New Europe College
GE-NEC Program
2004-2005
2005-2006
2006-2007

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PHOTOGRAPHY AS ART AND DIGITAL TECHNOLOGY

The following text is written from the point of view of a visual artist who has made frequent use of analogue photography in his work, but who, like others around him, turned to digital technology at the start of the new century, though not without retaining deep concerns, besides the aesthetic and technical implications, about the conceptual ebbs and flows that have accompanied this transition.

At the beginning of the 1980s, traditional photography, based on film and chemical processes, became the victim of a technological revolution, an avalanche of digital technology which overtook it and gave it the status of a historical episode. These events gave rise to an unparalleled fervor among theorists and commentators on the photographic phenomenon in particular and culture in general. Vast numbers of books and articles were written which foretold, in a variety of ways, the death of photography. A situation not dissimilar to that immediately following the original birth of photography was created, when it was thought the then new technology would lead to the disappearance of painting. This – like the disappearance of theatre in the era of cinema, or film and cinema in the era of television, or the telephone in the Internet era – did not happen. Indeed, old media have only needed to alter their position in relation to new technologies. Film-based photography, therefore, will also not disappear, though it will probably only be used in highly specialized fields (art being one of them) and in close relationship with its classic aesthetic value, while appealing to the implied connotations (objectivity of representation, mass culture, etc.). In terms of image perception, we are now at a somewhat symmetrical, albeit opposed version of the moment seen at the beginning of the 19th century; we are witnesses to the closing of a historical parenthesis in which mankind lived under the illusion that through photography reality could be documented objectively. Paradoxically, this loss of faith in image

objectivity is occurring at a time when attitudes towards the medium – represented by the photographer, armed with a digital camera, who processes images with the help of a computer (setting contrasts, modifying color saturation, re-framing, cutting out or adding certain elements) and prints the final product using ink jet technology – are far closer to the way of thinking and working of the painter than that of the classical photographer. Similarly, the way a digital photograph is perceived and analyzed is closer to that for a work of art than a photograph made from a negative film.

The philosopher Roger Scruton gives a very accurate analysis of the way in which, from the point of view of its documentary qualities, we perceive and analyze a painted image:

"If a painting represents a subject, it does not follow that the subject exists nor, if it does exist, that the painting represents the subject as it is. Moreover, if x is a painting of a man, it does not follow that there is some particular man of which x is the painting. Furthermore, the painting stands in this intentional relation to its subject because of a representational act, the artist's act, and in characterizing the relation between a painting and its subject we are also describing the artist's intention. The successful realization of that intention lies in the creation of an appearance, an appearance which in some way leads the spectator to recognize the subject." [1]

Unlike a painting, when we look at a photograph we are guided by totally different judgments:

"A photograph is a photograph of something. But the relation here is causal and not intentional. In other words, if a photograph is a photograph of a subject, it follows that the subject exists, and if x is a photograph of a man, there is a particular man of whom x is the photograph. It also follows, though for different reasons, that the subject is, roughly, as it appears in the photograph. In characterizing the relation between the ideal photograph and its subject, one is characterizing not an intention but a causal process, and while there is, as a rule, an intentional act involved, this is not an essential part of the photographic relation. The ideal photograph also yields an appearance, but the appearance is not interesting as the realization of an intention but rather as a record of how an actual object looked". [2]

How do we perceive and analyze a digital photograph? Let us take as an example a hypothetical advertising image in which, in the most photorealistic way, various historical and contemporary personalities are floating together in space and urging us in one voice to use product *x* or *y*. We may like the idea behind the image, or we may appreciate the technical skill used to allow all the elements in the frame to co-exist in perfect harmony, but we are clearly not prepared to perceive the composition as a photograph in the sense that all the component elements in the frame were present at the same time, in the same place, in front of the camera. Surely, advertising uses photography with the greatest of ease, with no prejudice against the indexical relationship it has to reality, and even exploiting, if need be, this precious inheritance of photography, while at the same time eroding, by means of this approach, photographic documentary credibility.

It has become increasingly commonplace, even among amateur photographers digitally recording various moments and events that mark their personal lives and their families' lives, to intervene and eliminate certain details or to combine multiple images to produce ideal "documents" meant to be as close as possible to the way events were perceived or intended to be perceived in the future by others. In fact, amateur photographic studios and labs are now increasingly providing these "aesthetic surgery" services for their customers' photographs. We can verify this by imagining how future generations will react when confronted with family albums of such photos. Surely, in a totally different way from today's generations. In the future, electronic albums, containing digital family photos, will instead play the role of illustrated story books in which the main focus will not fall on the reliability of the realities or facts presented therein but the intentions and hopes that led to the construction of the images in the first place.

One of the most read and quoted theorists on the implications of digital technology in the development of various fields is William J. Mitchell.

At one point in his prominent book *The Reconfigured Eye, Visual Truth in the Post-Photographic Era*, Mitchell takes an analysis by Viola Pemberton-Pigott on Canaletto's painting technique – in which the Venetian painter is seen to combine several viewpoints, changing the horizon, modifying the height of various buildings, in order to create ideal images that could never be perceived this way from any single

viewpoint – and draws a comparison with the modus operandi of digital technology users:

> "So it is with computer collage. Its spatial and temporal dislocations – its explosions and reassemblies of the decisive moment – undermine photographic integrity in a particularly insidious way. The standard photograph's instantaneous character makes it essentially a record of an event – something with definite spatial and temporal coordinates. (Photo albums often record these coordinates, and some popular cameras even automatically stamp the date on each image.) We say that a photograph even took place at a particular moment of exposure. Seeing the photograph we can go back to those coordinates. But an electronically assembled event has unascertainable coordinates, and we find no flesh-and-blood photographer – alive or dead. Nobody can claim to have stood behind the camera and made the decision to record. It creates an ontological aneurism – a blowout in the barrier separating visual fact and fancy".[3]

Such situations refer to images resulting from the combination of other photographic images (digitally or recorded in analogue and subsequently digitalized) but using lens based systems. But what he calls "the post-photographic era" implies much more than this. With the help of three-dimensional scanning systems that generate complex sets of data we can obtain images that are very similar to those taken from the same recording points by using photographic systems. However, an important distinction must be made:

> "The synthesized perspective is not a direct imprint made by light emanating from the scene, but a *reconstruction* made by applying formalized theoretical knowledge of projection and shading to recorded observations. The verisimilitude of that reconstruction depends both on the completeness and accuracy of those observations and on the adequacy of the projection and shading techniques used."[4]

Technologies and programs specific to the post-photographic era are able, based on data sets, to build up seemingly photo-realistic images that are nonetheless independent from any real world references. Though they seem to have been created deliberately for artists, since they offer a maximum freedom of creation, the first fields in which they were used were the military and science.

"The procedure is to employ some appropriate scientific instrument to collect measurements and then to construct perspective views showing what would be seen if it were, in fact, possible to observe from certain specific viewpoints. Thus, for example, space scientists have been able to synthesize what appear to be detailed, close-up color photographs of the rings of Saturn and the mountainous topography of Venus. They are like the souvenirs of returning space travelers – but no traveler has ever witnessed these awesome scenes directly, and no camera has ever recorded them."[5]

Thus, this new technology not only enhances and makes more visible what was already visible; it also modifies the very nature of the visual, including domains it was previously considered impossible to visualize, by transforming data and concepts into images. According to Jean Louis Weissberg,[6] the transition from the photographic to the post-photographic era, would be similar to the transition from an era of "knowledge through recording", in which the image re-presented an object, to one of "knowledge through simulation", in which the image determines its existence. The consequences of such changes of perspective run far deeper, however, and go as far as to place in question our capacity to distinguish between the real and the imaginary.

But how are these ideas reflected in the working methodology of contemporary artists, and especially of those using the photographic image in their work? Before addressing this question, however, it is worthwhile remembering Christiane Paul's comment on how, in the larger context of digital art, photography is only a half-way house, half-way in the sense that it uses digital technology to create what are still traditional objects.

"One of the basic but crucial distinctions made here is that between art that uses digital technologies as a *tool* for the creation of traditional art objects – such as a photograph, print, sculpture, or music – and art that employs these technologies as its very own *medium*, being produced, stored, and presented exclusively in the digital format and making use of its interactive or participatory features. While both of these kinds of art share some of the inherent characteristics of digital technology, they are often distinctly different in their manifestations and aesthetics."[7]

This phenomenon is too recent, lacking sufficient distance, to permit an objective overall evaluation. However, the following opinions, involving

a short review of the historical relationship between photography and art, from its beginnings until postmodernism, can be taken as an interim assessment. These are followed by a more detailed presentation of what is happening in the various directions of contemporary art photography without insisting on individual artistic approaches, though emphasizing, where necessary, such approaches that may prove relevant for the chosen subject. The author has also included various opinions on the way new technologies are influencing the distribution of and trade in photographic images in general and art photography in particular.

> "Photography is a means of visual communication. But the history of photography as an art is concentrated on photography as an object and on its aesthetic qualities, rather than on photographic communication".[8]

In the 19th century, discussion of photography mainly centered on photography's ability to record details, and the accuracy with which it did so, as well as its expressive potential, which was still very much tributary to painting, both from a thematic and aesthetic point of view. It was pictorialism (with its various different trends, some with a naturalist foundation, others a symbolist or even modernist bias) that best characterized the pro-artistic tendencies of photographers at the time (Robert Demachy, Peter Henry Emerson, Gertrude Kasebier, Carece H. White and the young Alfred Stieglitz and Edward Weston).

Towards the end of the 1910s, together with the printing of the final issue of the publication *Camera Work*, emphasis began to shift towards photography as a specific medium with well defined qualities and attributes, which gave rise to the term *straight photography* (Ansel Adams, Eugene Atget, Karl Blossfeldt, Hery Cartier-Bresson, Walker Evans, August Sander, Edward Steichaen, Alfred Stieglitz, Paul Strand, Edward Weston, Minor White) and dominated the era known as *photographic modernism* until the 1970s. Two related major movements from the early part the 20th century are worthy of mention in terms of expressing the relationship between photography and art: Surrealism, in which some artists proved that photography could also be a medium in which to chart the borders of the unconscious (Man Ray, Hans Bellmer, Claude Cahun, Pierre Molinier, Andre Kertesz, etc.); and the Bauhaus school, in which photography became an essential part of artistic-type investigations (Laszlo Moholy-Nagy, Florence Henry, Paul Citroen, Andreas Feininger, etc.).

The road to the art galleries began from various directions around the beginning of the 1960s, first in the US and only later in Europe. Thus, on the one hand, a number of major representatives of Pop Art (Andy Warhol, Robert Rauschenberg, David Hockney, Ed Ruscha) began using photography in their work, while on the other hand, conceptual artists began using photography to question the concept of representation (Joseph Kosuth) or stress the importance of the creative process over the result itself (John Baldessari, Marcel Broodhaers, Victor Burgin, Bruce Naumann, etc.)

In the second half of the 1970s, Postmodernism became less interested in the formal component and photography, having become only one of the various ways of producing images in a consumer society, was increasingly perceived as a language or a sign system. Rediscovering the writings of the 1930s on photography and film by Walter Benjamin, and under the influence of semiological writings by Roland Barthes and Umberto Eco and works by French philosophers such as Jacques Derrida, Jean Baudrillard and Jean-Francois Lyotard, postmodern artists (Cindy Sherman, Barbara Kruger, Sherrie Levine, David Leivinthal, Richard Prince, Pierre et Gilles, etc.) began to question, with suitable irony and cynicism, concepts such as novelty, originality and the "aura" of the work of art in an era in which images seemed to be easier to manipulate, recycle and disseminate.[9]

Although supporters and promoters of photography as art had existed throughout its entire history, not even the most optimistic among these had dared hope this medium would ever win wide scale acceptance and be placed on the same level with painting and sculpture. While, in the United States, photography was being studied in universities (the Photography Department at MOMA was founded as far back as the 1930s), all these remained exceptional cases, both on the American continent and, especially, in Europe, where it was regarded by the artistic establishment as an unwanted populist presence in its elite milieu. In light of this Val Williams's comment on the state of affairs in 1970s London, found in the preface to the impressive retrospective album on Martin Parr, seems quite relevant:

"Today, when every other exhibition is a photography show, and painting and sculpture have become the exception to the rule, it is difficult to imagine a time when small photography galleries, often in makeshift accommodation – a corridor in a university building, a theatre foyer, the

reception area of a photographic company – were the only institutions that would show such photographers as Helmut Newton, Don McCullin and David Bailey, or would look at portfolios by such young hopefuls as Martin Parr."[10]

Ever since then the idea of photography as an art form has gained such a strong foothold that it today receives the recognition it deserves and is spreading throughout the entire network of contemporary artistic institutions (galleries, museums, art books and reviews, international art centers, biennials, art fairs, etc.). It is clear for all to see that photography is now one of the dominating media in contemporary art.

I am going to divide the art photography scene of the last 20 years into seven categories using the structure and distinctions defined by Charlotte Cotton,[11] as mentioned in her latest book on this subject. At the same time, however, I will arbitrate and complement these by recourse to certain moments in the history of this artistic medium as well as providing information as to how new technologies in contemporary art are reflected and details of instances where digital photography becomes relevant.

1. The first category involves photographic approaches with a performance aspect, in the sense that the artist is forced to determine and to orchestrate situations whose final purpose is to be photographed. This is a conscious and programmatic approach, contrary and purposely distancing the photographer from the presumed traditional way of working – the photographer supposedly scanning, continuously and solitarily, the world around him, or always ready to discover the (decisive) moment when intriguing images of great visual impact are configured in front of him and his camera, and at which moment he must push the button.

This type of photography takes its origin in the photographic documentation of artistic actions in the 1960s and 1970s, when photography became for conceptual artists a main medium for the spreading of artistic actions, mostly involving performances or other temporary forms of art. From the point of view of motivation, as well as style, this type of photography was totally different from the photography previously seen as art in the respective period. While modernist photography, through its masters, tried to emphasize the author's authority based on individual creativity and originality, as well as on technical virtuosity, conceptual photography minimized these aspects to total negation. In order to place

more emphasis on the artistic act contained within the photographic image rather than on the aesthetic qualities of the image, conceptual artists chose an aesthetics which, at the time, was considered non-artistic, a-technical and non-original at any cost.

The style best suited to this approach, and that adopted by many conceptual artists of the time, was that of the documentarism/photojournalism specific to the mid 20th century, a style featuring only approximately composed images, often made without the photographer even looking through the lens at the time of releasing the shutter (Robert Frank, Garry Winogrand, William Klein, William Eggleston, etc.). The resulting aesthetics was the consequence of a strategy by means of which the artists were trying to counterbalance conceptual work by wrapping it in seemingly fortuitous images with no concern whatsoever for the existing norms used by modernist artistic photography (Ansel Adams, Edward Weston, Minor White), which was practiced using large format cameras (4x5, 5x7 or 8x10 inches) on negatives of extremely fine granulation, with special attention being paid to composition and the processing of negatives and prints.

Many works by conceptual artists in those years were spread around and only a photograph of the original was retained. In this case, the versatile and ambiguous status of the photograph, both as a document and as a direct link to the artistic act, was of great help to contemporary art photography.

The main difference between conceptual artists in the middle of the 20th century and artists using this type of aesthetics in photography at the end of the 20th century and the beginning of the 21st is that the final purpose of the latter is the achievement of photographic images. Were we to draw a clearer distinction, we would say that for mid-20th century conceptual artists the purpose was action in itself, and the photograph a result of documented action; while for present-day artists using this aesthetics, the recorded action is a pretext, a vehicle used to arrive at the final purpose, that is, the photographic image.

2. The second category includes photographic approaches in which the narrative plays an important role. The characteristics of this photographic genre can also be found in Western figurative painting of the 18th and 19th centuries. Some of the images of this type used by contemporary artists include reference to tales, urban myths and events taken from mass-media, all of which form part of the collective conscience of the world we live

in. Others are more ambiguous, presenting situations viewers are called to fill in with narratives and meanings as they please. Jeff Wall, Inez von Lamsweerde, Mariko Mori, Calum Colvin, Bernard Faucon, Sandy Skoglund, David Levinthal, Miriam Backstrom, Thomas Demand, James Casebere, Sam Taylor-Wood, Teresa Hubbard and Alexander Birchler, Philip-Lorca di Corcia are among the best known artists working within these aesthetic and conceptual coordinates. Some of these, however, construct their images and work in a way not dissimilar to a film director: they use actors placed in staged spaces or real locations that have been carefully chosen and fully lighted. Others work on a small scale, using small-scale models and puppets that they photograph in an ambiguous way, making them seem real. Others combine a number of real elements taken from different spaces and points in time, or real elements with characters or objects created with the aid of 3D programs, with everything being computer processed. Depending on what each author chooses to emphasize, in some of these images human intervention can be more evident than in others. While many contemporary artists and photographers create series grouped into more narrative or – on the contrary – enigmatic photographic essays, artists staging situations meant to be photographed in general do not produce series on a certain subject, but rather unique works. Each such photograph includes enough elements to present a narrative.

3. The most wide spread style of photography encountered on the contemporary artistic scene in recent decades – seeming one made specially for gallery walls – is one that is surprising for its inexpressive aesthetics and the photographer's detachment, on the one hand, and again for its large dimensions, the maximal clarity of the whole image frame and richness of detail, on the other. Unlike painting, when we refer to a photograph we are unable to say it has specific dimensions, for it can be printed in an infinity of dimensions. This is why, generally speaking, photo albums do not mention the dimensions of the reproduced images. And where these are given, they usually refer to certain prints in an exhibition. On the other hand, it is almost unanimously accepted that the context in which a photograph is presented can, in certain conditions, alter or completely change its meaning. This is certainly true of newspaper photography, but not exclusively. An increasing number of contemporary artists have begun taking into consideration and, more or less directly, referencing the context in which their image is to be

presented. Unlike *context*, *dimension* is never considered a decisive element in the perception of a photographic image. However, there are certain photos, which, when seen in albums, books or magazines, can only be partially understood, as their authors largely rely on the impact their monumental character and clarity of detail are presumed to have on viewers when in direct contact with the "original" exhibit. This is also the case of photographs included in this category.

Even if some of the photos included here are sometimes based on emotional subjects, this is not the real key to their reading and understanding.

"The emphasis, then, is on photography as a way of seeing beyond the limitations of individual perspective, a way of mapping the extent of the forces, invisible from a single human standpoint, that govern the man-made and natural world. Deadpan photography may be highly specific in its description of its subjects, but its seeming neutrality and totality of vision is of epic proportions"[12]

Though it only received full acknowledgement in the 1990s, and for a totally different means of expression which, both from a conceptual and a formal point of view, was opposed to the Neo-expressionism and artistic subjectivism that had dominated the previous decade, the style that generated Deadpan Aesthetics has deeper roots, most notably in the history of German photography. Many even call it "Germanic", mainly because its major representatives came from the Kunstakademie Dusseldorf (Andreas Gurski, Thomas Ruff, Thomas Struth, Candida Höfer, Axel Hutte, etc.), having been the students of Berndt and Hilla Becher. Also, through their approach, the two professors were themselves continuing a tradition that had started in the first half of the 20th century together with the New Objectivity (Neue Sachlichkeit) – and Albert Renger-Patsch, August Sander and Erwin Blumenfeld can be considered forerunners of this trend. Artists such as Rieneke Dijkstra, Celine van Balen, Hiroshi Sugimoto, Keith Cottingham, Mette Tronwoll, Margherita Spiluttini, Walter Niedermayr, etc. are also worthy of mention. Even if most of these artists began their careers working with large format cameras, recording their subjects in B&W or on color negatives, many now also make significant use of digital processing, albeit in a manner that in no way alters the feeling of objectivity seen as defining for this style.

4. This fourth category includes images representing arrangements of commonplace objects placed in unusual relationships. The act of taking a photograph involves a translation from the three-dimensional to the two-dimensional and a framing of fragments of everyday life, thereby changing them into shapes and color spots detached from their initial function. Juxtapositions of objects with sexual connotations, the changing of size ratios between various objects, unusual lighting, and emphasizing ambiguities of form and function – these are just a few of its characteristics.

I sincerely doubt whether we could ever produce an inventory of all the subjects approached by these artists, as for them almost any object can take on an artistic meaning by photographing it under certain conditions. However, "one must be cautious about thinking of this type of photography as primarily concerned with making visible non-subjects, or things in the world that are without visual symbolism. In truth there is no such thing as an unphotographed or unphotographable subject. It is for us to determine a subject's significance knowing that it must have one, for the artist has photographed it and thereby designated it as significant."[13]

Photography, therefore, opens up new perspectives to us, teaches us to view the world around us in a different way, to see something different in objects other than their purely functional status. In these artistic investigations, roots can also be found in the Minimalism and Conceptualism of the 1960s, at a time when artists belonging to this trend were breaking down the barriers between the art studio, the gallery and the rest of the world and shifting the emphasis over to the artist's skill and craft, the creative process itself, and the concept underlying the art object. The main question the viewer has in mind no longer relates to who produced the work of art and how (by what means) it was achieved, but rather how the objects or places represented in the image become subjects of artistic interest, or how and through which creative process the image representing them is considered a work of art. Ultimately, this type of approach undermines artistic judgments that rely solely on a plastic vocabulary (form, composition, color, etc.), without addressing the relationship between the work of art and its environment. On the contrary, artists in this category (Peter Fishli and David Weiss, Gabriel Orozco, Felix Gonzalez-Torres, Janson Evans, Nigel Shafran, Jean-Marcsunt Bustamante, Wolfgang Tillmans, Beat Streuli, etc.) are primarily concerned

with the context in which the work is presented and are constantly setting challenges to discover the borders of the art object.

5. The fifth category is dominated by artists who investigate, through photography, situations, events, and visual journals from their own intimate, everyday life as well as that of people around them in order to show them in the contemporary artistic context.

A viewer with less experience in contemporary art might well ask what such personal images (sometimes too personal even for a family album) are doing in public spaces such as galleries or art museums and the pages of different publications dealing with subjects of contemporary art.

Even if, on a superficial level, there is a certain resemblance between the snapshot-type images created by the artists discussed above and the family album photograph, from an aesthetic point of view an essential distinction needs to be drawn between these two photographic expressions. Photographs made for a family album generally represent certain symbolic instances in family life or social achievements. The first kiss of a married couple immediately after their marital ceremony, the moment a baby touches the water during a baptism ceremony, blowing out the candles at a birthday party, clinking champagne glass on New Year's Eve, a group family photo in front of their new house right after moving in, snapshots with colleagues after promotion at work, holidays snaps with loved ones in front of cultural monuments or in exotic places, etc. – all these are meant to provide a visual documentary of the successful passage through life and validate the healthy importance of the social roles they play, in family, in school, at the office, on holiday, etc.

On the other hand, the photographs taken by artists who borrow this type of visual aesthetics concentrate precisely on those taboo moments not found in family albums: conflict moods, sadness, vices, sickness, and death, or even, simply, non-events – offhand characters, lying in bed, with vacant eyes, talking on the phone, or others, trying to smile for the camera but with tears in their eyes, etc.

Certainly, under fine scrutiny, the domestic photograph made for family albums can also lead towards depths which are more or less visible or predictable at the moment the photo is taken (a relationship of power or authority can always be found in group photos, people's postures or attitudes can also be linked to their future development or they may indirectly disclose dramas or unpleasant moments that are not supposed

to be described in detail or at least recorded in the following pages of the album). In addition, many of these artists are directly and personally involved in their own projects, and often appear themselves in their images, beside relatives, friends, and acquaintances. Any individual image made by artists such as Nan Goldin, Nobuyoshi Araki, Larry Clark, Corinne Day, Wolfgang Tillmans, Jack Pierson, Richard Billingham, Hiromix, Anelies Strba, Elina Brotherus, etc. must be viewed as part of the wider constellation of their own personal work. One of the characteristics of contemporary art is that it appeals to a more informed audience, one which, while viewing a solitary work of art, is expected to be aware of the concept that gave rise to it and possibly also the project it belongs to and even the author's entire work, especially if the project under focus is a lifetime one.

6. Another category includes photographers who, despite not working for the mass media, employ artistic strategies to maintain the social relevance of the images they produce.

This type of photography grew out of television and the Internet and has taken over the role of disseminating political and social news following the drop in demand for pictorials in socially and politically biased magazines.

Unlike journalists, who jump straight to the core of events in order to "cut off" certain shocking, exciting, drama-full moments, artists in this category prefer to adopt an anti-journalistic attitude, avoiding involvement until after the "decisive moment" and maintaining a distance that favors a contemplative attitude over disasters or the events thus recorded.

This is a suitable moment to dwell briefly on the problems facing the photo-journalist community and to mention that one of the current challenges to the status of photojournalism, on an equal level with television and the Internet, is the large scale adoption of digital photography. In the space of only a few years, press photography has almost completely swapped film-based technology for digital. Indeed, digital technology now dominates print media. Its undisputed practical advantages hasten this transition from analogue to digital: the ease of sending images directly from the site of the event, straight from the digital camera or a mobile phone and via the Internet to a newspaper's editorial office, or the press agency that ordered them, is just one of these advantages. Digital technology has to an extent helped photography to reach a speed of distribution comparable to that of other means of transmitting information. Unfortunately, however,

this speed of recording and transmitting photographic press images makes it increasingly hard for photographers and editors to resist the extremely high temptation to interfere with an image (to emphasize, blur or even cut out or add certain elements). Indeed, there has been a strong sense of restlessness in the community of press photographers ever since the beginnings of this trend. "Photographers, editors and publishers need to speak out unequivocally and say 'NO' to the abuse that can and will creep into newsrooms as the use of digital photo technology becomes widespread… We cannot use this technology to create lies, no matter how tempting or easy"[14]. The amazing number of press scandals due to "unauthorized" interference with images has strongly affected the status of photojournalism, a genre that relies more than any other on the credibility of photographic images. If the damage to this credibility continues to increase, photojournalism itself may one day be consigned to history or, in the best case scenario, turn into art.

"In the future, readers of newspapers and magazines will probably view news pictures more as illustrations than as reportage, since they will be well aware that they can no longer distinguish between a genuine image and one that has been manipulated. Even if news photographers and editors resist the temptations of electronic manipulation, as they are likely to do, the credibility of all reproduced images will be diminished by a climate of reduced expectations. In short, photographers will not seem as real as they once did."[15]

From an aesthetic point of view, contemporary photojournalism is going through some rather contradictory trends, of which I shall mention only two.

A) On the one hand, an increasing number of press photographers with artistic ambitions are now conscious of the fact that the history of photography does not necessarily mention those who were closest to an event or who documented it most accurately, but rather those concerned with aesthetic and philosophical criteria. In other words, those who, through their images, manage to transcend the conditioning of time and space and, though starting from precise situations which happened sometime and somewhere, in one corner of the world or another, manage to cloak them in an archetypal aura, possibly with reference to the history of art. An important reason why many photographers opt for this aesthetic approach (and even art for art's sake) is that the prizes at big

photojournalism contests (World Press Photo or Pulitzer) continue to be awarded to this type of photography. In recent years, however, there has been an increase in the criticism directed at these approaches. Many have questioned the morals of this photojournalistic approach and whether the beautiful and tragic images produced are the result of the photographer's concern for composition and form rather than for the situation itself. The photojournalist comes across as a beauty hunter, searching for archetypal images that seem to have been taken out of art history books (crucifixions, passion motifs and even lowly Madonnas with child). The obsessive interest in the ratios between diagonal and vertical lines, *sharf-unsharf*, clear-obscure make the human dramas unfolding in front of the camera seem secondary. In one example, against a rough, brown-green wall, three grieving women – probably wife, sister and mother – are standing, dressed in black, over a corpse lying on the ground before partly covered by an immaculately white sheet. A streak of blood is pouring out from under the sheet, forming a red puddle towards the bottom of the image that reflects the face of one of the women. The composition is dense on the right hand side, a square representing two thirds of the frame, while the other third remains free of any detail except for the road and the wall descending towards the left. This photograph, bearing the signature of Frank Zecchin (Magnum), was in fact bought and used by the Benetton Corporation for one of its advertising campaigns.

B) Another trend among these photographers is the contrary approach of avoiding too artistic an approach to subjects they intend to document, precisely for the above reasons.

Susan Sontag captured the essence of this attitude:

"Those who stress the evidentiary punch of image-making by cameras have to finesse the question of the subjectivity of the image-maker. For the photography of atrocity, people want the weight of witnessing without the taint of artistry, which is equated with insincerity or mere contrivance. Pictures of hellish events seem more authentic when they don't have the look that comes from being 'properly' lighted and composed, because the photographer either is an amateur or – just as serviceable – has adopted one of several familiar anti-art styles. By flying low, artistically speaking, such pictures are thought to be less manipulative – all widely distributed images of suffering now stand under that suspicion – and less likely to arouse facile compassion or identification".[16]

Photojournalists' traditional attitude towards the world is that of witnesses, invisible where possible, who are simply observing and cutting out "key" (possibly symbolic) instances from the course of events without becoming involved or influencing them in any way. Unfortunately, they are quite often thrown by the publications or agencies they work for into the middle of complex events with little knowledge of their origins or history. The short time they have to produce photographs is also a source of pressure that far from favors the development of a more nuanced relationship between the photographer and field realities. This is often obvious in press images, which most of the time are spectacular only at the level of the visual show.

Unlike photojournalists, artists whose photographic work deals with social and political relationships within human territories and communities (following armed conflict, changes of political regime or natural disasters) work in a totally different way. Not being pressured by time or events, their projects are prepared thoroughly and rely on longer or repeat visits and more complex communication with the people and places under scrutiny. This communication between artists and the community is often essential and is part of the project concept. Sophie Ristelhueber, Willie Doherty, Ori Gersht, Paul Seawright, Simon Norfolk, Chan Chao, Allan Sekula, Luc Delahaye, Ziyah Gafic, Esko Mannikko, Boris Mikhailov are among the most representative artists of this genre.

Characteristic of the dilemma of today's photojournalists is the growth of Martin Parr, a member of the Magnum Agency (this Olympus of press photography) whose visual discourse is at present much closer to that of contemporary artists expressing themselves through photography than that of newspaper photographers, while his images feature in art galleries, albums and magazines to a larger extent than in social or political publications. For him, as well as the few other elite photographers who began their careers as talented photojournalists or documentarists, reality and social events only warrant researching if they can act as links to their own projects and obsessions.

7. The seventh category is one specific to Postmodernism and (under the influence of thinkers such as Roland Barthes and Michel Foucault) brings together artists interested in photography as a system of signs endowed with significance and value only in relationship with other, larger systems of signs and codes of a social and political nature. This approach

is opposed to the modernist photographers' way of understanding this medium in which it is advisable to distinguish oneself from the anonymous mass of everyday photo producers, centering one's work on concepts such as originality, aesthetic innovation and technique. Unlike them, postmodern photographers examine the medium in terms of production, reproductive capacity, dissemination, imitation, reception, falsity.

This type of photography makes constant appeal to our visual imaginary, which is often made up of images extracted from the mass media, family albums, advertising, movies, the history of the arts, etc.

> "There is something deeply familiar about these works; the key to their meaning comes from our own cultural knowledge of generic as well as specific images. These are photographs that invite us to be self-conscious of what we see, how we see, and how images trigger and shape our emotions and understanding of the world. Postmodernist critiques of photographic imagery have been an invitation both to practitioners and to viewers to explicitly acknowledge the cultural coding that photography mediates."[17]

The works of the artists Cindy Sherman, Sherrie Levine, Nikki S. Lee, Tracey Moffatt, Tacita Dean, Richard Prince and Joan Fontucberta illustrate this artistic trend in different ways. The techniques used are quite diverse, from the return to 19th century photographic processes (Adam Fuss) to ostentatious digital intervention on images found in various archives or the Internet (Thomas Ruff) or more subtle digital manipulations of personal photographs seemingly taken from the family album (Viebeke Tandberg).

A less debated subject in writings about the relationship between art, photography and technology is the influence of new technologies on the trade with photographic images in general and art photography in particular.

We are going to see the way in which digital technology has changed, or is about to change, not only the means of production, reception, analysis and dissemination, but also the whole economic system that has slowly built up throughout the history of this medium. The last 15 years have been marked by a hurried re-orientation of large producers of classical photographic equipment and consumables towards the digital system. Some companies strengthened their position, others were forced to merge in order to survive, others simply could not find a new way of

existing and failed. In addition to this, new players appeared in what is the extremely dynamic market of the photographic industry. They produce specific components for digital systems or computer programs for image processing. Not even the most optimistic supporters of digital technology could have imagined that, by the middle of the 1990s, this transition would have been so fast and unconditional. It was expected that digital photography would become a mass phenomenon, aimed especially at non-professionals, but all observers unanimously agreed that, in the professional and art field, it would not replace film photography in the foreseeable future. Then, for a short period towards the end of the 1990s, it was thought that in the professional field a mixed system would be the most viable in which images would continue to be recorded on film and then subsequently digitalized using increasingly accurate and rapid film scanning systems before being processed by computer. Having entered the new century, it became clear that digital systems possessed far better qualities than film and that manufacturers were starting to bring prices down to a comparable level. All these technological developments in image production, storage and distribution need to be viewed against the backdrop of a boom in Internet use, especially in the World Wide Web, where images began playing an increasingly significant role.

In 1989 Bill Gates founded the Corbis Agency which, in the space of only a few years, was to "swallow" and buy out some of the largest photographic archives in the world, among which was the Bettman Archive (over 16 million images) and UPI. This was only the beginning; since then, the collection has been growing by thousands or tens of thousands of images nearly every week – as can be seen on the Agency Web site (www.corbis.com) – by adding images from archives of institutions such as NASA, National Institute of Health, Library of Congress, the National Gallery of Art in London, the Andy Warhol Foundation, etc. It should be noted that with most of these institutions, Corbis negotiated non-exclusive rights, allowing these bodies to keep certain reproduction rights for images belonging to them. In practice, Corbis was borrowing their photographic prints or films (negatives or slides) for scanning, then sending them back and keeping the rights to spread them only in a digital format, surely the only format Corbis thought would matter in the future. In turn, when the agency trades an image, it in fact sells the electronic reproduction rights of the respective image for a determined period of time. The price can vary according to resolution, size on the page, the type of publication and

the number of copies issued, where the image is to be printed on paper, or Internet traffic and the nature of the Web site, where it is to be used in an electronic format only.

Corbis, therefore, does not deal in prints. Bill Gates has stated on several occasions that owning "original prints" (in fact, a contradiction in terms when it comes to photography) is of no importance to him. With Corbis he does not intend to create a collection of photographs but to sell as many reproductions as possible and, in the future, to control the flow of visual information on a planetary scale.

That only one man, the richest in the world, is gaining increasing control of the world's visual heritage has for many become a worrying fact, all the more so as the Internet is a continuously expanding market and Microsoft, Gates' other company, has already secured an advantageous position on this market through its ownership of Internet Explorer, the world's most frequently used Web browser. Today it is already possible

> "for any interested subscriber, from schoolchildren to industry executives, to locate, download and automatically pay for the images owned by Corbis. The consequence of all this is that Gates may soon control not only the vehicle but also a major portion of the visual content being conveyed over the information superhighway."[18]

It is interesting to analyze what happens when this form of trade is applied to art photography. In 1996, Corbis signed a long term agreement with The Ansel Adams Publishing Rights Trust, whereby it received exclusive rights for the distribution in an electronic format of the photographic works of Ansel Adams. Geoffrey Batcher correctly asked what it is Corbis actually bought from Ansel Adams' photographic works.

Ansel Adams is an extreme case in the history of photography, being known for the rigor and consistency in following and controlling the process of photographic image production, for each individual negative, through all its stages, from pre-exposure moments until the final print. He used his real teaching skills to describe all these processes in detail in several books on photographic technique which today are still considered reference works for black and white photography. Adams and most of modernist photographers considered that in this art, perfection could only be reached if the photographer was able to be one with his own equipment and master, down to the finest details, the chemical process

related to film processing and image printing on photosensitive paper. The photographer must first learn

"to see photographically – that is learning to see his subject matter in terms of the capacities of his tools and processes, so that he can instantaneously translate the elements and values in a scene before him into the photograph he wants to make."

Then,

"by varying the position of his camera, his camera angle, or the focal length of his lens, the photographer can achieve an infinite number of varied compositions with a single, stationary subject. By changing the light on the subject, or by using a color filter, any or all of the values in the subject can be altered. By varying the length of exposure, the kind of emulsion, the method of developing, the photographer can vary the registering of relative values in the negative. And the relative values as registered in the negative can be further modified by allowing more or less light to affect certain parts of the image in printing. Thus, with the limits of his medium, without resorting to any method of control that is not photographic (i.e., of an optical or chemical nature), the photographer can depart from literal recording to whatever extent he chooses."[19]

I have chosen this quotation from Edward Weston because it seems to make a synthesis of the way of thinking that was characteristic of a major trend in the history of photography, Ansel Adams being one of its most important representatives. For all these masters, the negative was perceived as a musical score open to various interpretations. At times over the course of several decades, Adams returned and reinterpreted the same negative by dodging and burning some of its parts. For instance, Ansel Adams made the first print of "Moonrise, Hernandez, New Mexico" – a photograph recorded on negative in 1941 – immediately after processing the film. Around 1948 he started changing the intensity of the shades of grey between the landscape and the sky, producing variants that started from an extremely pale sky, where the moon was barely visible, to others where the sky was almost black and the moon very visible. By 1980, the year he stopped printing from this negative, Adams had made around 1,300 original and highly different prints, stretching the limits of the tonal ranges of his negatives and the photographic paper he used.

What can Corbis offer its customers from Adams' work? It is hard to say. A digital code resulting from the scanning of his prints, or maybe of the negative? Which of the 1,300 "original prints" made by Adams of "Moonrise, Hernandez, New Mexico" are covered by Corbis' distribution rights? Does Corbis, or any hypothetical customer buying a digital document of the above mentioned work from the agency, have the right to make further interpretations (unauthorized by the artist) of this document? These are subtleties that do not arise in the case of the majority of photographs traded by Corbis, or other similar agencies. But when it comes to art photographs, which base their existence and value on such subtleties, I believe these questions are legitimate. For the moment they cannot be answered clearly, because the development in technology has been far faster than market mechanisms and legal systems. Surely, however, before long, we will witness a change in perspective as to the way photographic prints are traded and distributed.

The form of photographic trade in which Corbis is one of the largest and most active on the market has developed and diversified as a result of the facilities offered by digital technology and especially the Internet for transmitting visual information. Consequently, the photographer no longer sells objects, meaning photographs, but instead sells the right to reproduce those photographs under agreed conditions. He receives a percentage according to the number of copies made per image, the type of publication, etc. The value of this percentage is clearly smaller than that of the photograph in question, but, since limited rights for the use of one (the same) print can be sold over and over again to different customers, the print becomes a kind of share in a print bank that brings its author periodical long term dividends. As with the music industry, Corbis and other agencies of the same type accept responsibility for protecting a photographer's copyrights and ensuring the correct distribution of images sold through the agency. For a photographer it is important to know that the agency offers maximum visibility for his works so as to generate a periodic turnover. Small individual offers are already common practice in both music and print distribution over the Internet. The number of cases in which the artists themselves are selling their own works, in order to maintain the highest possible turnover and without having to pay an agency commission, is increasing by the day. Any photographer can create his own Internet site to display his works and sell limited reproduction rights and even prints. However, this makes it more difficult to maximize image visibility and advertising as well as other

services, especially legal ones, comparable to those offered by agencies to the photographers they represent.

In a world of multiples and reproductions, where, if we look around, it is impossible to find a "unique" object, it seems this form of electronic trade will come to dominate the future.

At the same time, the traditional networks for the trade of art using art galleries are also trying to adapt to the new challenges thrown up by technology, which is either used by artists for creative purposes or to aid the art trade and the necessary advertising.

Photographs only started being collected as art objects on a large scale after 1970, and it was not until the mid-1990s that the contemporary photography trade was in full bloom.

A number of variables must be taken into account when establishing the price of a photograph: the fame or value of the artist on the art scene, the aesthetic and technical qualities of the print, its importance in the oeuvre of the respective artist, and the presumed standing of the print (whether it was displayed at major art events or reproduced in books, catalogues, albums and reviews) and its place in a wider historical context – to mention just a few. In addition, both galleries and buyers take into account the number of prints made of the image in question. The smaller this number, the higher the price may go. Thus, for collectors, two objects that are comparable from all other points of view can have different values because one is unique or exists in smaller numbers and the other can be found in larger numbers. Each collector wishes to possess something that, if not unique, at least does not feature in a large number of collections. However, photography, excepting the daguerreotype and Polaroid is, in essence, open to multiplication. It is not the only multipliable medium, of course; but in most of the other cases, such as various types of etchings, the artist numbers the copies made ("editions") from the same etching plate because (whether made of wood, zinc or stone) it will be damaged after a number of uses. In the case of etching, the accuracy of the print is higher for the first copies and decreases with each new use of the etching plate. After a number of prints made from the same plate, the artist may decide to destroy the plate in order to avoid any unauthorized use with the aim of making new prints of a lower technical quality. In the case of film-based photography, there is no difference in image quality, irrespective of the number of reproductions made from the same negative. In the case of digital photography there is, of course, no negative whatsoever; the

negative is being replaced with a numerical code that is generated by the photosensitive sensor of the digital camera and which can generate an infinity of identical images. However, every so often, especially in terms of photography as art, different editions of the same print can still be found. In etching, prints are made only by means of a 1:1 contact (the final print on paper has exactly the same size as the negative on the etching plate). In film-based photography, however, though printing can also be made by contact (especially in the case of large 8x10 inch format negatives), due to the small size of the negatives (24x36mm, 4.5x6cm, 6x6cm, 6x7cm, 6x9cm or 4x5 inch), prints are made using an enlarger which, through an optical system, enlarges the negative image on the photo-sensitive paper. Thus, the same image can be printed in several copies of different sizes. The artist can do his own printing himself (though this is rare today) or let it be done by professional laboratories working to the artist's strict orders. Each print is then signed, dated and numbered by the artist, either on the front or back. He thus assumes that this given print is the best interpretation of the negative possible in all details (framing, image contrast, shades and degree of color saturation, etc.), according to his vision. These issues also help to control the number of prints made, avoiding an inflation of copies made from the same negative. For the collector, it is important to have a guarantee that the investment made in buying a photograph will not fall in value due to the new copies of the same image. This is an elementary marketing and business detail. In some cases, however, the photographer may resume, after a certain period of time (and motivated by a sensible change of vision but also technical means) the printing of the same negative. The results may be quite different and the photographer takes responsibility for them. It was stated above that there are no strict rules to this effect and that there are many parameters which can be taken into consideration. Without wanting to complicate things by going into further details, there is one other somewhat paradoxical fact that should be mentioned. Many collectors prefer to buy what in specialist terms is called a "vintage print", meaning a photographic copy made shortly after the negative was produced (a period of a maximum of 5 years is accepted between the moment the photo was taken and the moment of printing). This type of photography is considered by many collectors and dealers to be the most valuable, since it is the first, original approach by the photographer towards the recorded subject. Since printing materials and technology are continuously changing, a "vintage print" is considered

more authentic because the paper and chemicals used for its processing were contemporary with the negative.

Nonetheless, this print is often not even close to being the best made from a negative. In some cases a later print, which is better from the technical point of view (i.e. made using more recent technology and on newer materials by professionals at a photographic lab who are better trained in printing than the author of the negative), is considered to be less valuable because it is not "vintage" and possibly not even signed by the author, e.g. if it was printed after his death.

But what then of digital images, which by their nature (maybe even more than film-based photography) are contrary to the idea of uniqueness? Unlike film negatives, the circulation and unauthorized printing of a digital document (digital photography) is more difficult to control. At present there are two established technologies used in the printing of digital images. The first uses ink jet on different types of paper with a specially treated surface (not photosensitive). The ink, sprayed in fine jets from several cartridges of different colors, impregnates the paper and creates a sort of watercolor image with fine details; the visual impression given is purely photographic.

The second technology is called Lambda print and is produced by Durst Company. It uses normal color photosensitive paper and the processing system is the same (RA4) as with traditional color photography (C print). However, the exposure of the paper does not use a color negative, but instead comes from a digital document with the help of laser technology. The final result has the same appearance and quality as a traditional paper photograph. The fade-resistance of digital prints depends on various factors: the quality of ink, the paper or other (especially treated) types of print media used, and the specificity of the space where the print is displayed (temperature, humidity and, of course, light intensity). Various tests can estimate the "life" of these types of images and manufacturers continue to develop new products with better resistance to variations in light and temperature which they launch under various commercial names (e.g. "archival papers" or "museal prints"). Both technologies have their supporters and detractors, their advantages and disadvantages. In both cases, when producing prints of large dimensions, the equipment comes very expensive – in particular, Lambda technology, which is not normally found in a private laboratory. For this reason, most artists and photographers print works larger than A3 using specialist laboratories. While with laboratories specialized in printing from negatives the photographer brings

the negative to the lab for printing only to take it back again at the end, with digital prints the photographer sends a digital document to the lab, often via the Internet, which is supposed to be destroyed after the prints have been made and never used again for other prints unauthorized by the author. The same is true of photo reproductions in magazines, albums and art catalogues: the photographer, curator or agency sends the digital document of the required image at printing resolution to the publication. After the work is complete, the editor or publisher that used the document is supposed never to use it again for unauthorized works. In reality, it is impossible to control what happens, or will happen in the future, to any given document. Laboratories and publishers normally archive all their work on DVD or hard disk for accessing later if required. We can only begin to speculate what will happen when, hypothetically speaking, the commercial quota of issues in digital format made by an artist or photographer begin to increase dramatically after a number of years or their content becomes highly topical. In the meantime, printing technology, as well as the lifespan of print media, will surely continue to improve. It would come as no surprise to find the same images on the market, only with better print quality and a longer lifespan, albeit "unauthorized". This is an assumption many dealers, collectors and potential collectors of digital prints are surely taking into consideration. It is also one of the reasons why many art collectors today refuse to invest in digital prints, considering them little more than "expensive posters".

On the other hand, but for the same reason, an increasing number of photographers and artists are making the change towards ink jet technology, which means more accessible equipment (from a point of view of price) and keeping the entire image printing process within their own studios.

I will finish by expressing the feeling that many essential things may have been left unsaid or presented with a minimum of detail, while others, such as technical details, may come across as over specialized for readers looking for more general truths.

What is for sure is that I took these shortcomings into account when I decided to venture into a territory in which art, philosophy, technology and economics are defined by borders that appear to be becoming ever more blurred and slippery.

NOTES

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