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AD and AI: A Cautionary Tale

Even the judicious use of artificial intelligence results in anomalies added to a historical photograph, *Bruce Christianson writes*

Figure 1 is a photograph[1] from 1878 showing early academic dress in Aotearoa New Zealand.[2] The years prior to digitization have not treated the photograph kindly, and so I decided to see if the judicious use of an AI tool could reverse some of the deterioration. The freeware tool I trialled works without prompts, by comparing the target photograph with a vast online archive of images, then altering it so as to more closely resemble the sharp versions of pictures which it regards as similar.

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The results were instructive. Figure 1A shows one of the more successful attempts: the AI has done a lovely job of removing the snow, but has given Ms Bolton's sleeve a cuff that is not actually present in the original photograph. This cuff resembles that of Loggan's foundation scholar, who is in a similar stance to Ms Bolton. Doubtless the inclusion in the reference archive of images such as those of Figure 2 persuaded the AI that this particular adjustment was authentic.

Other images produced by AI from alternative digitizations of the same target photograph were more startling: one image added velvet facings to some of the gowns; another turned one gown into an academic chimere, with the gown sleeves matched instead to the dress worn underneath; and in one spectacular case, the AI inserted a rolled-up scroll into Ms Grierson's left hand—presumably a degree certificate.

Inferring the true form of historic academic dress from AI-enhanced images that contain such artefacts will present a formidable problem for future researchers.

1 Photograph by Peter Schourup, from file copy neg E1073/30, Hocken Collections Uare Taoka o Hākena, University of Otago Otakou Whakaihu Waka.

2 Bruce Christianson, 'Inaugural Prescriptions of Academic Dress in Aotearoa New Zealand 1877–1879', *TBS*, 25 (2025), pp. 93-105.

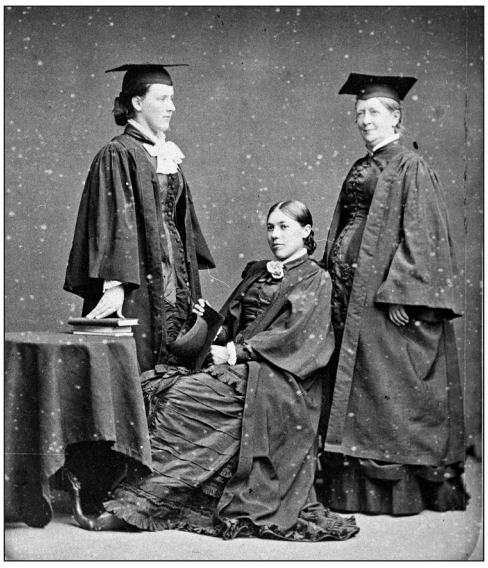


Fig. 1. Three Canterbury University College undergraduates wearing the College Gown in 1878: from left to right Mary Connon, Gertrude Hannah Grierson, Anne Jane Bolton.

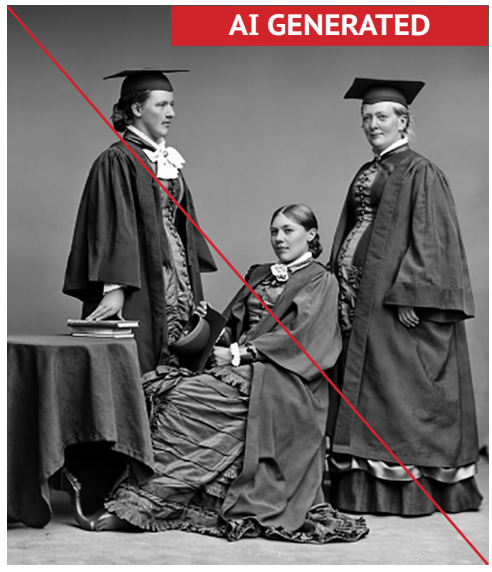


Fig. 1A. The same photograph enhanced by AI.

Fig. 2. Loggan's Oxford Scholar in 1675.



Collection of Dr Alex Kerr