From Pinhole to Pixel

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ABSTRACT

The foundation of photography lies in the roots of an extensive history. Taking off from its initial years, photography has matured into an indispensable form of visual art.
On analyzing the culture of photography in India, it was observed that even in the wake of the numerous explorations in terms of these styles and techniques, art and photography are still separated by a fine line of commercialization. The research validates the argument and reveals a need to break away from the monotony of the conventional techniques of photography.
The aim of the research is to understand the evolution of photography through various eras, and study the different styles, techniques and processes which appeared during its course. There is an incessant search for newer horizons to explore art, and this possibility of change needs to be re-evoked into the sensibilities of the Indian fashion photographers.
Another objective of the research is to gauge the acceptability of digitalization and understand the perception of art photography from the perspective of Indian photographers. It is necessary for them to recognize the importance of adequate education concerning photography, which will not only help them in employing the various techniques and processes aesthetically, but also render a cultural relevance to a photograph.
The Dawn of Photography
THE BEGINNINGS OF PHOTOGRAPHY

The introduction of photography as a scientific innovation revolutionized the perception of visual art and historical documentation. In spite of the consciousness towards colouring and bleaching, the distinction between heat, air and light remained a distant notion, and it was long before the concept of photography gained impetus.

There are two distinct processes which constitute photography, the optical and the chemical processes. When relaying the optical process, it is difficult not to be reminiscent of the Camera Obscura, the aid of which was being vastly advocated during the times of Leonardo da Vinci, also validated by one of his paintings of the camera in 1519.

Meanwhile, other experiments towards the development of photography were also ongoing. In the early seventeenth century, Angelo Sala noticed the tendency of powdered nitrate to blacken on exposure to sunlight. In 1727, Johann Heinrich Schulze observed the colour variations in certain liquids when exposed to light. By the beginning of the nineteenth century, capturing images on paper became a possibility; however, the method to make that image permanent was still unknown.

The earliest known picture, produced by Niépce in 1827, used a material which hardened when exposed to light, and required an exposure time of eight hours. Niépce later entered into a partnership with Louis Daguerre, who continued the experiment, with the former’s death soon after. Daguerre developed photographic plates, which reduced the exposure time from eight hours down to barely half an hour. He also realized that an image could be immersed in a salt solution, to achieve permanency. The process became known as the Daguerreotype, after Louis Daguerre.

This process proved to be quite expensive, and each image could be produced only once, barring the possibility to duplicate the same. Two cameras had to be deployed simultaneously in case another copy of the image was required. This drawback of the daguerreotypes sparked the need for alternative methods of photography.

A solution to this was introduced in the form of a process called the Calotype, invented by William Henry Fox Talbot. A primitive negative was developed in 1835, which was of a poorer quality in comparison to the more distinct images produced by the Daguerreotype process. The primary advantage of this process however, was the capacity to produce an unlimited number of positive prints from a single negative.

In 1848, Abel Niépce de Saint-Victor introduced the creation of negatives by coating a glass plate with the white of egg, sensitised with potassium iodide and then washed with an acid solution of silver nitrate. The outcome of this process was an image of fine detail and a very high quality. The
process, however, was quite time taking, and hence used typically for architectural and landscape photography.

The relatively slow progress of photography in England can be partially attributed to Daguerre patenting his inventions and also to Talbot, for his law-suits related to his patents.

In 1851, photography was represented in a new light, when by Frederick Scott Archer introduced the Collodion process. This process reduced the exposure time to as less as two to three seconds, and enabled low-cost printing of the images. This process also had a disadvantage, since the coating, exposure and development of the image were required to be done while the plate was still wet. Despite the attempts made to preserve the exposed plates and develop at a more convenient time, the preservatives used only lessened the sensitivity of the plates, and the need for a dry method was deeply felt.

In 1871, Dr. Richard Maddox suggested a way to use Gelatin instead of glass as a basis for photographic plate, which resulted in the development of the dry plate process. John Carbutt persuaded the production of a very this celluloid as a backing for the sensitive material to be coated and in 1884, George Eastman introduced a flexible film, and later introduced the box camera. Eadweard Muybridge introduced the concept of motion picture photography in the years that followed.

Photography flourished with the continual developments being made, and it is not surprising that the number of photographic establishments had risen from a mere handful in the 1840s to as many as 147 by 1857. Photography was predicted to substitute the art of painting in no time.
THE ADDITIVE COLOR PROCESS

THE ALBUMEN PROCESS

THE AMBROTYPE PROCESS

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THE ADDITIVE COLOUR PROCESS

There are two methods of generating a colour, the additive process and the subtractive process. Sir James Clerk Maxwell established the additive process in 1861. In this process, all colours can be created by combining three primary colours, red, green and blue.

THE ALBUMEN PROCESS

In the late 1840s, the Albumen process began to be employed for the preparation of both, the negatives as well as for the printing paper, so as to augment the definition. A modification was required at the negative stage, to rid the imperfections. The negatives used to be on paper, and when a positive was developed, the flaws of the paper were also printed with the image. The lone solution to this at that point in time, was to use glass negatives in place of paper. Abel Niépce perfected a process in 1848, which drew on the use of salted white of egg containing some potassium iodide, coated on a glass plate. After the plate dried, it was treated with an acid solution of silver nitrate, and later processed in gallic acid. This process brought about finer detail and enhanced quality.

The sole disadvantage of this process however, was its time-consuming pace, with exposure times ranging between five and fifteen minutes. Accordingly, it was mostly used for architectural or still life work, and was rarely intended for portraiture. Nevertheless, this process was believed to stand true to the conviction that duration was the key in enhancing brilliance and perfection of the picture.

Albumen printing paper continued to be in common use until the end of the century.
THE AMBROTYPE PROCESS

In 1851, Frederick Scott Archer introduced the Ambrotype process, commonly known as the Collodion process. A thin under-exposed negative, if exposed before a dark background, appears like a positive, due to the silver reflecting some light, while the areas without silver appear black. Ambrotypes were direct positives, made by under-exposing collodion on glass negative, bleaching it, followed by placing a black background, usually black velvet and occasionally varnish, behind it. This method was relatively different from the Daguerreotypes, and comparatively less expensive. This process gained recognition on the grounds of various advantages such as reduced cost and exposure time. Besides, there was no need for printing, and the Ambrotypes could be viewed from any angle, unlike the Daguerreotypes.

THE AUTOCHROME PROCESS

The Autochrome, introduced in 1907 by the Lumière brothers, was the earliest feasible colour photograph process. The process involved the creation of a screen, formed by a layer of minute starch grains, dyed in the primary colours, behind which was a layer of panchromatic film. The film was subjected to reversal development, the starch grains acting as tiny filters on the film, and it was viewed as transparency through an identical screen. The picture was fashioned in a delicate and soft pastel quality.
BROMOIL PRINT PROCESS

The Bromoil Print process, pioneered by E.J. Wall in 1907, stood on the principle that oil and water do not blend. The method involved a positive image on a paper support. The enlargement, once made, was bleached in a solution of potassium bichromate to remove the black silver image. In this state, it was possible to apply greasy inks of various colours to pigment the surface of the gelatin, by means of assorted brushes. In a short span of time, this process turned to substitute the gum bichromate process, invented in the past decade.

THE CALOTYPE PROCESS

The Calotype process was introduced in 1841 by Fox Talbot. It is a positive/negative process in which a piece of paper was brushed with a weak salt solution, dried and then again brushed with a weak silver nitrate solution. Silver chloride was formed on the paper, which made it sensitive to light, readying the paper for exposure. After a duration of nearly half an hour, it was fixed with a strong solution of potassium iodide of hypo. With persistent experimentations, Fox Talbot gradually succeeded in improving the photogenic drawing process and thereby naming it as the calotype process. He realised that if he added gallic acid to the paper, it became more sensitive to light and thus it was no longer required to be exposed until the image became perceptible. Further treatment with gallic acid was given for development. To create the positive, the negative was placed on
more photo paper, laid flat in a glass frame and exposed to sunlight.
Talbot went on to initiate the mass production of prints.
This process had many advantages, the foremost being the ability to make unlimited number of
prints using a single negative. The prints on the paper were easier to examine, being less delicate,
and retouching could be done on either the negative or the positive. Apart from this, the calotype
had much warmer tones.
In spite of the numerous advantages, this process failed to equal the Daguerreotype process in
popularity, as a result of its several drawbacks. The two stages involved, of making the negative
and then the positive, was a time-consuming process, and moreover, the prints tended to fade. In
addition, the imperfections of the paper reduced the quality and definition of the prints. Another
major barrier to its popularity was the patent restrictions placed on the calotype process.

THE CARBON PROCESS

Print fading was a familiar dilemma in the early days of photography. Following the experiments
with carbon, in 1864, Joseph Wilson Swan offered a solution to this apprehension.
The prints made using this process were lasting, and came in several colours. The sensitising solu-
tion was a blend of carbon, gelatin, the colouring material, and potassium bichromate. Once the
paper was exposed to light, it became insoluble in water, and the prints were developed by wash-
ing the unexposed soluble material in warm water.
Carbon prints rapidly attained popularity, and are still used occasionally.

THE COLLODION PROCESS

The two processes followed in photography, the daguerreotype and the calotype processes, had
their own advantages and disadvantages. Hence, efforts began to be made in an attempt to com-
bine the best features of both the technique, the focus being placed on the ability to reproduce fine
detail and the capacity to produce multiple prints.
In 1851, Frederick Scott Archer suggested the collodion process. In this process, a viscous solution
of guncotton dissolved in ether and alcohol was created, providing the much needed binding.
There were numerous advantages attributed to the collodion process, the foremost being the re-
duction in the exposure times to two to three seconds, because of its higher sensitivity to light
compared to the calotype process. It also enhanced the image quality. Since this process was not
patented, it gained enormous popularity in the world of photography. However, there were a few disadvantages as well. It was a demanding process, as the collodion had to be spread evenly on the entire plate, and while still wet, had to be sensitised, exposed and developed, as the sensitivity reduced once the collodion dried. Moreover, the collodion mixture was inflammable and highly explosive. Regardless of the drawbacks however, the collodion process gained status rapidly, and turned out to be a watershed in photography.

THE CYANOTYPE PROCESS

The Cyanotype process, first introduced by John Herschel in 1842, is still in force today and widely termed as the blue-print process. This process entailed the impregnation of paper with iron salts and using it for contact printing. The paper was then washed in water, and the outcome was a white image on deep blue. The long exposure time required for this technique could be overlooked in favour of the advantage of the method. Since the chemicals were mainly sensitive to Ultra-Violet rays, the solutions could be prepared in subdued light, rather than in a darkroom.
THE DAGUERREOTYPE

The daguerreotype process, introduced in 1839, is considered to be the first successful photographic process. In this process, copper plates were exposed to iodine, and the fumes formed light-sensitive silver iodide. This plate, to be utilised within an hour, was exposed to light for around 10 to 20 minutes, depending on the availability of light. Later, it was developed over mercury heated to 75 degrees centigrade, which caused the mercury to fuse with the silver. The image was then fixed in a warm solution of common salt, and the plate was distilled in hot water. A milky white image was produced due to the action of light, and the outcome was of an excellent quality.

However, there were a few disadvantages to this process, the most familiar one being that the image could not be reproduced. Also, the chemicals used, like bromine and chlorine fumes and hot mercury, were highly toxic. In addition, the image produced was laterally inverted, and it was difficult to view from certain angles. Another problem with the initial daguerreotypes was the length of exposure time required, 10 to 15 minutes in bright sunlight, such lengths being unsuitable for portraiture. Later, chemical as well as optical amends began to be made in the process in order to reduce the exposure times. The use of bromide and chlorine were explored by many. J. M. Petzval invented a portrait lens with an aperture of f3.6, countering the f14 already being used. These developments enabled the photographers to use exposures of between 10 and 30 seconds, making portraiture a possibility.

Since the photographs at that time were monochromes, many artists began hand colouring the image. The colours were carefully applied and then fixed plainly by breathing on the plate.

THE DRY-PLATE PROCESS

The Dry-Plate process was invented by Charles Bennett in 1878, following the proposals to use Gelatin as a binder. This process was revolutionary in the sense that portable darkrooms were no
longer required. In addition, fast shutter speeds were possible since this process was much more sensitive to light, and it aided in a greater degree of standardization and quality. Consequently, a new range of cameras began to appear.

**GUM BICHROMATE PROCESS**

The Gum Bichromate process, introduced in 1894, was one of the several processes endeavoured to enhance the photographic qualities. This was a process which allowed alterations to the extent that just with the use of a pencil, eraser and a few brushes, one could modify the tones and relieve a lot of details. The outcome was more like a painting than a photograph. The process involved the coating of paper with gum Arabic, mixed with a sensitive chemical that would harden when exposed to light. The exposed gum layer was then washed in water, leaving the hard parts behind. Treatment of the print with a handful of brushes enabled some modifications. These prints often have the appearance of charcoal drawings. The photographer could use any desired paper for this process, depending on the effect called for, and can also pick the colour in which it should be finished. Once the print has been made it is moistened and it is possible to thin-out a shade or remove a portion of it with the help of a brush.

One of the leading photographers of that era, who promoted this technique, was Robert Demachy.

**HELIOGRAPHS**

The term Heliograph originated in 1827 when Nicephore Niépce introduced the process and produced the first photograph. This is deemed to be the first permanent method of recording an im-
age. For this process, he used a solution called Bitumen of Judea, a derivation of asphalt, found in Syria. It was a varnish which, when coated and dried, hardened on exposure to light. Oil of lavender and white petroleum were then used to dissolve the areas unaffected by light. Subsequently, the light areas were revealed by the bitumen and the dark ones by the bare metal.

THE OZOTYPE PROCESS

Introduced by Thomas Manley in 1898, the Ozotype is a pigment process in which a gelatine silver bromide was transferred by contact to pigment paper. This method however, did not gain much fame in those times.

THE PLATINUM PRINTING PROCESS

The Platinum Printing process, introduced by William Willis, was introduced in 1873. In this process, plain paper with sensitive iron salts was exposed in contact with a negative. The print
was then developed in a potassium oxalate solution. This process created a striking image, in rich black tones and offered a remarkable tonal range, which made the prints more notable. In addition, unlike various other processes, it was permanent.

Some of the influential photographers of that era, who made use of this process were Peter Henry Emerson, Clarence White, Frederick Evans and Gertrude Kasebier.

THE TINTYPE PROCESS

The Tintype process, also known as a ferrotype, was introduced by Adolphe Alexandre Martin in 1853. In this, a metallic sheet was used instead of glass, and the plate was coated with collodion and sensitised just before use. This process was faster and less expensive than most of the other processes in those times. It did not need any drying and no negative was required, making it a one-stage process. The prints also proved to be relatively durable, and the material could be easily cut up to be filled in lockets, brooches, etc.

The smallest ferrotypes which were made were known as the ‘Little Gems’ tintypes, and were approximately the size of a postage stamp, made simultaneously on a single plate in a camera with 12 to 16 lenses. The images were laterally reversed. The tintypes could be easily produced by unskilled photographers, and their quality could vary. Nevertheless, they introduced photography to the working class as well.
WAXED PAPER PROCESS

One of the disadvantages of the calotype process was that while developing the print, the imperfections of the paper also transferred on to the image. In 1851, Gustave Le Gray familiarized a process in which the paper was treated with wax, prior to the exposure and development. This process facilitated the storage of paper for nearly a week before use. A definite improvement in the definition was also evident. Conversely, this method turned out to be even slower than the calotype process, and often, exposures of up to fifteen minutes were required.

THE WOODBURYTYPE PROCESS

The Woodburytype process, patented by Walter Woodbury in 1866, is a form of photographic printing similar to the carbon process. In this process, a photograph in gelatine was applied with enormous pressure in order to serrate a sheet of lead. The outcome was a picture of significant excellence, without any grains, and the method was used widely until the turn of the century.
Styles of Photography

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ARCHITECTURAL PHOTOGRAPHY

Architectural photography is can predominantly be classified as general interest, travel or landscape. This, however, might not be the photographer’s primary objective.

One of the first architectural photographers was Philip Delamotte, who documented the re-building of the Crystal Palace from 1853 to 1854.

Other significant works in architectural photography come from Fenton, Hill and Adamson and Bourne and Frith. In addition to these, the works of others like Robert McPherson, James Anderson, Valentine Blanchard, Frederick Evans and Carlo Ponti are worth noticing.

CARTE-DE-VISITE PHOTOGRAPHY

Introduced by a Parisian photographer, Andre Disdéri in 1854, were small visiting card portraits, usually measuring 4 1/2 x 2 ½ inches. Andre proposed a technique of taking a number of photographs, around 8, on a single plate, and thereby reducing the cost of production. Various kinds of cameras were devised for this; a few of them rotating the photographic plate, while the others with multiple lens that could be uncovered singly or all together. These were basically Albumen prints and to print quickly, several negatives were taken at once. Quantity was rather significant than quality, not overlooking certain exceptions.

There was a swift rise in its popularity, as having one’s own carte-de-visite made became common place. Huge profits were made with this trend.

One of the many positive features of these cards was their low price. In addition, they were light and easy to collect, enabling people to place them in photographic albums.

Various props were used in carte-de-visites, such as balustrades and curtains, moving on to columns, hammocks, palm trees, etc.

This innovation was deemed to have saved the fall of the photographic business by that time.
DOCUMENTARY PHOTOGRAPHY

In the wake of biographies and autobiographies, some photographers took to recording the lives and times of the period they lived in, through images. Before the invention of photography, events were portrayed by means of paintings. Photography however, added to the authenticity of these records, and captured the emotions were difficult to explain through paintings. Documentary photography had the capacity to depict the events in considerable detail. This ability was soon recognised by photographers and put to use in the most inspired ways.

LANDSCAPE PHOTOGRAPHY

Landscape photography has been quite popular in the world of photography, in spite of being quite inconvenient at times, especially when trying process such as collodian were used. Many a mesmerising and vibrant landscapes have drawn the attention of photographers, and been beautifully captured on film. Some of the leading landscape photographers of all times are Roger Fenton, P.H. Delamotte, and Francis Bedford.

MICRO-PHOTOGRAPHY

Although George Shadbolt is accredited for the invention of micro-photography, the earliest example of this was created by John Benjamin Dancer in 1939, when he produced images of 15mm in diameter. Micro-photography is done on a highly diminished scale, meant to be observed using a microscope. Although many prominent artists had dismissed the initiative as trivial and of no practical utility, micro-photography was predicted to be useful someday for sending secret messages during wartime. Soon enough, the concept grew in popularity, and in no time several opticians in France were using this technique. One of the most well-known amongst these was Rene Dagron, who created...
souvenirs by placing micro-photographs in penholders, rings, and so on. The prediction came true in the years that followed, when a pigeon post service was started in Paris, and messages printed in micro-photographic form were attached to the tails of carrier pigeons. Thus, micro-photography could be defined as the process of substantial reduction of the original, either for archival use, or for portability.

NATURALISTIC PHOTOGRAPHY

From the early days of photography, alterations in the final print, to manipulate the outcome as desired, were quite familiar. Pictorialism was the order of the day. Around 1890, P.H. Emerson introduced the notion of naturalistic photography, and held that photography should be taken as a legitimate art in its own right, rather than as a tool to imitate other art forms, such as painting. Meanwhile, many a photographers showed concern about the Photographic Society’s inclination towards the scientific as opposed to the artistic aspects of photography. Emerson, however, believed that every photographer should attempt to prove his worth by depicting the nature in its true character, instead of turning to paintings and other media for inspiration. He felt that one should know how to achieve the desired image exactly and depict it perfectly.

PHOTOGRAPHY FOR SOCIAL REFORM

Photography began to be used by many artists as a useful medium in promoting various social causes. Richard Beard once illustrated a major project on poverty prevailing in London, through his photographs of street scenes. In 1899, John Thomson depicted in his own style, a similar project called the ‘Street Life in London’. A Scottish photographer, Thomas Annan, portrayed the slums of Glasgow. Jacob Riis, a journalist, through his photographs threw considerable light on the condition in the slums of New York. Another artist, Lewis Hine, worked on a campaign to change the labour laws in the United States of America.
PORTRAITURE

Until the dawn of the eighteenth century, portraits were regarded as an indulgence of the wealthy. It was glamorous to produce images of oneself or of others, the extensive skills required however, made it quite expensive.

By the eighteenth century though, there was a tremendous rise in the demand for inexpensive portraiture, which amounted to several developments in the realm of photography. Profile picture, traced from the shadow cast by a lamp, often cut freehand from paper became quite a vogue. This process was named after Etienne de Silhouette, who practiced the technique.

Nevertheless, there were certain limitations attached. For a portrait picture, one had to be appropriately dressed, since the process was only sensitive to blue or white. The portrait could only be taken in a suitable weather and most of the studios were located on the top floor of a building. Often, a metal clamp, hidden from the camera, was attached at the back of the client’s head, to maintain stillness for the picture to be taken.

Full length portraits reveal from time to time how carefully one was to pose in order to stay still, and yet maintain a natural posture. Various techniques, often appalling in nature, were used to keep the client still, considering the long exposure times required.

The discovery of the collodion process proved to be a blessing to the art of portraiture, with the sweeping reduction in the exposure time.

Portraiture though, was not a much-loved choice for many of the artists, who believed in quantity and quick profit, rather than the quality. Many of these works had poor lighting and stereotypical props, creating an air of disinterest and monotony in the images.

This was also a means for people to portray themselves as more well-to-do than they actually were, and it enabled them to set aside the harsh reality and present themselves in a rather honourable manner.

Yet, remarkable exceptions can still be traced, displaying the photographer’s interest in the client, and the effort made with respect to expressions, lighting, backgrounds and the props. Here, the prime focus was on quality, and not quantity or profits. Some of these dedicated artists were Hill and Adamson, Julia Margaret Cameron, Lewis Carroll and, later, Alvin Langdon Coburn. Hugh Welch Diamond used portraiture for medical reasons.
STEREOSCOPIC PHOTOGRAPHY

Stereoscopic or 3D photography accomplished in creating an illusion of depth. This technique is based on the fact that the human eyes are set at a distance of around two inches and a half from each other, and thus, each eye sees an image slightly differently. Following this principle, if two separate photographs are taken at that same distance apart, an illusion of depth is likely to be created.

This concept though, was not too new, since the idea of stereoscopy actually preceded photography, and the theory of binocular vision and drawing was quite known.

Equipments to demonstrate this theory did not begin to be constructed before the 1800s. Sir David Brewster introduced a binocular camera, and the first stereoscopic photograph was produced. Albumen was the most common process for making stereoscopic photographs while daguerreotype images were used only on odd occasions. A variety of viewers were introduced, one such being the cabinet-type viewer, which could store fifty or so positives. Another alternative for viewing the images was the anaglyph process, developed by Ducos Du Hauron, and was used for printing two images on a single sheet.

TRAVEL PHOTOGRAPHY

Until the onset of photography on a large scale, travelling around was a privilege attributed with the rich and well-to-do people only. Thus, before the use of photography, individuals had to rely on the accuracy provided by the explorers, verbally or through a written description. Photography facilitate a larger group of people to enjoy the pictures of faraway lands and enjoy the experience,
visually. Travel photographers traversed far off lands for the joy of the commoners. Travel photography however, was quite a demanding profession. Photographers had to carry along an enormous amount of equipment, since the processing needed to be done soon after exposure. Calotypes were still used by some of the travel photographers, since they were simpler than the collodion process, and allowed the photographer to develop the paper negatives easily at home, expose on location and then, develop the images on returning back home. One of the pioneers of this process was Rev. George Bridges, who, by 1852, had produced close to 1,500 paper negatives of scenes in the Mediterranean and Egypt. Some of the artists who actively practiced travel photography were Maxime du Camp, Francis Frith, Francis Bedford, John C. Fremont, Charles Clifford, William Young and Solomon Nunes Carvalho, amongst others. Samuel Bourne took some particularly striking pictures of the Indian architecture, at times under very tiresome conditions.

WAR PHOTOGRAPHY

While documentary photography gained momentum, it gradually ventured into war photography as well. These war photographs managed to capture some of the harsh realities which crushed people’s fantasies to bits. There was a certain amount of manipulation prevalent in war photography as well and there were many photographers who depicted war pictures, but had never once gone near any actual place of conflict. Another example of using photography during wartime was displayed by the use of micro-photography and carrier pigeons. Some of the major photographers who took up war photography include James Robertson, Roger Fenton and Joseph Louis Gay-Lussac, who used the daguerreotype method. Joseph spoke for the ability of daguerreotypes to precisely render the landscapes. Mathew Brady, along with a large team of photographers, covered the American Civil War in pictures.
Photography in its earliest stages was in monochromes, with just a few techniques known to be used to add colour to the original image. The need for colour photography though, was soon felt, and thus progress was made gradually to achieve this.

In the 1860s, James Clerk Maxwell suggested that three monochrome images of the same subject could be formed; each created using a different colour filter of the primary colours, namely, red, blue and green. This idea laid the foundation for the trichromate colour photography. With an appropriate emulsion responding to all colours, the technique turned out to be quite sound.

Herman Vogel discovered sensitising dyes in 1873, which formed the framework for full colour photography. Following this lead, orthochromatic plates that were sensitive to all colours were produced.

In 1906, ‘panchromatic’ films, sensitive to all colours came to fore, and it was possible for photographers to view each of these three slides superimposed upon one another, using a viewer.

Auguste and Louis Lumière introduced plates called Autochrome in 1907, due to which, the colours appeared in delicate pastel shades, which often appeared slightly darker than desired.

Another method that came to be known was the subtractive method, introduced by Ducas du Hau-
ron in 1869. Through this process the colour could be re-created. Ducas proposed that instead of mixing colour lights, dyed images could be combined, and the films could be coated with three thin layers of emulsion, each sensitive to the primary colours. On processing, the transparency would appear as a full colour photograph.
In the 1930s, Kodak produced a film following this principle, and named it Kodachrome.

FILM

The foremost photographic film was developed by John Corbutt in 1888, by coating sheets of celluloid with photographic emulsion. Later that year, George Eastman produced roll film which was designed for Kodak, a new camera, wherein, after exposure the film would be returned still in the camera for processing afterwards. In 1894 Eastman Kodak produced daylight loading film. By the 1930s, the initial, highly inflammable films had been substituted with non inflammable cellulose acetate films. The process however, still remained quite hazardous.

IMPRESSIONISM

Impressionism was a movement enthused by naturalistic painting, largely landscape which was the prime theme of the 19th Century art, and emphasised on colour and light, in rapid brush strokes. The term ‘impressionism’ derives itself from a painting by Monet called ‘Impression: Sunrise’, painted in 1872. It was a name given to ideas which took inspiration from fleeting experiences and emotions, rather than any lengthy detail, and represented through a medley of hues

Photographer unknown, 1880
and a variety of brush strokes.

Degas, Renoir and Pissarro are among other artists renowned for this form of art. These artists felt kindred in their disapproval of the existing art establishment and the recurring rejections faced by each of them.

Photography too was influenced by impressionism. In 1874, a few of the photographers who had adopted the theory of impressionism in their work, came together to exhibit some of their photographs in Paris. This group remained in existence for nearly twelve years, and the likes of Cezzane and Gaugin exhibited their work.

Another photographer worth mentioning is George Davidson, who believed that it was not always necessary to strive for a sharp image. He defied all the pre-existing notions by using a rough-surfaced paper and a soft focus for one of his photographs, ‘The Onion Field’.

**LIGHTING**

In the initial days after the birth of photography, the only source of lighting was the sunlight, and thus, all was dependent on long days and good weather, and since the early chemical emulsions, being less sensitive to light, bright lighting was ever so important.

The earliest known artificial light photography was introduced in 1839 by L. Ibbetson, when he used oxy-hydrogen light, widely known as limelight, for photographing microscopic objects. He created a daguerreotype in as short a time as around five minutes, and claimed that it would have taken nearly twenty-five minutes using normal sunlight.

Meanwhile, Nadar used battery-operated lighting to photograph the sewers of Paris. Soon after, the first studio lit by electric light was established by Van der Weyde. The lighting, powered by a gas-driven dynamo, was sufficient to enable exposures of as short as 2 to 3 seconds for creating carte-de-visites. Thereafter, a number of studios started using arc lighting for their photographs.

Fox Talbot conducted an experiment in 1850 using static electricity stored in Leyden jars. The prime motive of all these experimentations was to capture fast motions.

Some photographers also took to using uncanny techniques of lighting, such as burning magnesium in oxygen, wherein a piece of magnesium wire was held from one end and lighted at the other end, causing bright light. The first portrait taken using magnesium was by the Alfred Brothers, dating back to February 1864. This technique however, was quite expensive in those times, and could not be used commonly, until the price of magnesium reduced in the following decade. Soon thereafter, magnesium flashlamps were introduced, a combination of magnesium and dry plates.
The principle behind these flashlamps was a small amount of magnesium powder blown using rubber pumps through a spirit pump, producing a bright flash lasting for about 1/15th of a second. One of the disadvantages of using this method was the amount of smoke and ash left behind. Later, flash powder, a mixture of magnesium powder with an oxidising agent such as potassium chlorate was introduced. After spreading the powder on a metal disc, it was ignited with sparks from a flint wheel, electrical fuse or simply by applying a taper. This powder was highly explosive and thus quite dangerous. This concern, however, was resolved with the invention of the flashbulb in the late 1920s, and the introduction of the flash tube in 1931, by Harold Egerton.

PICTORIALISM

Pictorialism emerged in the later half of the nineteenth century, when it was commonly misperceived as impressionism. In the realm of photography, greater emphasis was laid on the overall disposition of an image, in comparison to the singular subjects, and any photograph which also accentuated the surroundings beyond a particular subject, defined pictorialism.

As the nineteenth century progressed, the desire to break off from the conventional styles of those times intensified. Photographers wished to explore, and the focus of photography began to gradually shift from sharp reality, towards creating a more aesthetically appealing form of art. This is when the notion of pictorialism gained momentum, and the incorporation of art and emotion into a photograph came to be appreciated.

Several photographers sought to adopt newer, more artistic techniques in photography, such as the manipulation of the negatives, use of the gum bichromate process and combination printing, which altered the details, and came to be recognised as High-Art photography.
Some of the influential photographers associated with this approach to photography were Oscar Rejlander, Henry Peach Robinson, Robert Demachy and George Davidson, amongst various others.

THE PRE-RAPHAELITES

A group of mostly British artists who rejected the neoclassical style of photography, composed the brotherhood called the Pre-Raphaelites, founded in 1848. The movement had a considerable impact on art in Britain in those times, as the artists preached Early Renaissance as a purer form of art.

This movement entailed three main theories. The stress was laid on historical and religious paintings, termed as the realist phase. Truth of nature advocated the portrayal of contemporary scenes, in a rather surreal detail, while a fascination for the middle ages led to the representations of the mediaeval themes and styles.

The Pre-Raphaelites were inspired by the past in their work, the images thus holding religious, mythological or historical depictions, and particularly mediaeval themes. The concept was to establish that although the truth is ugly, it has to be beautified and pleasingly manipulated.

Among those influenced by this movement were Lewis Carroll, Julia Margaret Cameron, Henry Peach Robinson and Francis Bedford.

VORTOGRAPHS AND VORTICISM

Wynham Lewis, a painter and writer, published “Blast: Review of the Great English Vortex”, instigating the Vorticism movement. Evolving from Futurism and Cubism, Vorticism dismissed the traditional values in favour of the modern technology. The aim of the Vorticist photography was to capture the complexities of the industrialised civilisation.
THE EMERGENCE OF MODERN PHOTOGRAPHY

THE PHOTO-SECESSION

THE NEW OBJECTIVITY

EXPERIMENTAL APPROACHES

DOCUMENTARY PHOTOGRAPHY

PHOTOJOURNALISM
The Emergence of Modern Photography

Ever since the earliest days of photography, beginning with the invention of the pinhole camera and camera obscura, it had proved to be quite a trying and time taking process. The inadequate availability of light was another barring factor in photographic progress. The early cameras were later substituted with cannistered film and by the 1930s, with the development of Kodachrome colour processing, colour photography became available to the masses. In the late 1940s, Edwin Land, a chemist, proposed the Polaroid process. This process enabled to take a picture, conveniently remove the print from the camera, and after peeling off the protective layer, let it slowly fade into view.

A Japanese company, Fuji, created the first disposable camera in the mid 1980s, which made the photography process much simpler, and the turnaround time was reduced to just 24 hours. Soon enough, around the ‘90s, Fuji introduced the first digital camera, the DS-1P, resulting in the wearing out the era of film cameras. Employing CMOS sensors instead of films, the digital cameras could display the photographs immediately and right away permitting the photographer to print or delete them. At present, a range of digital cameras are at a painless disposal of the general public.

There are a range of photographic courses available in a number of renowned academies, pivotal for the progressive realm of photography.
The Photo-Secession, founded in 1902 by a New York based photographer called Alfred Stieglitz, was amongst the most significant Pictorialist groups prevalent in the early half of the 20th century. The setters of the secessionist movement in Europe sought to differ from what they considered to me outdated modes of working and thinking about the arts. They worked to exhibit the works of many of the modernist painters and sculptors, as well as the photographs of those artists who employed a variety of printing processes, such as gum-bichromate and bromoil printing. These were the methods which required considerable skill, and created unique prints that often resembled etchings or lithographs more than photographs.

Over a period of 15 years of the existence of Photo-Secession, the emphasis shifted from the artificial and artistic representations, towards depicting the true features which photography was valued for. Stieglitz published 50 issues of a printed journal, the Camera Work, between 1903 and 1917. Among other works, fine gravure reproductions of American and European photographs and halftone reproductions of artwork by Henri Matisse and Pablo Picasso featured in the journal.

The members of the Photo-Secession included the likes of Steichen, Alvin Langdon Coburn, Gertrude Käsebier, and Clarence H. White.
With the advent of industrialization and technology came ‘New Objectivity’, also known as the ‘new vision’ or ‘Precisionism’. In the years following the First World War, photography was shaped with sharp, defined imagery, and the objects tended to be removed from their actual context. The clear lines and the cool colours of this style were evident of the growth and progress during the 1920s.

In 1917, Strand produced sharp and highly detailed close-ups of the machines and the organic matter, and also created sparkling landscapes. He was later invited to Mexico to produce educational prints for the government, for which he created a series of portraits and landscapes with the prism lens, and published them as gravure prints in 1940. Steichen, who was associated with aerial photography for the American Expeditionary Forces, took to sharply focused celebrity, fashion and product images, leaving behind his initial his impressionistic style. These images were published in Vanity Fair and vogue magazines. Many other crisp, well-designed images of industrial products appeared in the advertising brochures and magazines, some of them by the likes of Margaret Bourke-White, Paul Outerbridge, and Charles Sheeler.

A Californian photographer, Edward Weston, was noted for his fondness for clear, highly detailed presentation of both, the natural and the manufactured forms. Weston used a large-format equipment with lenses stopped down to the smallest aperture, and designed a method of rendering the very essence of an object, noticeably bringing out its characteristics, such as the colour, the material used, and so on. He was followed by many others, who appreciated the use of the smallest aperture, in order...
to create the maximum depth of field and sharpness. This led to the formation of the group known as the f.64, consisting of Weston himself, his son Brett, Ansel Adams and Imogen Cunningham, amongst others.

Strand’s nature photography spectacularly captured the beauty of wildlife, and the popularity of his images helped raise the awareness regarding the need for preserving the wildlife. Strand constantly preached what he referred to as the ‘zone system’, following his emphasis on the exact control of the tonal quality.

As the theme of New Objectivity spread in Europe, German photographers like Karl Blossfeldt and Albert Renger-Patzsch. Blossfeldt produced highly detailed and quite magnified images of plants, removed from their natural habitat. Renger-Patzsch believed in accentuating the material of the subject, rather than the photographer’s emotions towards it. He also held that the final image should exist in all its completeness, without any manipulations.

This objective approach also characterised the works of those inspired from the artistic ideas of Constructivism, a movement which urged the possibility to present the routine objects and processes from newer vantage points, thereby reawaken the interest in them. The concept originated in the Soviet Union and rapidly spread to Germany and the central European countries during the late 1920s and the early 1930s. The idea, pioneered by a Russian painter and ideologue Aleksandr Rodchenko, enabled much greater exploration with forms. Aleksandr captured the plain and mundane objects from unusual vantage points, portraying the world in a fresh and interesting form.

Constructivism also influenced photographers in Japan, especially following the earthquake in 1923, laying emphasis on the new, sharper form and style. Among the most prominent of these photographers was Yasuzō Nojima, who came to be recognised for his portraits, landscapes and groundbreaking nudes.

**EXPERIMENTAL APPROACHES**

By 1916, the idea of abstract representation had found its way into many artists’ works, and the influence of Modernist abstraction was widely evident. Photo-Secessionist Alvin Langdon Coburn produced a series of images where no subject matter is recognisable, the images commonly known as vortographs. The period between the two world wars, was the apex of experimentations and diversified photography, promoted by the Constructivist ideology as well as the Moholy-Nagy and the Bauhaus.

With the manipulation of images, experimenting with the processes and the use of multiple images or exposures, the images largely resembled abstract paintings, abstaining from the actual subject matter. Often, the selection of lighting and the printing paper were also explored. This new direc-
tion of photography was briefly attributed to the Dadaist ideologies of accidents, chance and the subconscious. A Dada artist, Man Ray, created the ‘rayographs’, which were a series of abstract shapes, created by exposing objects placed on sensitized paper to light, instead of using a camera. This eventually led to the introduction of camera-less photography, called ‘light graphics’. Inspired from this technique, Moholy-Nagy created the ‘photograms’, which, using this kind of manipulation consisted of abstract shapes and forms. An American photographer, Carlotta Corpron, produced a range of abstract images using a device called a photo modulator.

The techniques of photocollage and montage grew in appeal during the interwar period, enabling the artists to express the complex political or psychological feelings and ideas. German artists, Herbert Bayer, Raoul Hausmann, John Heartfield, and Hannah Höch, employed collages and montages to comment ironically on the political and social issues. In his works, Höch portrayed the role of the ‘new woman’ emerging from the turmoil of postwar German society. By creating montages integrating drafting tools and geometric shapes, the Soviet Constructivists aimed to establish their belief that the artist himself is the architect of the society.
In the early years of the 20th century, French photographer Eugène Atget highlighted the idea of documentary photography, producing nearly 10,000 images of Paris and its surroundings. He documented shop fronts, the trees and the greenery, the architectural details and the statuary and individual street vendors. In addition to emphasising the composition, materiality of the subjects and the quality of light, Atget paid remarkable attention to the photographer’s feelings towards the subject matter. Through his intense images, created using a large-format camera, documentary photography transformed from mere record making into a moving experience of one’s surroundings.

Lewis W. Hine was another prominent documentary photographer, who worked on the immigrant and working-class life in the United States. Hine later worked for the National Child Labor Committee, an organisation seeking to induce awareness in the American industrial economy of its effects on individual workers. From 1908 to 1916, Hine produced numerous individual portraits and group scenes of underage children employed in textile mills, mines, canning establishments, and glass factories and in various other street trades throughout the United States. His work prompted the first federal regulation on child labour in the United States.

During the Great Depression, the federal government of the United States undertook a major documentary project, which entailed the contribution of 11 photographers, who worked towards producing as
many as 270,000 images. These images presented
the effects of displacement caused by the economic
downturn, lack of rain, and wasteful agricultural
practices in the South America and the midlands.
Walker Evans was another photographer who doc-
umented the lives of Southern sharecroppers, and
worked with James Agee on Let Us Now Praise
Famous Men, issued in 1966. Margaret Bourke-
White, a prominent industrial photographer at a
time, worked with her husband, writer Erskine
Caldwell, to produce You Have Seen Their Faces in
1937, which was one of the first photographic pic-
ture books to appear in soft cover.
Berenice Abbott executed a significant federal
project, and vaguely inspired by Atget’s works on
Paris, photographed parts of the New York City, in
an attempt to bring together the past, present and the
future. She published and exhibited this work, titled
Changing New York, in 1939, underwritten by the
Works Projects Administration (WPA). The Photo League, an association of photographers com-
ing from varying backgrounds, also set out to document the urban, working class neighbourhoods
of New York.
A German portraitist, August Sander, created a por-
trait of Germany during this period, featuring the
individuals forming the German society, and docu-
mented a class structure with the workers and farm-
ers in the lowermost position. These images, pro-
posed for a book called ‘The Face of Our Time’,
were destroyed by the Nazi regime.
Other influential documentary photographers were
Russian photographer Sergey Prokudin-Gorsky,
Mexican Manuel Alvarez Bravo, and Robert Dois-
neau and Brassai working in Paris, amongst oth-
ers. Over a period of 20 years, Edward S. Curtis
documented 20 volumes on studies of the Native
American tribes. The National Geographic was in-
creasingly interested in the lives of people outside
the Western culture during those years.
As the demand for photographic illustrations intensified, Photojournalism gained rapid force by the end of the 19th century. With the coming of lighter, easier-to-use cameras, war images began to be reproduced widely, and magazines in large numbers were being produced throughout the world.

Although the photographic records of the First World War were under strict censorship, the rise of picture magazines beginning from the 1920s till the 1950s warranted authentic war reportage. Amongst those who documented various wars were Jimmy Hare who covered the Spanish-American War, Luigi Barzini who photographed the Russo-Japanese War and Augustin Victor Casasola who documented the Mexican Revolution.

German-made miniature cameras, Ermanox and Leica, introduced in 1924 and in 1925 respectively, gave a new dimension to photojournalism, with their wide-aperture lenses, short exposure times and the ability to photograph indoor scenes in the available light. In addition, Leica used a 35-mm roll film with increased frames per second, resulting in photographs with more informal and casual poses. This provided the photographers with the speed and precision needed to capture significant moments in as less as just a fraction of a second. This led the Frenchman Henri Cartier-Bresson, who believed the camera to be an extension of the eye, to develop a style which he referred to as the search for the ‘decisive moment’. Using a miniature 35-mm film camera, he created exposures which brought together gripping psychological and visual appeal.

By 1928, two of the largest picture magazines of Europe, the Münchner Illustrierte Presse and the Berliner Illustrierte Zeitung, were publishing these new styles of photographs. Erich Salomon photographed candid portraits of several politicians and celebrities by sneaking into many meetings officially prohibiting photographers and journalists. Felix H. Man photographed cultural and social events, which Stefan Lorant, the editor of the Münchner Illustrierte, used in imaginative picture essays.

The example of these German magazines was soon followed in the rest of Europe and in the United States, leading to the launch of several picture magazines, such as the Parisian Vu in 1928, as well...
as, Life and Look, the two magazines conceived in 1936 in the United States. This amounted to the evolution of photojournalism, and the idea of an entire team of a picture editor, photographer, researcher, and a writer began to materialise. The photographers were given clear brief for their assignments and were required to take great quantities of photographs, so as to provide a wide selection to the editors. The visual story was then carefully organised and planned, for maximum reader impact. The opening photograph laid the brick-work followed by a written narration and a visual climax for a definite conclusion.

The initial preference was on visual sharpness and depth and thus, the American photographers used large-format cameras that required slow lenses, large plates, and additional flash light. Amongst the most renowned photographers for various magazines were Bourke-White working for Life, Alfred Eisenstaedt, a photo reporter for the German Keystone Picture Agency, Hansel Mieth and Peter Stackpole. Some of the photographers however, objected to the complete control practiced by the editors over the workings of the publications.

Stefan Lorant withdrew from the Münchner Illustrierte Presse, and established two magazines, the Weekly Illustrated and the Picture Post in 1934 and 1938 respectively, in London. The photographers were encouraged to take photographs using just the available light, without the aid of a flash light. These images brought huge reader appeal due to their outstanding naturalness.

The photojournalistic style various events, such as the exhibition ‘Family of Man’ at the Museum of Modern Art in New York City in 1955, and presented nearly 500 images, mostly from photojournalistic and documentary work, resembling a three-dimensional magazine.

Spanish Village, W. Eugene Smith, 1951
Postmodern Photography
POSTMODERN PHOTOGRAPHY

The 1980s witnessed the emergence of a generation of photographers who were kindred in the belief that they were artists involved in the art of photography. The art was acutely related to the truth and exclusive of any manual interventions, the medium of expression being light-sensitive emulsions.

Framing and presentation were integral to the process of creating the work itself. Some of the photographers treated their works as installations by framing them or adding typography to them. There was an intense desire to deviate from the conventional styles of photography and redefine the perspective in which their work was perceived. These artists were aided by several contemporary art dealers, critics, and collectors.

Robert Mapplethorpe, an American artist, was acclaimed for the innovations in terms of format and presentation in his work, and also for challenging the conventions and taboos. Cindy Sherman constructed an intricate montage based on the theme of identity and image, positioning herself as the constantly metamorphosed subject. John Baldessari and Richard Prince, meanwhile, were working to unearth the mysteries of the mediated image, which they adapted into challenging structures.

The expression ‘Postmodern’ came into being as photographers began to explore the existing theories in the image-making process.

The dawn of the 21st century has presented the photographers with a new opportunity to wander away from the traditional negative-positive process. It is possible now, to create images ‘digitally’, an electronic alternative to the erstwhile chemical processes, and the images are recorded as data on thin disks, and can be viewed directly on a computer screen. This innovation has also offered the capability to manipulate the images more easily, which has proved to be an important commercial advantage, since it is possible to conveniently remove imperfections, alter the details and so on. This has also helped in the trouble-free and faster transmission of these images.

This new-found potential of digital photography, however, is being questioned by many on the grounds that the traditional photography was defined by its candor and simplicity, quite unlike the domain of digital imagery.
The Perpetual Debates
DIGITALIZATION OF PHOTOGRAPHY

ART AND PHOTOGRAPHY
The introduction of photography revolutionized the world of art and rendered a new perspective to the visual depiction of emotions. Over the years, photography has adopted numerous forms and styles, and advanced from its early stages to become an imaginative and indispensable visual art form.

With the passing of time, every process improvises itself through various innovations and technological progress. Digital imagery is one of the most recent developments in the realm of photography. Its growth, however, has been greatly overshadowed by the frequent arguments against it, voiced by some of the veterans in the field of art and photography.

The foremost argument arising from the dispute between traditional and digital photography is that, the images in the days of traditional photography were realistic, unlike the digitally manipulated images of today’s times. A belief which is deeply etched in the ideologies of those preaching the conventional methods is that the images created digitally, would never reach the iconic status enjoyed by traditional photography. In the earliest photographic processes, it was difficult to reproduce an image, and each photograph was one of its kinds, making it unique.

The immediate results of digital photography and the ability to easily reproduce a digital image, although a boon for commercial photography, were dismissed by many as a disgrace to photography.

It cannot be denied though, that the coming of digital imagery has widened the sphere of creativity and imagination. It is now possible to digitally alter the contents of an image, meeting the specific expectations of the photographer. In addition, it is unarguably a more efficient, faster and less expensive alternative to traditional photography, and offers higher control on the final image.

Nevertheless, digital photography has still not achieved perfection in creating high-resolution images, as is the case with the conventional photographic processes, which provide a lot of image information. It is believed that photography will gain more creativity and effectiveness only when the end product is of the finest quality.

Digital photography can also be quite time-consuming, on account of the countless possible techniques of manipulation using the various photo-editing softwares.

While capitalizing on the available technology and embracing the tools available might seem the right thing to do today, some photographers who specialize in the dark room and the techniques of film photography think differently of this recent development in their field, for this innovation might prove to eliminate the essence of their specialization. However, it would be incorrect to claim that manipulation is something only to be associated with digital photography. Corrections occurred in the traditional techniques of photography as well, where it was a common process to correct a perspective problem or varying the colours of an image with filtration. Therefore, it can be said that some of the process of a darkroom and those in digital editing are quite analogous.
A counter-argument in favour of digital photography is that it increases the scope of exploration and extends freedom to the photographer to take several photographs of the same subject, creating an extensive variety of images to choose from. The art of photography heavily relies on the element of spontaneity and accident, occurring in the process of capturing a single event in multiple images.

Consequently, this perpetual debate on the issue can be brought to a close by stating that both, digital and traditional photography, compliment each other, both having their own benefits and shortcomings, and the world of photography has room for both. Art, a timeless and progressive entity in character, is subjective and there are innumerable ways of expressing it.

Digital photography is merely a tool for modernization and a testimony to the growth of photography.

ART AND PHOTOGRAPHY

A creation of significant aesthetic appeal, which makes an impression on the spectator, can be described as ‘art’. It is inclusive of anything, whether aligned or not, proportionate or distorted, beautiful or disturbing, with just one definite aspect being its effectiveness. It should be capable of communicating an emotion beyond words.

It has been widely argued that art is a mere accident, introduced to mankind by the Gods, while others who strive for utmost perfection in their work, resolutely shunning such beliefs.

A debate which persistently shakes many a conviction is whether technology has enriched or doomed the artistic ideologies, and since art in itself is quite ambiguous, it is difficult to convincingly settle the argument.

The introduction of photography in the 1820s influenced the conventional understanding of what was referred to as the ‘fine art’. It was a fascinating new opportunity to explore newer horizons of imagination and creativity. But those practicing the already existing artistic skills found themselves threatened by the development, and swiftly dismissed it as an innovation lacking any true creative nature.

Amidst these debates however, photography gradually established itself as an honourable form of artistic expression, as effective as any other form of visual art, be it a painting or a sculpture.
Conclusion
CONCLUSION

The introduction of photography widened the horizons of visual art and the indispensable inter-reliance of art and photography was gradually recognized. In India, however, there still exists a small, yet significant distinction between the two.

A lack of the historical knowledge of photography prevails, limiting the explorations in terms of styles and techniques, amounting to a state of stagnancy. The commercialization of fashion photography in India has resulted in a diminishing scope for creativity and imagination, while aesthetics and art have taken a backseat to make way for the escalating growth of commercialization. In addition, the concept of art photography has not been able to evolve beyond the theme of street photography, and it is believed by many that an amalgamation of art and photography would significantly alter the conventional styles of photography followed in Indian fashion photography. Thus, it is essential to pause, and reflect on the subsisting scenario of fashion photography in India.
After a careful study of the history of photography, followed by a primary research on Indian photography, a style of photography was proposed, in an attempt to blend fine art with fashion photography, while sustaining its commercial value. 

The various styles, processes and techniques that appeared in the course of technological developments aided in creating the following series of photographs. These images are simply an example of one of the many possibilities of innovations in the realm of art and photography. These photographs are essentially inspired from the age-old processes of gum bichromate and collodion, in addition to the vortographs.
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