

By the Light of a Putrid Haddock

Bill Jay

I was attending a slide show of contemporary photographs recently when three images were projected which gave me food for thought. You must wait for the pun. The first was by Robert Heinecken and depicted a photogram of his breakfast. He had placed the egg, bacon, hash browns, etc., directly onto a piece of photographic paper and exposed it to light. The cooking oil produced some interesting effects in the processing chemicals. Next was a picture by Jack Sal, who made a considerable reputation a short time ago by spreading crackers on photographic paper left outside in the sun for hours, sometimes days. The crumbs were equivalent to stars in a night sky, or something. Third was a slide of a bedspread made from slices of toast on a sheet sensitised by the cyanotype process. The photograph was by Ellen Manchester, I believe. It was difficult to tell what any of these slides represented until the lecturer told us.

A woman in the audience, evidently not an art photographer, politely asked why these people had used such silly subjects for their unintelligible pictures. It was a good (at least interesting) question, but it was laughed at by the other members of the audience, evidently artists. The lecturer good-naturedly asked why a rasher of bacon was “sillier” than Fox Talbot’s lace or plants; why a cracker was “sillier” than Man Ray’s gyroscope. Touché! The woman responded with: “I don’t know why, but they just are!” which had the audience in stitches. I laughed, too. But on reflection I think the woman was right: some things, in certain contexts, are sillier than others.

“Silly” subjects are not the prerogative of contemporary photographers. They have occurred at frequent intervals throughout the medium’s history. For example, Heinecken’s bacon cannot compare to the photographer in 1882 who proudly announced that he had succeeded in producing a photograph by the light emitted from a putrid haddock.¹ It was irrelevant that the viewer found it was “difficult to discover what it was intended to represent.” The reviewer of this startling discovery was careful not to be derogatory because “possibly ... we have here the germs of some great discovery which in the dim future may enable us to utilise the hitherto wasted light that is produced by decaying animal matter.” I re-offer the idea as my contribution to the world’s energy shortage.

Putrid haddocks did not replace carbon-arc lamps or burning magnesium in the photographic studio. But 20 years later, indefatigable researchers were still working on the problem. A Professor Gorham of Brown University announced in 1901 that he had succeeded in extracting from decayed beef sufficient illumination to take photographs

of the laboratory apparatus.² Gorham was seeking to obtain artificial light without heat, “and believes he is on the right track.” Nothing more was heard of beef-steak pictures.

In 1910 Dr Lazarus-Barton, director of the Cancer Research Laboratory at the Middlesex Hospital, announced that he had made photographs by the light emitted from liver. He even gave the process a name: skotographs.³ Lazarus-Barton used all sorts of animal tissue in his work, but the most powerful lighting seems to have been produced by an extract of sheep’s liver, which “will produce a picture at a distance of as much as 15 millimetres from the plate.” That might be a considerable distance for Dr L-B, but not quite enough to make portraits with a plate of liver alongside the face.

Research into this rather specialised area of photography was also being pursued in France. At a “seance” at the Paris Academy of Science in 1896 it was reported that the light emitted by glow-worms would penetrate black paper and affect a dry plate.⁴ Such hard scientific data, however, did not help the photographer, E.F. Johns, when he was prosecuted in 1900 for riding his bicycle without lights. He tried to convince a bench of magistrates that three glow-worms in a celluloid box gave a light equal to that of a statutory candle and was a fair equivalent of a bicycle lamp. He was ordered to pay court costs.⁵ His photometry must have been faulty.

There is no evidence that hornets affect photographic plates, but they did have a peculiar use in 19th century photography. It was contended that the best material for polishing lenses was the substance of which a hornet’s nest is composed.⁶ This fact amused the editor of the *American Amateur Photographer* who wrote: “But you want to do your polishing when the hornet is not around to help you.”⁷

One way to rid the studio or darkroom of hornets and other insect life was to close up the room and leave the stopper out of a bottle of bromide overnight. “This will effectually destroy all infection and insect life,” it was claimed. But to return to “silly” subjects, photographers might want to reintroduce photograms on the objects rather than on photographic paper. Pictures on rashers of bacon would be quite a novelty. And the idea is not quite so daft as it sounds. Nineteenth-century photographers experimented in producing pictures on a wide variety of improbable surfaces. As early as 1857 the photographer W.R. Grove communicated to the President of the Photographic Society that he had produced photograms on recently caught trout. He was quite specific: “The trouts I experimented on were each of about 2 lbs. weight, and of the pink variety.” He placed a leaf on the side of each trout and “after about an hour I removed the leaves, and on the upper side was a distinct well-defined copy of the leaf, just as we have all seen on photographic paper in the earlier stages of photography ... The image of the leaf on the fish’s skin was white on a dark ground: it seemed that the light had darkened all around except the spot protected by the leaf.”⁸

On several occasions 19th century newspapers encouraged their readers to produce photographic images on ripening fruit. The unripe apple, or other fruit, is covered by a black cap for a few days in order to make it somewhat pale, then a suitable film

negative is taped in position on the fruit's sunlight side. After the fruit has ripened, it is plucked, and the negative removed. There on the skin is a photographic image. This technique was not a mere novelty for amateur photographers; it had popular appeal. In 1907 a magazine reported that "of late years fruits bearing photographs have occasionally appeared at Covent Garden Market."⁹

A photographer named Luigi Uccelli made quite a stir in 1895 with his successful experiments in reproducing photographs on seaweed. Seven years earlier this Italian gentleman was staying in Jersey when he accidentally dropped some salt on a frond of seaweed, and discovered that there was a chemical interaction of some sort. He began musing on the possibilities of preparing seaweed as a base for photographic images. He continued his experiments while living in Penzance, Cornwall, and after years of effort and numberless failures he was able to remove the slippery surface and print recognisable portraits on this thin, pliable, and unusual substitute for sensitised paper. Uccelli did not reveal the secret of his success, but his seaweed pictures of the Pope, Sarah Bernhardt, and other celebrities met with approval; "the effect is both novel and decorative," said one magazine.¹⁰

Also both novel and decorative was the invention of a Chicago photographer in 1891. He discovered how to "impress indelible pictures on the human skin by the aid of photography." Of course, the images might have been indelible, but they were not permanent. A review of this discovery remarked: "It is said that the young men of Chicago are setting the fashion of having their sweethearts' portraits printed on their arms in this fashion, and to the fickle the want of permanence will not be regarded as a disadvantage."¹¹ Ten years later skin photographs were rediscovered by a Roumanian chemist named Dinkeresco; again "it is becoming quite a fashionable craze to have tiny portraits printed on the wrist or arm."¹² The craze was an expensive one. Dinkeresco's portraits cost from five to ten guineas, which was a considerable sum at the turn of the century, equal to at least 15 times those figures today.

For those who might be thinking of re-inventing the craze, I will happily pass on the secrets of the process in the hope to one day see an exhibition of photographs not on the spartan walls of a gallery but on the body of the artist. You need two solutions: solution one is sodium chloride 12 grains per ounce; solution two is silver nitrate 40 grains per ounce. Rub solution one on the skin and let dry. Then carefully apply solution two, on top of this area, and let dry. This stage must be done in the dark. Attach a negative over the sensitised area, making sure that the film fits closely to the skin. Expose the area to the sun until it is printed very dark. This is a printing-out process; no development is necessary. Sponge with a saturated solution of hypo and wash. You are now a living photogenic drawing. The image lasts a long time, but wears off gradually.

If you wish to remove the image in a hurry do not use the common 19th century silver stain remover: potassium cyanide. An effective, and less toxic, solution can be found in *Photographic Times*, Vol. xi 1881, p. 182. Look it up.

The idea of photographs printed on various parts of the anatomy was constantly surfacing. "The latest society fad," according to the daily press of 1906, "is the wearing of photographs upon the fingernails." (A few weeks earlier the craze was photographs on waistcoat buttons.) The price of a fingernail portrait was half a guinea "and at the end of three weeks the growth of the nail has necessitated its renewal." Planned obsolescence is nothing new.

So many "silly" substances have been used in photographic chemicals that a complete list would require book length treatment. Even the most casual scan of the 19th century photographic press would impress the reader with the plethora of individual variations on the usual processes. Contemporary historians refer to the collodion negative technique and the albumen printing process as the most common and widely used combination in 19th century photography. And they are right. But what is so often overlooked is that there were almost as many variations in these processes as there were photographers using them. Each individual seemed to have adapted the solutions to his own requirements, or invented completely new variations that never got beyond the experimental stage.

A good example of a problem which spawned a wide variety of solutions was the inconvenience of developing a collodion plate immediately after exposure, while the surface was still wet. Many substances were added to the collodion in order to keep the collodion sensitive and "damp" for an extended period of time and so free the photographer from the darkroom tent. Some of these substances were: glycerine, sugar, honey, caramel, treacle, malt, raspberry syrup, raisin syrup, vinegar, skimmed milk, tea, coffee, liquorice, tobacco, ginger wine, sherry, beer, morphine, and gum arabic. There was a new process every week, and the nature of the preservatives prompted one writer to comment on these "researchers": "Once the imaginative faculties had been stimulated the capacity for research was enlarged by such a scientific proceeding as standing upon a chair, and from that elevated point of sight, subjecting the varied contents of the kitchen larder to scrutiny." This was indeed the culinary age of photography.

I once heard a serious, almost scholarly, paper from an historian which attempted to prove that the true inventor of photography was not Talbot, and not Daguerre, but a Norwegian who placed a sheet of paper, accidentally splashed with blueberry juice, in the back of his camera obscura. He forgot about it until umpteen hours later when, lo and behold, an image had appeared. I sound sceptical, and I am, but I am not saying the story has no validity. Stranger things have happened in this and every other field of human inquiry. In fact, I have a rather sneaky affection for the blueberry juice invention of photography.

Apart from preservatives, and blueberry juice, some odd substances have been employed in photography. Before collodion was employed various substances were tried in an effort to make the light sensitive chemicals "stick" to glass, including the

slime exuded from snails. The idea made sense – snails can climb up glass without difficulty – but was considered impractical.

In 1860 a photographer recommended adding hard cider and rusty nails to the developer of his ambrotypes “and found that it worked like a charm.” Another photographer recommended a developer made from Irish moss.¹⁴ Yet another devised a printing paper sensitised with the juice of walnut rinds.¹⁵ Prof. J. Towler wrote a long and detailed account in 1876 on the various ways in which horse chestnuts can be employed in photography.¹⁶ After maceration, filtration, and various decantations, Towler was left with a white mass, which he used as a substitute starch for mounting prints; a yellowish liquid, which he used as a preservative in his collodion; and some dry grounds, which he used for making bread and puddings.

A few years later a scholarly article appeared in several photographic journals detailing how to make printing paper from beet juice.¹⁷ In the same year, 1879, the German photographer F.H. Voigt utilised the humble potato for rendering albumen papers more pliable to the retouching pencil. The area of albumen which is to be retouched is rubbed with the freshly cut slice of potato instead of the normal abrasive powder.¹⁸ Another German recommended adding crunched-up eggshells to the collodion.¹⁹

And so on. After reading hundreds of these suggestions, it is abundantly evident that our predecessors were nothing if not inventive, curious and, at times, downright ingenious. Photography did not comprise a rigid system, commercially prepared materials, and inviolate procedures and subjects. It was dynamic, surprising, exciting, and open-ended in its possibilities. They loved their medium, and they enjoyed playing with it. And if an occasional experiment proved to be useful to their colleagues, then so much the better.

In this context pictures of crackers, and photograms of eggs and bacon, do not seem so silly. On the other hand ... well, there was one 19th century process which, no matter how hard I try to rationalise it, still does seem slightly ... silly. In 1902, a researcher named R.A. Reiss delivered a paper at the Paris Academy of Science in which he advocated replacing the water of developing solutions with urine!²⁰

The French, as any Englishman will tell you, are a fickle lot, and I am delighted to report that the idea was thoroughly investigated on the other side of the Channel by no less a personage than Major-General James John Waterhouse. He found that the urine developer would only work with a particular make of photographic plates – of French manufacture, of course.

References:

1. The British Journal of Photography, 7 April 1882, p. 185.
2. The British Journal of Photography, 22 November 1901, p. 745

3. The Amateur Photographer, 18 January 1910, p. 52
4. The British Journal of Photography, 18 September 1896, p. 594
5. The Amateur Photographer, 3 August 1900
6. The Photographic Review of Reviews, 111, 1894, p. 179
7. The Amateur Photographer, 18 September 1885, p. 371.
8. Journal of the Photographic Society, 21 December 1857, p. 128
9. The Amateur Photographer, 2 July 1907
10. The Amateur Photographer, 3 July 1896, p. 15; The Photographic Review of Reviews, February 1895, p. 53.
11. The Photographic News, 21 August 1891, p. 592.
12. The Amateur Photographer, 11 January 1901, p. 25.
13. The Amateur Photographer, 2 July 1903, p. 12.
14. The Photographic News, 25 January 1867, p. 47.
15. The Photographic News, 31 October 1862, p. 528.
16. The Photographic Times, Vol. vi, 1876, pp. 29-30.
17. The Photographic Times, Vol. ix, 1879, p. 39.
18. The Photographic Times, Vol. ix, 1879, p. 140.
19. The Photographic Times, Vol. i, 1871, p. 154.
20. American Amateur Photography, XIV, 1902, p. 357.
21. Photography, 21 August 1902, pp. 578–579.

First published in The British Journal of Photography, 14 September 1984.