

Contemporary photography, traditional materials, conservation issues: New Zealand artist Ben Cauchi

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The nineteenth century photographic processes ambrotype and tintype are used today by Ben Cauchi, a New Zealand contemporary artist, to explore ideas of memory, history and the history of photography itself. The Art Gallery of New South Wales (AGNSW) has collected a number of Cauchi's ambrotypes and tintypes.

This paper will look at Cauchi's use of the ambrotype and tintype processes, and consider the similarities and differences in his approach to these materials and techniques in contrast to those of nineteenth century photographers. The care of Cauchi's works in the AGNSW collection will be discussed and the importance of an ongoing dialogue with the artist will be considered in relation to both the AGNSW's approach and also the artist's use of materials.

Introduction

The Art Gallery of New South Wales (AGNSW) has collected a number of works by New Zealand contemporary artist Ben Cauchi who uses the nineteenth century photographic processes ambrotype and tintype to explore ideas of memory, history and the history of photography itself. The presence of these works in the AGNSW collection and the issues that have arisen with regard to their care have provided the opportunity to focus on gaining a greater understanding of Cauchi's approach to making and displaying his works and has at the same time highlighted interesting differences between Cauchi's use of these techniques and their use by nineteenth century photographers. These issues will be discussed and the importance of an ongoing dialogue with the artist will be considered in relation to both the AGNSW's approach and also the artist's use of materials.

Ben Cauchi

In an interview in 2009, the New Zealand artist Ben Cauchi said (McCulloch 2009, p. 106):

'I think there's a quality inherent in some of the early photographic processes that clicks for me. I like the idea of the perfect imperfection – photography's an imperfect medium, and this process really embraces that ... the tones, the foibles and slight randomness and serendipity'.

Ben Cauchi was speaking about the wet collodion processes, ambrotype and tintype, which he uses today to make artworks exploring ideas of memory, history and the history of photography itself. Born in 1974, Ben Cauchi completed an Advanced Diploma in Photography at Massey University in Wellington in 2000 (Darren Knight Gallery). Since that time, his work has become increasingly well known with Cauchi recently receiving the 2012 Creative New Zealand Berlin Visual Artists Residency, Künstlerhaus Bethanien, Berlin (Creative New Zealand 2012). His work is held in a number of Australian and New Zealand art collections. The AGNSW has nine works by Cauchi: six ambrotypes, one tintype and two chromogenic photographs.

Cauchi chooses to work with and manipulate historic photographic techniques both because they are historic photographic techniques and because of the material and aesthetic qualities that they bring to his work. Lister (2005) argues that,

'... by invoking the historical, Cauchi explores contemporary ways of looking at and responding to photography. These photographs may be set in the darkened spaces of the studio, but they operate in a much murkier realm between the contemporary and the historical, the gallery and the museum, the authentic and the fake'.

Wet collodion photography

A preliminary examination of nineteenth century photography manuals reveals the excitement and enthusiasm associated with the beginnings of photography. In 1858 Nathan Burgess wrote in the fourth edition of his book *The photograph and ambrotype manual* (1858, p. 3):

‘It may not be inappropriate at the present time to refer to the progress of this wonderful art, since its first advent in 1839, and to note its tendencies and its effects, to trace its leading features and results up to its present high position in the scientific world; and, finally, to mark out the commanding results which it is destined yet to achieve in its onward progress to perfection’.

The popularity of photography and the technical and scientific interest it generated in the nineteenth century pushed the development of the medium and the development of the photography industry. The industry had grown so rapidly since 1839 that by 1858 Burgess (1858, p. 5) noted that,

‘The Photographic Art has become of such importance in this country, that many persons have embarked large amounts of capital in the manufacture of materials for the use of the photographic artist. The inducement has been fully warranted from the fact that all these persons who have invested in this branch of commerce have been fully rewarded’.

In this entrepreneurial atmosphere, developments in techniques and the invention of new processes were continual as better, faster, cheaper means of producing images became available. As a result, the ambrotype and tintype processes, while popular for a period, became outmoded in their turn. The wet collodion process was, after all, constrained by a number of issues. One was that long exposure times were required. A three-minute exposure was usual but much longer times could be required depending on the light and conditions. This meant, for portraits, that subjects were often arranged so they had a table or other prop to lean on and head rests were also used (Humphrey 1857, p. 33) to help the person stay still for the required amount of time.

Another issue was that the plate had to be exposed, and then developed, while the collodion was still wet, hence the name wet collodion, limiting the photographer to either working very close to the darkroom, or travelling with a portable darkroom. Towler (1866, p. 149) describes the use of darkroom tents for the purpose of landscape photography. Ambrotypes and tintypes were also unique images since the glass or metal plate exposed in the camera was the photograph once fully processed. This meant in the long run that these processes were superseded as the use of glass plate negatives to reproduce images on paper became more viable and more profitable.

There was also considerable margin for technical errors when using these photographic processes. *The photograph and ambrotype manual* (Burgess 1858, p. 194), for example, contains

numerous trouble-shooting tips to help photographers avoid imperfections and improve the technical quality of their work. Interestingly, the imperfections and limitations that a nineteenth-century photographer strove to eliminate from images are the very type of imperfections and limitations that Ben Cauchi deliberately cultivates to create his images, which have a ghostly and ethereal quality that could not be achieved using contemporary photographic techniques. Harvey (2006, p. 57) has noted that, ‘Cauchi’s sumptuous photographs capture distinctive characteristics of the ambrotype, such as oystering around the edges, “comets” in the emulsion and areas where no image has formed. These small irregularities point to the risks inherent in pre-industrial photographic techniques – Cauchi’s ability to capture the image is no sure thing’.

Materials and techniques

Ambrotypes and tintypes are both wet collodion photographic processes. Collodion is poured onto a scrupulously clean glass plate (or iron plate for nineteenth century tintypes). It is then sensitised in a bath of silver nitrate. Before the collodion dries the plate is put in a plate holder and into the camera and exposed. The exposed plate is then developed and fixed. The image surface, when dry, is often coated with a varnish layer, and hand-colouring is sometimes applied as well. The image on the glass plate (ambrotype) appears negative if held against a white background but appears positive against a black background. For this reason a black varnish coating is put onto the reverse of the ambrotype, or a black paper or fabric backing sheet can also be used. For the tintype the dark colour of the japanned iron plate serves the same purpose as the varnish or backing paper so the image appears positive.

The essential process that Cauchi uses is the same as in the nineteenth century. Cauchi does, however, use some modern materials where this suits his purpose. He has used both glass and Perspex as supports for his ambrotypes and uses black aluminium supports for his tintypes. Recently, Cauchi has had an extra large camera made and has been making much larger ambrotypes than previously. For these large works the Perspex bows too much and so he has had to use glass supports. The varnish coating Cauchi uses for his works is an acrylic varnish, Pebeo superfine picture varnish (Ben Cauchi 2012, email, 19 April).

Cauchi has described the wet collodion process as ‘a mucky and noxious one by today’s standards; it’s also a very manual process and the nature of the various liquid solutions, even down to how a solution is poured across the plate, plays a major role in the final appearance of the image. In essence, it’s a fairly straightforward process, although there are many things that can (and sometimes do) go wrong at each stage’. (Ben Cauchi 2011, email, 18 July)

A close examination of some of Cauchi’s ambrotypes reveals the made quality of these photographs. Up close, spots and marks and tide lines are evident. These elements are artefacts of the process

that have been deliberately created by Cauchi. On a work like *Reverse self portrait* (Figure 1) it is possible to see black patches at the corners because there is no emulsion layer (Ben Cauchi 2011, email, 26 September), which means that the black varnish on the reverse is visible straight through the glass. There are also small black spots scattered over the image caused by droplets of water deliberately sprinkled on the plate by Cauchi directly prior to exposure and white marks on and around the back of the head of the figure also created by Cauchi when he sprinkled dust onto the plate prior to exposure (Ben Cauchi 2011, email, 26 September). With regard to these ‘imperfections’ Cauchi has commented that, ‘I was trying to create a sense of a “happening” and I had been experimenting with different techniques of getting more control over the marks on the plates so they weren’t so random’ (Ben Cauchi 2011, email, 26 September). There are also drip marks at the bottom right corner of this plate that Cauchi (2011, email, 26 September) has identified as,

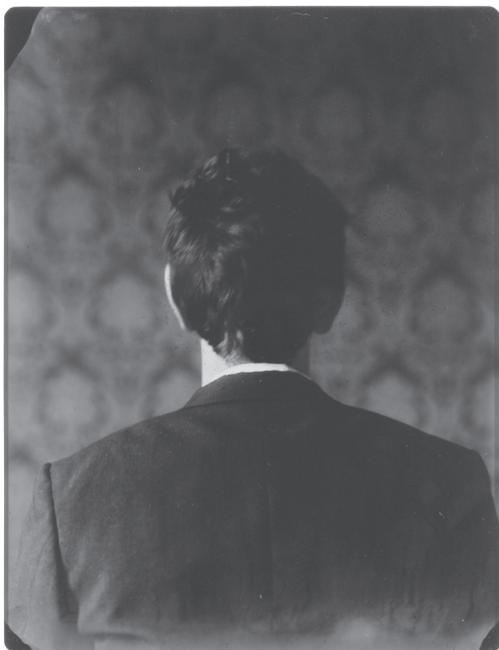


Figure 1 – Ben Cauchi, ‘Reverse self portrait’ 2006. Ambrotype, 41.5 x 35 cm, Art Gallery of New South Wales. Gift of Henry Ergas 2009. Donated through the Australian Government’s Cultural Gifts Program. © The artist. Photographed by Felicity Jenkins.

‘... beading up of the developer at the start of rinsing the developer off ... the developer is poured across the plate and stays on the plate for about 15–20 seconds before being rinsed off. It takes a few seconds of rinsing under a steady stream of water from a hose for the developing action to stop. I usually swirl the hose over the plate and allow various areas to keep developing (like the bottom of this plate) – the consequence of that is you sometimes get these patches where some of the developer has remained a few seconds longer and continued to develop fairly randomly’.

Similar technical imperfections are evident on *The start of it all* (Figure 2). The incomplete and uneven nature of the collodion

layer is evident in the drip-like marks at the bottom right corner and the uneven application of the developer is evident at the bottom left corner. A transmitted-light image of this work (Figure 3) shows the brush marks in the black glass paint on the reverse. Cauchi varnishes all of his ambrotypes and tintypes with ‘... a gloss acrylic varnish that is poured on and drained off the plate in much the same way as the collodion ... If the plate is left unvarnished it is likely to tarnish rather quickly, and is very easily scratched’. (Ben Cauchi 2012, email, 5 March)



Figure 2 – Ben Cauchi, ‘The start of it all’ 2008. Ambrotype, 43 x 36 cm, Art Gallery of New South Wales. Gift of QBE Insurance (Australia) Ltd 2009. © The artist. Photographed by Felicity Jenkins.



Figure 3 – Transmitted-light image of Ben Cauchi, ‘The start of it all’ 2008. Ambrotype, 43 x 36 cm, Art Gallery of New South Wales. Gift of QBE Insurance (Australia) Ltd 2009. © The artist. Photographed by Felicity Jenkins.

While Cauchi deliberately adulterates the process to achieve different visual results this does not mean that he always knows what the outcome will be. Cauchi (2011, email, 26 September) has commented that,

'The self-portrait with a spot on the hand [*Self-portrait as Prophet, 2005* (Ambrotype, 240 x 200 mm)] is one of those serendipitous moments – a piece of detritus landing on the surface of the plate between sensitising and developing, which caused a comet, fortunately just in the right spot. For me, this is one of those special plates when the defects of the process really adds something. A gift'.

Mounting and framing

Cauchi's ambrotypes and tintypes in the AGNSW collection were acquired already mounted using one of two methods. *Reverse self portrait* (Figure 1) is secured into a sink mount with a broad inner slip or mount made from medium density fibreboard that has been spray-painted white to match the spray-painted white timber frame. While the appearance of the frame and wide slip brings to mind nineteenth century ambrotype cases and frames, the white spray-painted surface highlights the contemporary nature of the work. Two other ambrotypes and a tintype have also been mounted and framed in this manner.

The other method of mounting and framing used by Cauchi for *The start of it all* (Figure 2), and two other ambrotypes in the AGNSW collection, involves the use of black-painted copper clips. The clips, screwed with one screw per clip to the back of an auxiliary support, wrap around the edges of the glass plate holding it in position. The work is then fixed into a plain white-painted box frame with screws through the backboard and into the auxiliary support. Double-sided tape has also been used between the two parts, presumably to hold them in position while being screwed together. Cauchi likes the fact that, using this method of mounting, it is possible to see the entire glass sheet.

In 2010 five ambrotypes framed using the clips were acquired by the AGNSW but upon arrival at the AGNSW it was found that two of the works had been irreparably damaged in transit. The works had been framed and packed in padded boxes and then secured inside another outer box. Upon examination it was determined that the method of securing the works into their frames, combined with a chance accident in which the box containing the works must have been dropped on its corner, had led to the damage. While the two works were broken beyond repair, the other three works suffered only minor damage. For these works, the clips had all pivoted on their screw allowing the glass ambrotype plates to shift position. This caused some abrasion and flaking of the glass and black glass paint at the clip positions. As a direct result of a few such incidents around this time Cauchi began using Perspex supports for his ambrotypes (Ben Cauchi 2010, email, 11 March). He also began to rethink his approach to the transportation of

his works and decided, after discussions with his framer, that henceforth the works should always travel flat and face up if framed with the clips (Ben Cauchi 2010, email, 11 March).

Cauchi has also refined other approaches to the framing of his works to ensure they are safer. For glass plates, Cauchi's framer makes '... an enclosure (museum glass, thin spacer, plate – varnish side up, backing card ... all sealed with bookbinding cloth) that can then be simply framed with a moulding to the edge of the enclosure' (Ben Cauchi 2012, email, 5 March). For the Perspex plates, the framer either uses this method or they are float mounted. For float mounting, mount-board strips are adhered to the reverse of the black Perspex with Lascaux 360HV water-soluble acrylic adhesive ADH10 (Paul Craig 2012, email, 3 April). The strips are then adhered with hot-melt adhesive to the backing board which is 'either painted customwood or museum board' (Paul Craig 2012, email, 3 April). Cauchi is happy with this framing option for the Perspex ambrotypes, as he likes to be able to '... show the full plate – that "object" fetish' (Ben Cauchi 2012, email, 5 March).

While Cauchi still likes the idea of the clips, which allow the whole glass plate to be visible, he has not yet spent the time to work out how to modify this method of framing to make it safer. At the AGNSW, the three ambrotypes framed floating with the copper clips all have a number of issues. While changing the method of framing altogether is an option, it is the AGNSW's and the artist's preference to modify the existing framing method for these works to ensure that it provides adequate protection without changing the appearance of the works. To minimise the risk of further abrasion and flaking of the surface of the glass, and of the black glass paint on the reverse of the plate (see the bottom edge of Figure 3), the AGNSW plans to add more screws so that there are two screws securing each copper clip into place. The copper clips will also be lined with self-adhesive felt strips to reduce the risk of further abrasion. The screws will not be visible when the work is framed and the felt is dark in colour and not noticeable. The problem of how to consolidate the already abraded glass surface without adversely effecting the collodion emulsion layer or the acrylic varnish is one that the AGNSW objects conservators are still considering.

One final issue is the double-sided tape used between the auxiliary support and the backboard. The tape makes it quite difficult to take the work out of its frame since the copper clips can only be unscrewed once the auxiliary support has been completely removed from the frame backboard. The presence of the tape means that even after the screws are removed a spatula must be inserted to separate the auxiliary support from the backboard resulting in some flexing of the parts, albeit minor. For this reason, the AGNSW plans to remove the double-sided tape from the auxiliary support and backboard, or insert a barrier layer.

Talking to the artist

The opportunity to speak with Ben Cauchi and exchange emails over the last few years has made it possible to gain a greater understanding of his work and his approach to making and displaying his photographs. Contact was first made with Cauchi in early 2010 after the two works mentioned earlier had broken in transit. Email discussions revolved around the various issues associated with the clip method of framing. Cauchi was interested in the suggestions the AGNSW put forward regarding modifications to the clip framing method as he was keen to ensure that no further works were broken. It was at this stage that Cauchi mentioned that he had started using Perspex for ambrotypes for fear of further glass breakages. It was useful for the AGNSW to get a sense of how Cauchi thought about the framing of his works as this clarified the importance of retaining the existing method of framing, which allowed the full sheet of glass to be viewed.

Subsequently, when the white marks on *Reverse self portrait* (Figure 1) were first noted in 2011 there was some concern that these marks were not original, as they could not be seen in the images on the AGNSW collection database. Once again the artist was contacted in the hope that he might be able to clarify the cause of these marks. Cauchi immediately emailed his own documentation image of this work that he had taken at the time the work was made. It clearly showed the marks and furthermore Cauchi was able to explain their origin. It was particularly important to confirm with the artist that the marks were deliberate and original to rule out the possibility that the marks represented some form of deterioration.

This led to further dialogue about the making of these works and gradually the extent to which Cauchi deliberately adulterates the wet collodion process to make his photographs became clear. Subsequent discussions with Cauchi about his use of materials and his mounting and framing techniques have made it possible to understand a little better the path Cauchi takes between the historical and the contemporary. This has provided an opportunity to think about the ways in which his work is both similar and different to nineteenth century photography practice. While the photographic processes Cauchi uses are the same, his purpose in using these processes and his manipulation of the processes is quite different, resulting in artworks that reference nineteenth century photography but are not limited by this reference.

Conclusion

The issues that have arisen in relation to the care of Ben Cauchi's work in the AGNSW collection have provided an opportunity to examine his work in some detail. The opportunity to speak to the artist about these issues has made it possible to gain a greater understanding of how the works were made and of the artist's approach to their care and display. In addition, the materials and techniques Cauchi has used, and the associated

connections with nineteenth century photographic practice, have provided an opportunity to consider these artworks in relation to the early history of photography. This connection enhances our understanding of Cauchi's work and also sheds some small light on the use of photography in the nineteenth century.

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References

- Burgess, Nathan G, 1858, *The photograph and ambrotype manual: a practical treatise on the art of taking positive and negative photographs on paper and glass, commonly known as photography, in all its branches; containing all the various recipes practiced by the most successful operators in the United States*, 4th edition, Wiley & Halsted, New York; Trubner, London, viewed 30 March 2012, <<http://archive.org/stream/photographambrot00burguoft#page/n5/mode/2up>>
- Creative New Zealand 2012, *Photographer awarded the 2012 Creative New Zealand Berlin Visual Artists Residency at the Künstlerhaus Bethanien in Berlin*, media release, 17 February 2012, Arts Council of New Zealand Toi Aotearoa, viewed 26 March 2012, <<http://www.creativenz.govt.nz/en/news/photographer-awardedthe-2012-creative-new-zealand-berlin-visual-artists-residency-at-the-kunsterhaus-bethanien-in-berlin>>
- Darren Knight Gallery, *Ben Cauchi biography*, Darren Knight Gallery, viewed 26 March 2012, <www.darrenknightgallery.com/artists/Cauchi/CauchiBiography.php>
- Harvey, Ruth, 2006, 'Fact or fiction? The photographic illusions of Bill Culbert & Ben Cauchi', *Art New Zealand*, vol.119 (Winter), pp. 54–57, 87
- Humphrey, Samuel Dwight, 1857, *A practical manual of the collodion process, giving in detail a method for producing positive and negative pictures on glass and paper. Ambrotypes. printing process*, Humphrey's journal print, New York, viewed 26 April 2012, <<http://archive.org/stream/practicalmanualo00hump rich#page/6/mode/2up>>
- Lister, Aaron, 2005, 'An offer of questionable intent, catalogue essay for the exhibition *Smoke and Mirrors*, Aratoi, Masterton
- McCulloch, Amber, 2009, 'Ben Cauchi', *Art World*, Feb/March 2009, pp. 106–109
- Towler, John, 1866, *The negative and print, or, The photographer's guide in the gallery and in the field: being a text-book for the operator and amateur, containing brief and concise instructions*

for the preparation of the different kinds of photographs now in vogue. Such as the ordinary negative for contact printing, the solar negative and the negative for the copying camera, printing on albumen paper, vignette printing, printing positives on opal or plain glass, the ambrotype, ferrotype, melainotype etc., stereographic printing, the dry process, the construction of the glass-house, the camera and the lens, and the treatment of the gold and silver residues, JH Ladd, New York, viewed 26 April 2012, <<http://archive.org/stream/negativeprintorp00towluoft#page/n11/mode/2up>>

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