and 7B). In another Meluish photograph of Princes Street, Emma stands in the studio doorway on the left, gazing out. "PHOTOGRAPHIC PORTRAITS TAKEN DAILY" is written on the building to her left (Figs 8A and 8B). In a third photograph of the same view, a woman stands in the middle of Princes Street (in the middle of the image) with no one close by. Since there is no blurring suggesting movement, this isn't a woman crossing the street - she is standing still. Her dark dress with white collar is similar to the outfits worn by Emma in the other two



Figure 7. Princes Street, Dunedin. Meluish studio, 1863. Toitū Otago Settlers Museum Box 57 No 157. A, View down Princes Street with Meluish studio on the left. Reprint by the Burton Bros. studio B, Detail of Figure 7A showing Emma Meluish

photographs, suggesting that this is Emma again posing for her husband (Figs 9A and 9B).

There is no mention of Emma's contribution to William's business in newspapers or directories and if contemporary sources were relied upon, it would be easy to conclude that she might have had a minor role as an assistant to her husband, serving customers or possibly retouching photographs like Janet Clifford. However, newspaper articles reporting William's death in England in December 1888 reveal that Emma had an active role in the studio and took photographs. A write-up in the Otago Daily Times mentions that "Mrs Meluish was a most able assistant to her husband in his business, and took a very active part in it. They took many 'Old Dunedin' views, numbers of which are still great

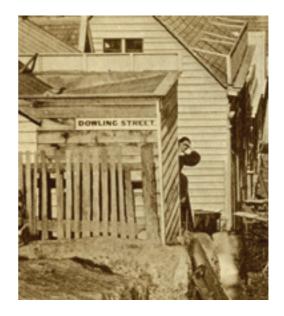
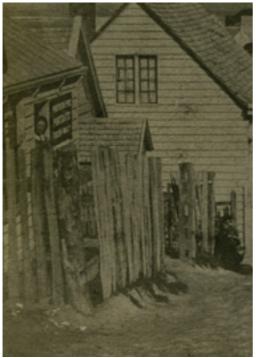




Figure 8. Princes Street, Dunedin. Meluish studio, undated. Toitū Otago Settlers Museum Box 57 No 146. A, View down Princes Street with Meluish studio on the left. **B**, Detail of Figure 8A showing Emma Meluish.



favourites of the public." (Otago Daily Times, 30 January 1889: 2). Similarly, the Tuapeka Times newspaper noted Emma's contribution: "To Mr and Mrs Meluish we are indebted to scenes of Dunedin in the days of the Gabriels Gully rush." (Tuapeka Times, 30 January 1889: 3). A third, lengthier article published in Dunedin's Evening Star repeated the sentiment of indebtedness to both William and Emma, but it went on to mention one of Emma's own photographic exploits:

Mrs Meluish, an active, business-like woman, assisted in the taking of photographs, and occasionally took a share of the outside work, one of her exploits being to tramp along the bullock track that led to Wickliffe Bay to photograph the remains of the Victory after the wreck had been purchased by Mr R B Martin (Evening Star, 29 January 1889: 2).



Figure 9. Princes Street, Dunedin. Meluish studio, undated. Toitū Otago Settlers Museum Box 57 No 179. A, View down Princes Street with Meluish studio on the left. B, Detail of Figure 9A, showing a woman who is likely to be Emma Meluish.

The steamer SS Victory ran ashore on the beach in Wickliffe Bay north of Dunedin on the night of 3 July 1861 and Martin purchased the wreck at the auction held on the 24th and 25th of that month (Otago Witness, 6 July 1861: 4; Otago Witness, 27 July 1861: 5). Emma probably took her photographs as soon as she could after Martin purchased it, probably in late July or early August, in order to take advantage of the commercial value of the photographs as a popular current event. Taking the photographs months later, once the shipwreck had passed from memory, would have been risky and not financially sound.

The article states that Emma journeyed out to Wickliffe Bay on the bullock track with no mention of William accompanying her. Wickliffe Bay is located towards the end of the Otago Peninsula, about 30 kilometres from central Dunedin. It is not known exactly how Emma made the journey other than tramping

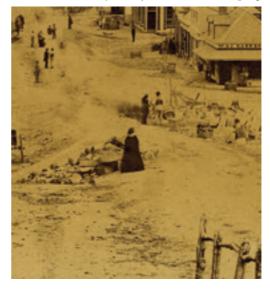




Figure 10. Alfred Charles Barker and his photography trap. Canterbury Museum 1944.78.220

along a track that led to Wickliffe Bay. A likely route and the quickest would have been by water from Dunedin to somewhere on the western side of the peninsula, possibly Portobello, then a bullock track over to the east side where the bay is located.3 Or it could have been a bullock track from Dunedin, travelling either along the top ridge of the peninsula (with a climb of 300 metres) or along the western coastline. No matter the route, in 1861 the peninsula was remote, rough terrain and whatever track she took would have been poorly developed. Travelling in winter had the advantage of being the driest time of the year and Emma possibly avoided the mud that plagued Dunedin (which was nicknamed "Mudedin"), but snow on the peninsula is always a possibility in late July and August.

Emma used the wet-plate collodion process to create negatives, which meant that as well as a large camera, lens and tripod, she had to transport fragile glass plates and bottles of chemicals to the site. The collodion process was labour intensive, requiring Emma to prepare a plate shortly before taking a photograph by coating it with collodion, then sensitising it in a silver nitrate bath. Once sensitised, the plate would need to be kept out of the light until the scene was composed. After exposure and before the collodion dried (usually within about 15 minutes), developer had to be poured on the plate, then the negative fixed, washed and dried (Lavédrine 2009: 242). To do all of this, Emma had to set up a darkroom on or very near the beach. Many nineteenthcentury photographers who worked away from

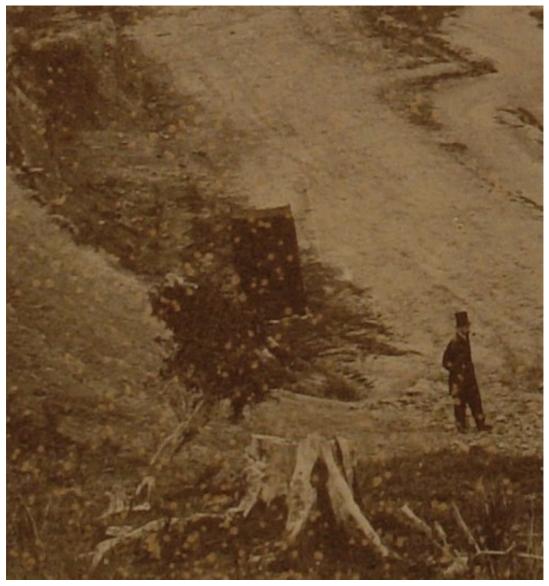


Figure 11. Detail of a photograph of Port Chalmers. Henry Frith's portable darkroom is the black box in the centre. Henry Frith (attributed). Toitū Otago Settlers Museum Box 83 No 130

their studios had specially-designed darkroom wagons that transported the required equipment plus a tent. Amateur photographer Alfred Charles Barker in Christchurch had one that became a familiar sight on the streets and was known as "The Travelling Medium" (Knight 1971: 30) (Fig. 10). Other photographers such as Henry Frith in Dunedin had square dark

room tents (Tozer 2018: 238) (Fig. 11). Some portable darkrooms were more modest still and comprised a folding table with a large bag attached that the photographer could insert their upper torso into to work (Woodward 1987: 11). Given the number of views of Dunedin and environs that the Meluish studio produced, it would have had some sort of portable darkroom



Figure 12. William Meluish. Toitū Otago Settlers Museum Meluish folio

for Emma to use.

The fact that Emma took the photographs at Wickliffe Bay by herself indicates that she was already a competent photographer in 1861,

accustomed to working in difficult conditions such as on a remote beach in winter and away from the more controlled and comfortable setting of the studio on Princes Street.

This suggests that she was probably taking photographs for quite some time and offers support to the suggestion that she assisted in the studio in Nelson or possibly back in England. Unfortunately, no photographs of the wreck of SS Victory from that period have been located.

Because photographs produced by the Meluish studio have been attributed to William (and no example of Emma's SS Victory photography has been found), it is impossible to pinpoint Emma's work. However, in a folio of Meluish photographs in the collection of Toitū Otago Settlers Museum, there is a portrait of William that Emma might have taken (Fig. 12). Any number of other Dunedin photographers could have taken the photograph, including William himself, but the carefully staged portrayal of William as a gold digger replete with loyal dog at his feet, was a complex composition requiring a competent photographer. Emma was an obvious and ideal choice.

In 1864, Daniel Mundy took over the studio and William established a business selling photographic goods and chemicals (Otago Daily Times, 27 April 1866). Emma and William left Dunedin to return to England in 1870. William died in London in 1888 and Emma in Bournemouth in 1915 (Otago Witness, 2 February 1916: 47).

Eliza Grey

So far, this paper has been concerned with defining a photographer as either an individual who operates a camera or a studio that produces photographs. Getting back to David Slater and the macaques and the muddy question of who is the photographer in that situation, a less conventional definition is that the photographer can be the author of a photograph rather than the camera operator. When photographic copyright laws emerged in the nineteenth century, the definition of a photograph's authorship - and therefore who owned the copyright - needed to be clarified. While the consensus was that the author was the photographer, alternative ideas emerged tied to widespread debates

about the nature of photography. Was it a mechanical process where no creativity existed (so no author), or was the person operating the camera akin to the author of a book? If it was an authorless, mechanical process, who then owned the copyright? Copyright historian Elena Cooper has found cases in England that appeared before the courts in the 1860s arguing that for portraits, the owner of the face was the author entitled to the copyright, especially for photographs of actors and actresses dressed in character (Cooper 2018: 183-189). If an accepted definition of a photographer is the author of an image, and in the nineteenth century the idea was entertained that the author and copyright holder of a portrait was the sitter, could New Zealand's first female photographer be Eliza Grey, who sat for one of the first recorded daguerreotypes taken in New Zealand?⁴ In September 1848, Lieutenant Edward Eyre made a failed attempt to take a daguerreotype of Eliza, the wife of Governor George Grey. Eyre's effort was recorded in a letter sent back to England, now in the Chapman Papers at the Alexander Turnbull Library (Ireland 2014). This definition of the sitter as author and therefore a type of photographer is tangential at best, but the suggestion that Eliza Grey was New Zealand's first female photographer opens up a new way of thinking about women and photography in New Zealand.

Conclusion

Was Elizabeth Pulman "quite possibly" New Zealand's first female professional photographer? No matter how you define photographer, the answer is no. The evidence shows that a number of other women can claim that title depending on the definition. Eliza Leaf was quite possibly the first professionally trained female photographer to immigrate to New Zealand (1862). Jane Smith was quite possibly the first woman to lend her name to a photographic studio (1864). Emma Melhuish was quite possibly the first female camera operator (1861). Eliza Grey was quite possibly the first author of a photograph (1848).

There might be other female photographers in New Zealand whose names have been lost or subsumed by a male family member known to be a photographer. The best that can be said about Elizabeth Pulman is that she was New Zealand's most well-known nineteenth-century female studio owner and possible photographer. Unfortunately, none of these "firsts" signify watershed moments that indicate a shift towards more women becoming photographers, and photography remained the purview of men throughout the nineteenth century. It wasn't until the end of the century and the arrival of technology by Kodak and others that enabled women as amateurs to take up photography in significant numbers. Chasing the "first" ignores the complexities of image making in the nineteenth century and the numerous roles women performed within professional studios. Moving away from a photographer or studiofocused approach will enable a richer history of New Zealand photography to be explored that will ultimately enable women's hidden contributions to be revealed.

Endnotes

- 1 The macaque selfie dispute has centred specifically on the issue of who owns the copyright, not who was the photographer. Because the role of photographer is profoundly tied to copyright law, it is relevant to this argument.
- 2 One of the earliest and most important histories of New Zealand Photography, *Hardwicke Knight's Photography in New Zealand: A Social and Technical History*, does not include any mention of the Pulman studio.
- 3 Correspondence with Seán Brosnahan, Toitū Otago Settlers Museum, 29 March 2021.
- 4 Not to be confused with Eliza Grey, a photographer in Thames in the 1870s. *Thames Advertiser*, 7 April 1867.

References

- Bishop C. 2019. Women Mean Business: Colonial Businesswomen in New Zealand. Dunedin: Otago University Press.
- Cooper E. 2018. Art and Modern Copyright: The Contested Image. Cambridge: Cambridge University Press.
- Eggleton D. 2006. *Into the Light: A History of New Zealand Photography*. Nelson: Craig Potton.
- Giles K. 2004. Is this New Zealand's first professional female photographer? Eliza Elizabeth Leaf 1819-1908. *Auckland Waikato Historical Journal* 83: 8–13.
- Giles K. 2007. Fairs and Steel: Their impact on Auckland photography. New Zealand Legacy 19: 8–12.
- Haley J. Forthcoming 2021. King Tāwhiao's photograph: Copyright, celebrity, and the commercial image in nineteenth-century New Zealand. In: Slauter W, Delamarie S, editors. Circulation and Control: Artistic Culture and Intellectual Property in the Nineteenth Century. Openbook Publishers.
- Hall K. 2019. *Hidden Light: Early Canterbury* and West Coast Photography. Christchurch: Christchurch Art Gallery Te Puna o Waiwhetū.
- Hall K and Pōhio N. Kanohi ki te kanohi / Face to face. Available from: https://christchurchartgallery. org.nz/blog/te-wheke/2020/04/kanohi-ki-tekanohi-face-to-face [cited 29 March 2021].
- Ireland P. 2014. Photography Early photography, 1840–1880s. Te Ara The encyclopedia of New Zealand. Available from: https://teara.govt.nz/en/zoomify/43200/trying-to-make-a-daguerreotype-1848 [cited 31 March 2021].
- Jackson PD. 1993. Pulman, Elizabeth. Te Ara The encyclopedia of New Zealand. Available from: https://teara.govt.nz/en/biographies/2p32/pulman-elizabeth [cited 24 March 2021].
- Knight H. 1971. *Photography in New Zealand: A Social and Technical History*. Dunedin: John McIndoe.
- Knight H. 1981. New Zealand Photographers: A Selection. Dunedin: Allied Press.

- Lavédrine B. 2009. Photographs of the Past: Process and Preservation. Los Angeles: The Getty Conservation Institute.
- Main W, Turner JB. 1993. New Zealand Photography from the 1840s to the Present. Auckland: PhotoForm Inc.
- McCredie A. 2015. New Zealand Photography Collected. Wellington: Te Papa Press.
- Ministry for Culture and Heritage. Elizabeth Pulman. Available from:https://nzhistory.govt. nz/keyword/famous-firsts [cited 24 March 2021].
- Skidmore C. 1996. Women workers in Notman's studio: 'Young ladies of the printing room'. History of Photography 20: 122–128.
- Tozer N. 2018. Snips & Snaps: The Friths, Nineteenthcentury Portraitists, Miniaturists, Caricaturists and Photographic Artists. Dangar NSW: Edmund and Alexander.
- Woodward J. 1987. A Canterbury Album: Collodion Photography in Canterbury 1857-1880. Christchurch: Te Waihora Press.