

OOO that's good that's Sharp .

How often do you hear this ,? As if the definition of a good photograph is sharpness , indeed an eye watering clarity never mind the composition or atmosphere . How did this come about ? What is the history behind it ? As a Calotypist you get used it , but if I wanted such an image I would be shooting with a digital camera . Clinical clarity is not what I am seeking . This is a subject that is as old as photography itself .

When the Frenchman Louis Daguerre announced the Daguerreotype to the world on the 9th January 1839 his process immediately set the tone . The Daguerreotype is made on a mirror like polished surface of thin sheets of silvered copper and produces an image that's is simultaneously negative and positive according to the way it is tilted in the light. An invisible or latent image was developed out using Mercury vapours .The resulting photograph is astonishingly sharp. From the moment of its birth photography had a dual character , a medium of artistic expression and as a powerful scientific tool.

Daguerre's patent was acquired by the French Government and on August 19th 1839 the French Government announced the invention was a gift to the "Free World ". However Daguerre himself registered the patent for England on the 12th of August , probably in the hope that the British Government would purchase the patent just as the French had. This slowed the development of photography in England. Whilst in France what followed was a Daguerreotypomania as the public's imagination was captured by the perfect clarity of Daguerre's process. And who can blame them even by modern standards the effect is amazing. These photographic jewels are nearly always kept in cases to protect their fragile surface.

The main detractor to the Daguerreotype was that it produced a one off image. It also required a considerable amount of equipment . its main use became portraiture and studios began to appear in every town and city across France.

Simultaneously across the Channel and unbeknown to each other William Henry Fox Talbot the Wiltshire Polymath was also working on a photographic process – the photogenic drawing . Made on Writing paper using Silver Chloride as the light sensitive chemical the picture was printed out in strong sunshine , producing a negative image . He had succeeded in producing and fixing an image as early as 1834. The exposure was slow sometimes taking many hours . But it did not require much equipment when compared with the Daguerreotype . Also paper was light weight cheap and relatively transparent . The negative image could be placed on top of another piece of sensitized paper and multiple Positive images could be produced. Because of the fibres of the paper the images were far softer than that of the Daguerreotype. In fact there was no comparison and it failed to capture the imagination of the public.

Instead of announcing his discovery to the world Talbot had been trying to perfect his process as well as working numerous other projects that occupied his fertile mind. Mortified that he had been beaten to the punch by Daguerre as the inventor of photography , Talbot continued his experiments , now knowing that the Daguerreotype used Silver Iodide as the light sensitive material and using that formula along with Gallic acid He discovered the Calotype in September 1840. Again a latent image was produced which could be developed out by Gallic acid. Exposure could be reduced to a few seconds . The medium was still paper which could be made more transparent by waxing , the

image was still a negative and multiple images could be produced. It still produced a softer image than the Daguerreotype but its potential was far greater. Modern photography was born. Incredibly Talbot patented the process in England and Wales Photography was still stymied in Britain.

In an article in the Photographic Journal of June 15 1860 entitled "Photography in its relation to the fine arts" Antoine Claudete had this to say.

"Now we must remind the photographic world that Talbot and Daguerre led to the discovery of photography because they were both artists and in want of photography."

"Daguerre was a professional painter of some reputation, and renowned for his invention of the Diorama" "Daguerre was in the habit of making his Dioramic sketches by the help of the Camera Obscura, which enabled him to produce more correct representations of the natural scenes which he wanted to copy. While using his camera, he was continually thinking how his labours would be facilitated if he could once and for all have the image fixed on its screen and be able to copy it at his leisure. This constant wish led to the discovery which bears his name.

Mr H Fox Talbot, an independent gentleman endowed with the most ingenious and scientific turn of mind, was in the habit, as an amateur artist of taking sketches during his travels, and while employing the camera obscura for this purpose, recollected what had been done by chemists in their researches upon the effect of light on various substances, and in his wish to serve his artistic attempts, was induced to try to fix the image of his camera by means of some chemical action"

Talbot was persuaded by his good friend Sir David Brewster to exempt Scotland from his patent and it was here that Photography first took the form of art. The Partnership of Robert Adamson and David Octavius Hill produced ground breaking photography that even today remains unsurpassed. Robert Adamson the photographer showed Hill the artist who's mission was to make portraits of the clergy involved in the formation of the free Church, the Calotype. Hill quickly grasped it's potential. He could easily have turned to the Daguerreotype but Hill preferred the size, tones, chiaroscuro and softness of the Calotype.

David Octavius Hill expressed his pleasure in the imperfection of the process in 1848 after Robert Adamson's untimely death at the age of only 26 in January of that year.

"The rough surface and unequal texture through out the paper is the main cause of the calotype failing in details before the daguerreotype and this is the very life of it they look like the imperfect work of man and not the diminished work of God."

Partly this was a result of the printing process. The Calotype negative was laid on top of another sheet of paper which had been coated in Silver Chloride. This was exposed to the sun until the desired tones appeared and then fixed in order to remove the light sensitive silver. By being printed through the Paper of the Calotype the resulting image was softened by the fibres in the paper. Furthermore the light sensitive coating of the print sunk into the fibres of the paper so that the image was in the paper rather than on it,

James Nasmyth wrote admiringly of the Calotype "It is nature reduced to an artistically standard and abounding in the most noble suggestion".

Indeed the prints made by the partnership are very rarely sharp, sometimes entire groups are very slightly out of focus, portraits particularly of women are often flattering because of this, any imperfections were not highlighted by clinical sharpness.

Elizabeth Rigby one of Hill's favourite subject's wrote the following passage In the Quarterly review of 1846.

—Kretschmeer paints the ruins of Baalbec in ochre and vermilion, and lays a large slice of melon in front. We, in short, give our version of Nature—they give theirs: which is right? One standard, however, there does exist, and one from which there is no appeal, for it rests upon demonstration, and not upon opinion. This is to be found in that wonderful source recently discovered—the only sure test for those artists who, professing to reflect Nature in their works, can by Nature herself only be judged. We mean the beautiful and wonderful Calotype drawings—so precious in every real artist's sight, not only for their own matchless truth of Nature, but as the triumphant proof of all to be most revered as truth in art. Every painter, high and low, to whom Nature has ever revealed herself, here finds his justification. Let Mr. Hill apply the Calotype instrument to a simple manly head in a commanding position, it creates a Sir Joshua—give it an old face wrinkled with age, it returns us a Rembrandt—summon three or four bare-legged urchins, we see Murillo's beggar boys—place it before a group of Newhaven fishermen, we have Teniers' Dutch Boors, or Ostade's Village Alehouse—or against a crumbling brick wall, and Peter de Hooghe lies mezzotinted before us. Take it to tangled sylvan landscapes, it presents us with a Hobbima, a Gainsborough, or even, what we had not sufficiently prized before, a Constable—give it fretted spires and leafy banks, distant towns and glittering streams, playful shadows and struggling lights, sunny storms and watery beams—and give it, lastly, the very motes dancing in the air before them all—and the detractors of Turner lick the dust—the loftiest eulogy of Mr. Ruskin is justified. Every truth that art and genius has yet succeeded in seizing here finds its prototype; but what shall we conjure up in heaven or earth, or in the waters below the earth, that shall produce a Düsseldorf picture? Nature disowns it.*

We mentioned Köhler's Finding of Moses; and we recur to that young artist's name with pleasure, as an exception, in many respects, to what we have hitherto described. His sketches are full of fire and action; and a Hagar and Ishmael by him in the Aix exhibition of 1845 was in every respect a beautiful picture.

* To some of our readers this class of photogenic drawings, so different in every respect from the Daguerriotype, may not be known at all, and to others only in a very inferior, mechanical form. To Mr. Fox Talbot the happy invention is owing; but that artistic application of it, which has brought these drawings to their present picturesque perfection, required the eye of an artist; and for this the public is indebted to Mr. D. O. Hill, of Edinburgh, in conjunction with Mr. Adamson, a young chemist of distinguished ability. It is to be hoped that Mr. Talbot, in justice to his own genius, will soon invite these gentlemen to London—where they would find rather more interesting, though certainly not more grotesque subjects than the fat Martyrs of the Free Kirk—as yet, seemingly, their favourite sitters.

However the Daguerreotype had set the standard and Talbot and his fellow Polymath Sir John Herschel immediately set about finding medium other than paper . One that was transparent , glass was the obvious choice . In his note books Talbot mentions experiments on glass as early as the 3rd of August 1839 . In September of that year Herschel described a “ New Daguerreotype on Glass process “ in his note book . The main problem was making the chemicals adhere to the glass. It took 48 hours to precipitate a silver film on the glass plate .

On the 30th August 1840 Talbot recorded his experiments with using Albumen mixed with silver nitrate and spread on glass . This concept formed part of a patent (no 12906) taken out in 1849 with Thomas Augustine Malone which described the idea of what later became known the Ambrotype. In other words a weak negative developed with Gallic acid which when placed against a dark back ground becomes a positive image. In this patent no fewer than three different applications of the Albumen on glass process were described.

In 1848 M Niepce de Saint Victor published his mode of applying albumen to glass , M Blanquart Everard followed suit as did M Gustave Le Gray.

It was in the early 1850s that several improvements to photography occurred .

The use of Albumen also extended to paper . Both the negative and the positive print. The use of which made the image sit on the surface of the paper resulting in a sharper image. The discovery of albumen paper came in the late 1840s and was the invention of Louis Desire Blanquart Everard . He declared his discovery to the world on the 27th May 1850 . Photographers were quick to take it up and by 1855 most serious photographers in had adopted or at least tried this method of printing. Producing beautiful tones and details .

In 1851 one of the great unsung pioneers of early Photography Frederick Scott Archer a Sculptor , published his discovery of the Wet Plate Collodion process , using Collodion (gun cotton) to adhere the light sensitive chemistry to a glass plate . Simultaneously combining the sharpness of the Daguerreotype and the reproducibility of the Calotype to produce prints on paper . Combined with albumen paper the results caught the public imagination encouraging more people to take up the art . The wet plate Collodion process was relatively easy to use but had two down sides , once the glass plate had been sensitised you had only a ten minute window to take the photograph , and if you wished to indulge in Landscape photography or to travel the equipment was heavy and required a portable dark room (tent) .

D O Hill briefly dabbled with Collodion in 1860 when he took approximately 20 photographs at Rock House with Alexander MacGlashen , even though they are very decent photographs they failed to have the same impact of his Calotypes . By that point photography had become industrialised and almost anyone could produce a decent photograph.

Finally , across the Channel the Frenchman Gustave Le Gray invented the waxed process , a variant of the Calotype . Le Gray was an accomplished artist before becoming an equally accomplished photographer . He also claimed that he had discovered the use of Collodion before Scott Archer . But in a national reversal of Talbot and Daguerre there is no disputing that Frederick Scott Archer was the first to publish his findings. This led Le Gray to relentlessly pursue perfection in the Paper negative which although “ less rapid than the Collodion-on-glass process , achieved more artistic effects “ he believed “ that the future of photography lies entirely with paper “ .The waxed paper process , involved the paper being waxed prior to lodisation . It was sensitized and then could be

preserved for up to two weeks allowing for comparatively light weight travelling. Le Gray also boasted "one of its primary qualities is that it provides perfect half tones". He announced his discovery in 1852 having spent the best part of two years perfecting it. As with everything that Le Gray researched the ultimate goal was to provide prints of high aesthetic quality.

In to this ever changing photographic scene strode one of the giants of early English Photography Benjamin Brecknell Turner. His allegiance- the English Calotype. He eschewed the waxed paper process. His work even though he was not a professional photographer became the bench mark for English Photography during the 1850s. Turner who was a Chandler by trade took up photography in 1849 with a licence from Fox Talbot that cost him the price of one guinea "for amusement purposes only". He was not from an artistic background as is sometimes reported. He moved rapidly from taking Calotypes with a whole plate camera to a colossal camera reputed to be 30 inches square and producing negatives 11 inches high and 15 inches wide. These were produced on thick paper due to their sheer size and the necessity to have a paper strong enough to withstand all the washing that a Calotype has to go through. Once the Calotype had been finished it was then waxed to increase the transparency for printing. Often these were enhanced with graphite. The scenes he chose to shoot were rural and rustic, avenues of trees, mighty oaks, churches, castles, Manor houses. The scale of the Calotype and the use of Albumen paper for printing allowed impressive detail and tones to be recorded whilst at the same time allowing the beautiful play of shadow and light that only the Calotype can produce. Like Le Gray his Calotype photographs had the highest aesthetic quality. Like Hill he also used the Collodion process and failed to make the same impact. His scrap book of press cuttings from the various photographic journals are all about sharpness and speed whilst all the time he was acclaimed for the slow and deliberate process of the Calotype.

Thus a battle for supremacy between Collodion and paper ensued. And for the next 8 years the photographic journals of the day often contained highly opinionated letters declaring allegiance to one process or the other. In the 1840s photography in England had been divided between professional practitioners who usually made daguerreotype portraits and the gentleman amateur who usually practised the Calotype for their own entertainment and artistic vision. Collodion blurred that division and it is often difficult to ascertain how exactly an image was produced. This is especially true of photographs by Le Gray who produced prints incorporating a Calotype landscape with Clouds captured by Collodion.

Sir William J Newton an excellent artist in the

Journal of the photographic society

February 1853

Upon photography in an artistic view and its relations to the arts.

I do not conceive it to be necessary or desirable for an artist to represent or aim at the attainment of every minute detail, but to endeavour at producing a broad and general effect.

I do not consider it necessary that the whole of the subject should be what is called in focus; on the contrary, I have found in many instances that the object is better obtained by the whole subject being a little out of focus, thereby giving a greater breadth of effect and consequently more suggestive of the true character of nature."

The response to Newton's statement depended on whether the reader felt that photography was an art or a science. But such was the reaction and there several pages from several authors he retracted some of the statement in the following issues saying that he was only referring to portraits and not landscapes.

Lady Elizabeth Eastlake in her 1857 article on Photography referred to this as Newtons Heresy. Whilst supporting has artistic vision.

For these reasons it is almost needless to say that we sympathise cordially with Sir William Newton, who at one time created no little scandal in the Photographic Society by propounding the heresy that pictures taken slightly out of focus, that is, with slightly uncertain and undefined forms, "though less *chemically* would be found more *artistically* beautiful." Much as photography is supposed to inspire its votaries with aesthetic instincts, this excellent artist could hardly have chosen an audience less fitted to endure such a proposition. As soon as could an accountant admit the morality of a false balance, or a seamstress the neatness of a puckered seam, as your merely scientific photographer be made to comprehend the possible beauty of "a slight *burr*." His mind proud science never taught to doubt the closest connexion between cause and effect, and the suggestion that the worse photography could be the better art was not only strange to him, but discordant. It was hard too to disturb his faith in his newly acquired powers. Holding, as he believed, the keys of imitation in his camera, he had tasted for once something of the intoxicating dreams of the artist; gloating over the pictures as they developed beneath his gaze, he had said in his heart "anch' io son pittore." Indeed there is no lack of evidence in the Photographic Journal of his believing that art had hitherto been but a blundering groper after that truth which the cleanest and precisest photography in his hands was now destined to reveal. Sir William Newton, therefore, was fain to allay the storm by qualifying his meaning to the level of photographic toleration, knowing that, of all the delusions which possess the human breast, few are so intractable as those about art. But let us examine a little more closely those advances which photography owes to science -- we mean in an artistic sense. We turn to the portraits, our *premiers amours* now taken under every appliance of facility both for sitter and operator. Far greater detail and precision accordingly appear. Every button is seen -- piles of stratified flounces in most accurate drawing are there, -- what was at first only suggestion is now all careful making out, -- but the likeness to Rembrandt and Reynolds is gone! There is no mystery in this.

Lady Elizabeth Eastlake

"Photography " 1857.

Notes and Queries Aug 13 1853 p157

Minuteness of Detail on Paper.

"But we may now adduce a work almost more remarkable for this quality , namely a view of Salisbury , by Mr Russell Sedgfield , a young wood engraver , which is about to appear in the Photographic album .

To this beautiful specimen of the art we may certainly refer as a proof that it is quite possible to obtain upon paper the greatest nicety of detail , in short every minuteness that can be desired or ought to be attempted “

Paper v collodion .. Journal of the Photographic society.

Thomas Sutton Oct 7 1854

“Sir I expect great things in photography from the Paris exhibition of next year principally in the comparison of results of different processes. In England there has been for some time a perfect mania for the Collodion process. An incredible number of amateurs have taken it up , and vast sums of money have been spent on it . The French have not been so thoroughly infected with this – shall I say delusion – but have acted more reasonably in attempting to bring albumen and paper to higher perfection. “

“I solemnly believe that the best paper work for views is absolutely finer than the best Collodion work “

By “Old photo” in a letter to the editor of the journal of the Photographic society 21 St August 1855.

A Calotypist, if successful , is an artist , a glass positive producer is a photographic operator, and that is the entire difference . His picture of today is the same – conditions being the same – as that of six months hence and as that of yesterday.

Chas Long December 22nd 1856

I do not purpose to raise the old war cry of paper versus collodion , but I think it is fair to state my conviction , that for most subjects of landscape and allied subjects the paper stands pre eminent. The Collodion process in such hands as our late honorary secretary , and of many others equally successful in the art , produce wonderful results , but for subjects where , texture , gradations of tint and distance are required , there is nothing in my opinion to compare with a good picture from the Calotype or waxed paper negative .

On the calotype process.

The Photographic News October 1 1858

“Each negative process possesses advantages which it is utterly impossible to combine , and for this reason only , men never can agree as to the best method of getting a negative. For architecture and indeed almost any class of subject except statuary , paper gives results fine enough to satisfy a very fastidious taste ; and in truth , for boldness and large pictures , glass gives no better results than this . Mudd’s “waxed paper “ rocks , old oaks etc. And **Turners** “Calotype “ old oaks etc equal anything of the same size that we meet with whether glass or paper .”

“Wet collodion , with its tents etc makes quite a load for a horse, and in some place it would be impossible to transport it . Paper alone is left to a man in these cases , and his choice lies betwixt wax paper and calotype. Perhaps for boldness and sharpness the latter is the better of the two , but in point of cheapness it is infinitely preferable and certainly it is less difficult to a beginner “

The Photographic News August 12 1859 p279 _ 280

Paper v Collodion

It will doubtless , be looked upon as a question long since decided as to the merits , or rather as it is deemed inferiority , of anything in comparison with wet collodion ; yet , if a man is not totally blinded by prejudice , he must allow the fact , that to work collodion on a trip is almost making a toil of what should be a pleasure , and that if he cannot take his van with him , a tent requires almost as much assistance , and is quite often almost useless.

But as to beauty – setting aside the question of convenience – the collodion men will say all must admit their higher claim . Far from it , I reply ; in pictures larger than 10 x 12 or at all events not less than this size , the texture of the Paper gives a boldness and artistic effect , in comparison with which a large collodion picture is dead and flat to a degree .

I have compared some Welsh scenery taken on Collodion with pictures taken on Paper, and it is undeniable that the Paper work excels the glass in all those points where Photography fails as to artistic effects . Not that it can be stated as to every kind of picture . To be in the highest degree successful with paper the picture should be more what may be called a study than a panorama – something requiring massive boldness . Bedfords exquisite pictures seem to be chosen with reference to the process he works ; sharpness , minuteness , and position are all irreproachable . **Turners** Calotypes are , however , no less beautiful – his old oaks and cottages are far bolder than anything from collodion ; broad shadows , which give a massive look to the trunks and architecture, and a stereoscopic effect which few , very few collodion pictures have . The difference seems to me to be , that the collodion subjects are intended to be kept in a portfolio , and the large paper productions are far more fit to be framed and hung on walls “

“My belief is that the finest quantity of photographs which could be gathered would be composed of about equal parts of glass and paper productions , and that the last mentioned will one day prove the more useful “

April 9 1859 journal of the Photographic society.

Since the discovery of collodion , photographic proceedings upon paper are almost discontinued , and with very good reason . Collodion works with more correctness and rapidity . Nevertheless if two impressions of the same subject be compared , one taken upon collodion and one taken upon negative paper, it is to be remarked that the impression taken upon paper is richer , softer , more aerial, more profound – in a word more artistic than the other.

By the late 1850s Wet Collodion was the most popular photographic process , Le Gray was using it almost exclusively, Thomas Sutton had changed his opinion and the Calotype was by 1858 hardly

mentioned in the Photographic Notes periodical that he edited . Chas Long had turned to a dry plate process . All no doubt driven by commercial considerations rather than just aesthetics.

The Calotype has a unique and beautiful way of recording things , but speed and sharpness won the day. As photography became more certain and equipment became more reliable and as mass production became a reality , the loss of the sense of excitement and wonder led many of the first generation of amateur photographers the core of whom were Calotypists , to retire from the art.

Through out the remainder of the 19th Century there were several notable exceptions to the quest for sharpness. Julia Margaret Cameron in the 1860 divided opinion with her Ethereal portraits , George Davidson's 1890 pinhole photograph called the onion field caused outrage when it won a medal at the Photographic Society of Great Britain's annual exhibition. Inspired by the teachings of the highly opinionated Peter Henry Emerson in his 1889 manual Naturalistic Photography for Students of the Art.

Nothing in nature has a hard outline,

The "sharp ideal" is the childish view taken of nature.

The principle object in the picture must be fairly sharp as the eye sees it , and no sharper ; but everything else and all other planes of the picture , must be subdued , so that the resulting print shall give an impression to the eye nearly as possible to the impression given by the natural scene.

Portraits

The falsity of focussing a head sharply is shown by the fact that by doing so freckles and pimples , which are not noticed by the eye stand out most obtrusively.

A few years later Emerson changed his mind ! And of course his comments regarding portraiture applies to the 21 St century where the airbrush is used extensively.

And as the century reached its last decade Alfred Stieglitz launched the pictorial movement of artistic photography as detailed in his article of November 1899 in the American Journal called Scribners Magazine.

"Let me here call attention to one of the most universally popular mistakes that have to do with photography—that of classing supposedly excellent work as professional, and using the term amateur to convey the idea of immature productions and to excuse atrociously poor photographs. As a matter of fact nearly all the greatest work is being, and has always been done, by those who are following photography for the love of it, and not merely for financial reasons. As the name implies, an amateur is one who works for love; and viewed in this light the incorrectness of the popular classification is readily apparent. "

Today photography is more diverse and accessible than ever it is everywhere and still to the layman sharpness remains the ultimate aim.

Finally Lady Eastlake summed up her preferences in her article of 1857 published in the Quarterly Review. Looking back to photography in its first decade

"We hardly ever saw a photograph in which there was not something or other of the most exquisite kind . But this brings us no nearer the standard we are seeking . Art cares not for the right finish unless it be in the right place . Her great aim is to produce a whole ; the more photography advances in the execution of parts , the less does it give the idea of completeness " .

