The Black Art

Silver stains posed social problems – and created health hazards – for the 19th-century photographer. A commentary on a cartoon . . .

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The cartoons and caricatures about photography in 19th-century periodicals are a much neglected source of information concerning the history of the medium. They hold, in doubly distilled form (in both sketch and caption), a rare glimpse into the idiosyncrasies, foibles, attitudes, as well as the problems and perils, besetting early photographers. A typical example of a photographic cartoon holding a wealth of information, once unraveled, is: "A Photographic Positive" published in 1853.*1* It was drawn by Cuthbert Bede, a pseudonym for a literary clerical gentleman, Rev. Edward Bradley*2* (1827-1889), who was one of the earliest, and best, humorists to lampoon the new art of photography. One of the classics of 19th-century photographic literature is his Photographic Pleasures, Popularly Portrayed with Pen and Pencil*3* which was first published in 1855 – and contained the cartoon "A Photographic Positive" in a slightly modified form.

The cartoon depicts a mother and a daughter, with smudged face, requesting help from a photographic chemist. Unless the dark stains, caused by splashes of silver nitrate, are removed the daughter "will not be fit to be seen at Lady Mayfair's tonight." The chemist removes the stains from the young lady's face with potassium cyanide. A happy ending – although other sufferers from the same malady were not so lucky, as we will see. This is one of the few photographic cartoons in which the individual is identified. Cuthbert Bede wrote*4* that the young lady's name was Miss Hussey Pache and that she was the niece of a Mr. J. M. Heathcote who, said Bede, "was one of the first among photographers."*5*

Cuthbert Bede also commented about the cartoon: "The incident really occurred to her." And, he might have added, it also occurred to thousands of other photographers throughout the 19th century. Silver nitrate stains were the stigma, the instantly identifiable marks of the photographer.

The problem was rife for two reasons. First, silver nitrate was an essential ingredient in practically all the common photographic processes (except the daguerreotype). Both the calotype and collodion negative had to be sensitized, or "excited" as the step was called, in silver nitrate by the photographer immediately prior to exposure. In addition, albumen paper had to be sensitized with silver nitrate before prints could be made from

the negative. Hence, this solution was found in every photographer's darkroom or traveling kit. Second, the silver nitrate solution is a clear liquid, indistinguishable in appearance from water. However, hands or faces splashed with the solution rapidly darkened under the action of light, producing disfiguring and difficult to remove black stains.

Perhaps the anonymous author of "Perils of the Fine Arts," published in 1861, based these verses on Bede's cartoon. A photographer notices that his wife's face is black and exclaims:

Good gracious, Julia! wretched girl,
What horror do I see?
What frantic fiend has wrought the deed
That rends your charms from me?
What fiend, I ask, in human mask
Has dared to black your face?

The photographer continues to describe his wife's fair countenance and the havoc to her features caused by the "bruises." He swears revenge on the perpetrator:

Revenge, I say! yet hold, no rape;
I will be calm, sweet wife. . .
Calm . . . icy calm. Speak, woman, speak
That I may have his life!
"Who did the deed? Oh! George, 'twas you.
Nay, dearest, do not shrink;
This face and chin . . I've wash'd it in
Your Photographic Ink!"

The "Photographic Ink" was, of course, the silver nitrate solution, and the reason why the term the "black art" was applied to photography throughout the collodion period. But it was not only hands and faces which were stained black by silver nitrate. A photographic outcast in the 19th century was the messy wet-plate operator who spilled chemicals over clothes, carpets, and furniture. Many hotels refused to give lodging to itinerant portraitists or traveling landscapists; as soon as landlords spotted a tripod in the luggage of prospective guests, all rooms were conveniently taken. One writer, under the heading "Cleanliness is next to Godliness," suggested that "Justices of the Peace be empowered to grant licenses, on the applicants proving their fitness, by bringing all necessary materials to the Justice's house, converting his library into a darkroom, and taking at least six good collodion pictures without making a spot, the police being instructed to put in jail any photographer traveling without a license."*6*

The alternative was that notices would appear at the entrance to every village: “All vagrants and photographers entering the village will be prosecuted with the utmost rigor of the law.” One writer, reminiscing about the wet-plate era, stated that:

*Not long ago, all churches and cathedrals were closed to photographers, because they used to allow the silver stains (from wet-plates) to drop from their dark slides on to the marble pavements. If amateur photographers turn their lodgings into darkrooms, no respectable landlady will admit them into her house.*7

Nor would Queen Victoria. As soon as dry-plates were practical, photographers were forbidden to operate the wet-plate process in any of her palaces or stately homes, even though the Queen herself was an enthusiastic photographer and collector.

Silver nitrate solution also caused problems of a more personal nature. The clear liquid was often confused by the unwary, or merely careless, photographer with water or gin. However, silver nitrate poisoning rarely killed photographers; it was not a virulent enough poison to be ingested by the suicidal and its effects could be counteracted to some degree in the event of accidental swallowing by the recommended antidotes of drinking albumen, starch paste, milk of magnesia or a good dose of salt water. The fatalities attributed to silver nitrate were usually to the non-photographer.

A typical story, with comic overtones, concerned the Abbe Salvy, vicar of a small town in France, who was an enthusiastic photographer. He was transferred to a new parish and asked three of the locals to help move his furniture. The Abbe placed some bottles of cider in the wagon to refresh the men on their journey. He also placed in the wagon a smaller bottle, well-covered and tied up, which he told them they must not touch. The day was hot. . .

“That must be right good stuff, which the curé told us not to touch.” “No doubt,” replied another, “it must be far better than the cider.” “Let us try it,” said all three. The bottle was produced. The man who took a good sup said it was not good. “See,” said he, handing it to one of his companions. The second tried, and pronounced a still more unfavorable opinion. “As it is so bad,” said the third, “I shall not have any, let us put back the bottle.” Scarcely was this done than the two who partook of the liquid fell on the ground writhing in dreadful agony. In a short time both were dead.*8*

Although this story purportedly refers to silver nitrate, it is much more likely that the small bottle contained deadly potassium cyanide, another stable ingredient of the 19th-century darkroom.

Not all the stories about silver nitrate in the 19th-century press dwelt on its inconveniences and tragedies. The solution also had its positive effects – and bizarre uses. Photographers with holes in their socks, pants or coats had a handy remedy. They would coat the underlying skin with silver nitrate in order that the black stain would

render the hole less noticeable. But the most common application was to confound the ignorant. A popular story among 19th-century photographers was the image seeking adventurer in Africa who was captured by natives. The situation looked dangerous. But with admirable presence of mind, he noticed that the chief had a gray beard. He washed the chief's hair in "water" which was in fact silver nitrate, and in a few minutes the beard was black again. The photographer was hailed as a miracle-worker and set free.

A typical report, with less dire consequences for failure, was published under the heading "Photography in Raratonga" in 1872.

Amongst other civilizations the missionaries have introduced photography, to the no small marvel of the natives. My white-bearded friend laughed loud and long when he was told that his beard would return to its pristine blackness on being dipped into that shallow dish of clear transparent fluid. He tried it, however, and the missionary was exalted into the seventh heaven of conjurordom.*9*

It was not necessary for photographers to travel overseas in order to find customers who were delighted with the "magic" of silver nitrate. Back-street operators in "low dens" who catered to the poor found ready customers for a silver nitrate treatment if not a portrait. One of the classics of 19th-century social reporting*10* describes such a studio and notes that for one shilling customers could have their whiskers and moustaches dyed. Of course, if the photographer was careless the silver nitrate solution dropped onto the skin, and this too was stained black. No problem, soothed the photographer, the stains could be removed (with potassium cyanide) for an extra three pennies.

Apart from hair dyeing, enterprising photographers also undertook the removal of corns and warts, using silver nitrate "Which has enjoyed a monopoly for this purpose."*11* F. B. Gage, an experienced American photographer, claimed that silver nitrate had cured his chronic bronchitis!*12* This solution was applied to his throat with a brush. Although this relieved the pain, after a few days the coagulated surface would slough off and the inflammation would begin again. The answer, he found, was to coat the throat with silver iodide – which not only gave temporary relief but the iodine began to cure the inflamed membranes of the throat.

My personal favorites among 19th-century silver nitrate stories are those which contain the spice of love and jealousy. Take the case of H. Thiebaut:

H. Thiebaut was a photographer – and a ladies man. His wife objected to his adulterous liasons and her actions led to a scandalous court case in Versailles in 1860. "It is a long tale of love, jealousy, infidelity, and vengeance," said a reporter.*13* The wife was charged with disfiguring her husband's mistress with photographic chemicals. She admitted that she had been in the habit of carrying a bottle of silver nitrate in her pocket for the purpose of disfiguring her rival. When she learnt that this would blacken the skin,

but little more, she switched to a more serious solution. “She subsequently threw a quantity of sulphuric acid over her, and beat her severely with a stick.”

Perhaps the most famous love affair blighted by silver nitrate was the fictitious “Ballad of Billy Baker.”*14* William Baker, “carte-de-visite taker,” falls in love with one of his sitters, Jemima Jenkins. She spurns Billy’s love. When Jemima rejects the photographer with: “Take such black paws as those with heart that’s just as black, for anything I know,” she struck a cruel blow at every 19th-century photographer’s weak spot. Billy is so dejected he decides to commit suicide; he bungles yet again and drinks hypo instead of the deadly potassium cyanide. The lesson was learned: never again would he flirt in his studio.

The cyanide which Billy intended to imbibe was also a common solution in 19th-century darkrooms, for two reasons. It was used as a fixing agent for collodion plates – and also as a silver nitrate stain remover.

The Punch cartoon caption has a postscript: “Mr. Squills administers relief to the fair sufferer, in the shape of Cyanide of Potassium.” This treatment was so common, in spite of its dangers, that it is a wonder that photographers and their customers were not dropping dead with even greater frequency. Photographers had the habit of rubbing their fingers with solid lumps of cyanide at the end of each day’s work. Although risky, “photographers do it every day,” claimed The Photographic News before reporting the death of yet another photographer.*15* He had no apparent cut on his hands so proceeded to remove the black silver with a lump of cyanide. A little piece of the lump chipped off and pushed under his fingernail where it broke the skin. He died in a few hours.

In spite of constant warnings that cyanide could be absorbed through the skin, photographers continued to rub their hands in the solution. Usually they escaped harm; often they suffered badly.

Cyanide sores on the hands were a common complaint of photographers, who lamented their blisters and the itchy pain “so intolerable that no words can describe the torture, which could only be borne by keeping both hands in cold water.”*16*

In spite of its dangers, cyanide remained the accepted treatment for silver nitrate stains from the case of Miss Hussey Pache, recorded for us by Cuthbert Bede, until the demise of the collodion process in the early 1880s.

References

1. Punch, 30 July 1853

2. Rev. Edward Bradley, as well as being an active vicar in the Church of England, wrote a score of books and hundreds of articles on a wide range of subject matter under his nom de plume, Cuthbert Bede, adopted from the two patron saints of his university town of Durham, England. His most popular success was The Adventures of Mr. Verdant Green, 1853, which sold well over 200,000 copies.

3. Photographic Pleasures was reprinted in 1857 and again, in a smaller-format, cheaper edition in 1864.

4. This information occurs in a letter from Bede, dated 28 March 1879, which turned up in a Sotheby-Park Bernet auction, held in New York, 23 September 1975. The contents of this letter were revealed by B. A. and H. K. Henisch in History of Photography, Volume 1, Number 3, July 1977, pp. 213-214. The authors thank Mr. Howard C. Daitz for making the Bede letter available to them.

5. J. M. Heathcote might have been "one of the first" among photographers in 1853 but nothing is known of his work today.

6. The Photographic Journal, 15 March 1859, p. 75.

7. The Amateur Photographer, 7 June 1901, p. 450.

8. The Photographic News, 10 July 1868, p. 335.

9. The British Journal of Photography, 5 July 1872, p. 322. Quoted from South Sea Bubbles.

10. London Labour and the London Poor, Henry Hayhew, Enlarged edition, 4 vols., London 1861-62. Vol. 3, pp. 204-210.

11. The British Journal of Photography, 5 August 1870, p. 369. The item continued that silver nitrate "appears to be on the wane" for this purpose. The new treatment was dichloracetic acid, applied with a sharp point of glass, and "great caution ought to be observed . . . as it (the acid) will eat a deep hole in the flesh."

12. The Photographic News, 2 February 1872, pp. 50-51.

13. The Photographic News, 7 December 1860, p. 384.

14. "The Ballad of Billy Baker" was originally intended to be sung to the tune of "One-horse Shay." This song was composed by Oliver Wendell Holmes, of stereoscopic viewer fame, and became an immensely popular lyric on both sides of the Atlantic.

The unidentified author of "Billy Baker" rewrote the lyrics for singing at a photographic convention in 1867. The complete verses were first published in The British Journal of Photography, 7 February 1868, p. 66.

15. The Photographic News, 22 October 1875, p. 505.

16. American Journal of Photography; quoted in The Photographic News, 12 October 1866, p. 487.

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