



Escaping Reality: Digital Imagery and the Resources of Photography

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Escaping Reality: Digital Imagery and the Resources of Photography

The materials and tools employed by artists help to shape the character of their art: it is difficult to imagine Rembrandt painting with tempera instead of oils, or Cartier-Bresson taking his photographs without a hand-held camera. For this reason, any innovation in materials and tools, any technological advancement, would seem to expand the resources of art, providing artists with more possibilities to choose from, more ways of creating.

But the relation between technological advancement and artistic resources may not be quite this simple, because technology may not be simply additive in its effects. Patrick Maynard discusses this issue in his paper "Photo-opportunity: Photography as Technology."¹ Maynard describes how technologies can generally be understood as amplifiers of our powers; that is, of locomotion, of communication, of production, etc., but he points out that while a given technology will amplify certain of our powers, it will, typically, suppress others. "A fork-lift tractor greatly increases our already existing powers to lift and move loads ... but a fork-lift does so by losing, even suppressing, the abilities that hand workers have to sense—not only weight but load, strain, density and frictional hold between surfaces."² Maynard describes photography as a technology that enhances our powers of depiction and detection, and calls on us to investigate the suppressions to which photography may be subject.

It will be my contention here that not only does any particular technology, like photography, have its own amplifications and suppressions in the manner discussed by Maynard, but that such a new technology introduced into the realm of art can affect the whole field of choices available to the artist, widening it in one area, only to narrow

it in another. New technologies alter rather than simply add to the resources of art.

This needs some explanation. With the introduction of fork-lifts, the use of manual lifting is not abolished; it can still be used in those cases where the disadvantages of the suppressions associated with fork-lifts outweigh their advantages. The fork-lift simply adds to the possible ways we might choose to lift things. There is also a sense in which a new technology of art simply adds. By the mid-nineteenth century, an artist interested in creating an image not only could choose from among charcoal, ink wash, water color, oil paint, etching, etc., all media available to previous generations, but he or she could also choose to make a daguerreotype or a calotype, something that would not have been possible decades earlier.

But the resources of art are not simply physical materials and processes. Each process has attached to it beliefs, practices, and conventions that affect our understanding and reading of the images produced, and that the artist employs to achieve his or her desired effects. The development of a new medium can change the way we see and use older media, and can thus change our readings of works produced in those older media. Once beliefs and practices have altered, artists may find that certain types of effects can no longer be obtained.

To illustrate this point, I will look at one of the most recent developments in the technologies of art, that of digital imagery and its application to photography. I will show that while the technologies of digital imagery are expanding certain resources of photography, they are also bringing with them an altered attitude that may ultimately diminish some of the powers to which photography traditionally has laid claim.

I. POWERS AND LIMITATIONS OF PHOTOGRAPHY

Before we consider the effects of digital imagery on photography, we must understand the ways in which photography functioned before this new technology was introduced. More specifically, we must look at the features that have distinguished photography's use in the production of images. Toward this end, it is helpful to consider the ways in which photography has functioned differently from painting.

There are many things that photography brought to the repertoire of image-making processes: a rapidity and ease of production, a new standard of precision and accuracy, and a more informal and experimental approach to composition and subject matter. But perhaps most distinctive was the perceived status of the photographic image, a status derived from the mechanical nature of its production. The photograph seems to have a special connection with reality and an independence of the photographer's intentions. For example, if there is a horse in a photograph, we assume that there must have been a horse in front of the camera, since the horse cannot just be a product of the photographer's imagination. For this reason, a photograph is thought to verify the existence of its subject in a way a painting never could; the photograph requires the presence of a horse for its production, while a painting could depend wholly on the artist's imagination.

It is this perception of a special connection to its subject matter that makes a photograph of a murder victim more upsetting to view than a police drawing of the same subject, no matter how accurate and detailed the drawing may be; and it is this that gives a photograph of a disaster or a disputed event more impact than a drawing of the same. In the photograph we seem to actually see the dead body, the disaster scene, the event, and it is hard for us to attribute the chilling or convincing nature of the image to the excesses or complicity of the photographer.

This close connection between what the photograph shows and what exists in the world is what Kendall Walton refers to when he speaks of the "transparency" of the photograph,³ what André Bazin refers to when he speaks of the "realism" of the photograph,⁴ and what Rudolf Arnheim has in mind when he says that the ob-

jects in a photograph print their own images "by means of the optical and chemical action of light."⁵

In truth, photographs can be far from objective in how they present a subject; the photographer's choice of camera angle, lighting, and framing all influence the way in which the subject will be seen. Furthermore, the characteristics of the medium itself—its two dimensionality, the delimitation of its image, the use of black and white—all contribute to a divergence between what we see in a photograph and what we would have seen in person. Nevertheless, our awareness of all these factors does not change the way we see photographs—as having a special connection to reality.

There are actually two separate issues here. As Walton, Bazin, and Arnheim all point out, the documentary power of the photograph has to do with the way photographs are typically made; it does not reside in the exact duplication of appearances. Even a blurred photograph has a documentary value unavailable to a drawing or painting.

In fact, the two concerns of documenting and duplicating can sometimes be at odds with each other. For example, a straight mid-nineteenth-century landscape photograph could clearly show either the land or the sky, but not both—a wet plate exposed for the vegetation would be overexposed for the clouds. To capture all parts of the scene would require the combination of two negatives.⁶ The attempt to duplicate appearances thus required the kind of human intervention that was normally thought to damage the image's documentary status. But despite this actual separability of the two concerns of documenting and duplicating, in our minds they inevitably become intertwined when we look at photographs, and this entanglement accounts for the especially compelling nature of photographic distortions and transformations. Our faith in the documentary character of the photograph is inappropriately but irresistibly transferred to the way things appear within the photograph. In other words, not only do we believe that a photograph of a horse is evidence of the horse's existence, but we also believe that it shows us what the horse really looks like.

This faith in the photograph's accurate reproduction of appearances is not wholly misplaced; after all, we have come to rely on photographs

for identification on licenses, passports, and numerous other documents. But the photograph has obvious limitations as a means of capturing appearances. Consider the photograph of J. P. Morgan shielding his face from the camera—his hat not only obscures, but seemingly obliterates his head (see fig. 1).⁷ We are unable to lightly shrug off the photograph's distortion since we are so used to accepting photographs as guides to the way things appear. It is not that we believe Morgan's head has really been obliterated, but the photograph makes us see him this way. The photograph seems to reveal something strange and unsettling about the way the world looks, and we are startled to find a gap between what the photograph compels us to see and what we know to be true. People with high fevers may *know* that their hallucinations are not real, but they may *seem* real nonetheless; that is why hallucinations can be so distressing. Similarly, we may *know* that what the photograph seems to show is not real, but we may still *see* it as real, and that is what makes the photograph so disturbing.

This way in which we perceive the distortions of photography plays an important role in their aesthetic impact. We can see this by considering some examples of photographic transformation, and comparing them with corresponding examples from painting.

In Imogen Cunningham's *Leaf Pattern* (1929),⁸ the cropping, lighting, two dimensionality of the photograph, and the use of black and white lead to the defamiliarization of a very common object, a houseplant. The jagged white areas between the leaves, the strips of leaves in light and leaves in shadow, and the shadows thrown against the wall create a confusion of positive and negative space difficult to decipher. The close-up and cropped nature of the image prevents us from getting our bearings, from obtaining a frame of reference. We are shown a houseplant in a way that we never see houseplants in real life.

Paintings also can engage in the defamiliarization of common objects. But the difference between the defamiliarizations of painting and those of photography is not just one of materials and processes used. The impact is different. The strangeness of a van Gogh cypress, or a Picasso guitar, or a Matisse nude is attributable to artistic license. The artist may choose to simplify

forms, to intensify or mute colors, to highlight certain aspects of the objects and to modify others, to analyze an object into its different planes, or to show it simultaneously from different perspectives. The strangeness is seen as resulting from the artist's imaginative rendering, and the resulting image is thus seen as diverging from what we would see in real life.

The defamiliarizations of photography are read otherwise, for despite our knowledge of the ways in which photographs can mislead and distort, we nevertheless irresistibly see the photograph as faithfully recording for us the appearances of the world. So when a photograph defamiliarizes, it is as though something is being revealed to us about our world. Insofar as photography is seen as a means of objective recording, the photographer is not seen as giving us his or her impressions or imaginings, but as showing us the way things really look. So the fascination of *Leaf Pattern* is not just that it shows a houseplant in an unfamiliar or surprising manner, it is that insofar as we see it as a photograph we think of it as an accurate recording, but what it shows us is a houseplant transformed, made unfamiliar. It may leave us to wonder that a simple houseplant can look so strange.

Even staged photographs can partake in the special kind of defamiliarization characteristic of photographs. Clarence John Laughlin's *The Appearance of Anonymous Man* (1949)⁹ shows us a woman, her face covered with a cloth and a gnarled piece of wood held out as though it were her hand. The elements that make up the image are readily identifiable; yet the resulting whole is unsettling and eerie. Though we can determine that the figure is just a woman with a cloth covering her face, it seems as though the cloth has become her face, as though she is an apparition. And though we can determine that the gnarled wood is just something she holds, it seems to have become her hand.

René Magritte has also used cloth-covered faces in several of his paintings, including *The Central Story* (1928) and *The Lovers* (1928).¹⁰ Though the imagery is in some respects similar, the response elicited by Magritte's paintings is different from that elicited by Laughlin's photograph. Magritte's images seem mysterious and symbolic, while Laughlin's seems unnatural and unsettling. Magritte's are seen as an artist's pe-



FIGURE 1. Unknown Photographer, *J. P. Morgan at Society Wedding Dodging the Camera* (1937). Gelatin Silver Print, 20 x 16" (50.8 x 40.6 cm). The Museum of Modern Art, New York. Copy Print © 1996 by The Museum of Modern Art, New York.

culiar imaginings, while Laughlin's seem to reveal a strange phenomenon of our world.

Magritte is of special interest with respect to this topic, because he often used photographic studies for his paintings, allowing us to compare closely related images in the two different media. This is true for his painting *The Therapist* (1937) (fig. 2). The painting shows a seated man holding a cane, but where the man's torso and head should be there is only a void—a cage with two birds—covered with a cape and a hat. The corresponding photograph¹¹ accomplishes this effect by showing a man with a painting propped on his lap, hiding his torso and head, the cloak and hat draped over the edges of the painting (see fig. 3). Magritte's photographic study is more shocking in its effect than his painting, because the photograph creates the illusion of a missing torso as it records the image of a real person, while the painting only depicts a fiction—a person whose torso is a void.

Another way in which photographs seem to transform reality is through the manner in which, as a result of the photograph's two dimensionality and peculiarities of point of view, they often seem to show space as discontinuous or fractured. André Kertész's *Buy* (1962)¹² is a cityscape taken from a position in front of but higher than a billboard. As a result of this vantage point, the billboard, which shows a smiling woman exhorting us to buy beer, fills the lower portion of the photograph. Beyond the billboard we see a street corner which has a wide sidewalk with arrows painted across it. Two figures, one walking and the other leaning against a stop sign, cast long shadows. This sidewalk scene fills the top of the photograph. The juxtaposition of the flat space of the billboard with the spare landscape of the sidewalk, the lack of a horizon, and the reversal of normal point of view (we usually see billboards *above* sidewalks) all add to the disjunction and confusion of the space shown. The effect is not unlike that produced by the complex spatial disjunctions to be found in certain Hokusai prints, but the shock is greater, since the disjunction is "found" in the world, not composed by the print maker.

Henri Cartier-Bresson's *Valencia, Spain* (1933) also gives an impression of disjunction (see fig. 4).¹³ On the right of the photograph we see the right side of a wooden gate to a bullring; it is parallel to the picture plane and cropped by

its proximity to the camera. A man with round eyeglasses looks through a small rectangular window in the gate; a brick wall can be seen close behind him. The window intersects the half of a bull's eye design painted on the gate, surrounding the number seven. On the left side of the photograph, past the edge of the gate, stands a boy in the distance, in shadow.

The relations between the space enclosing the man, the space enclosing the boy, and the gate are confusing. Both the man and the boy are located behind the gate, yet one is in light, the other in shadow; one occupies a seemingly shallow space, the other a much deeper space. A correspondence between the man and the design painted on the gate augments the confusion. The white disk of light reflected in the man's glasses echoes the white half circle of the painted design, and his shoulder seems to continue the encircling stripes. This correspondence draws the man forward and makes the contrast with the receding space on the left even stronger. It also obscures the relative positions of the gate and the space enclosed by the window.

Because the composition on the right is so flat and light, while that on the left recedes into shadow, because we have no sense of the architectural structure which might encompass both sides of the image or any demonstration of a continuous space which holds man, gate, and boy, the photograph seems a collage of space, but one that puzzles us because we know it shows what is in reality a unified space. We feel compelled to resolve this paradox of what we know and what we see, and this compulsion is linked to the fact that the image is a photograph. If the composition were a painting, we would not be convinced that despite appearances, it really does show a unified space.

When a painting reveals a paradox of space, such as the reflection in Manet's *Bar at the Folies Bergère*, we may try to understand the painting as consistent in its perspective, even though we are bound to be frustrated by its inconsistency. This is part of the interest of the painting. But with such a painting we are interested in how we as viewers are displaced by the incongruities of space, in the way in which our attempts to read the painting are destabilized and defy resolution. We are not transfixed by a space we know is unified though it appears otherwise; we are instead caught up with an im-



FIGURE 2. René Magritte, *The Therapist* (1937). Private Collection, Brussels, Belgium. Giraudon/Art Resource, New York. © 1996 by C. Herscovici, Brussels/Artists Rights Society (ARS), New York.

pulse to unify that which we may realize cannot be unified.

With a painting, we may know that the image was constructed in such a way that it cannot be read as a unified space, but we still attempt to do so. The painting exposes and disrupts our habitual ways of making sense of paintings. With a photograph, we know that we should be able to

read the image as a unified space, but we cannot. The photograph disrupts our expectations by exposing a gap between that which the photograph records and that which it compels us to see. The impact of disjunction in painting and photography is thus different.

Disjunctions of space caused by reflections are also very common in photographs. In Walker

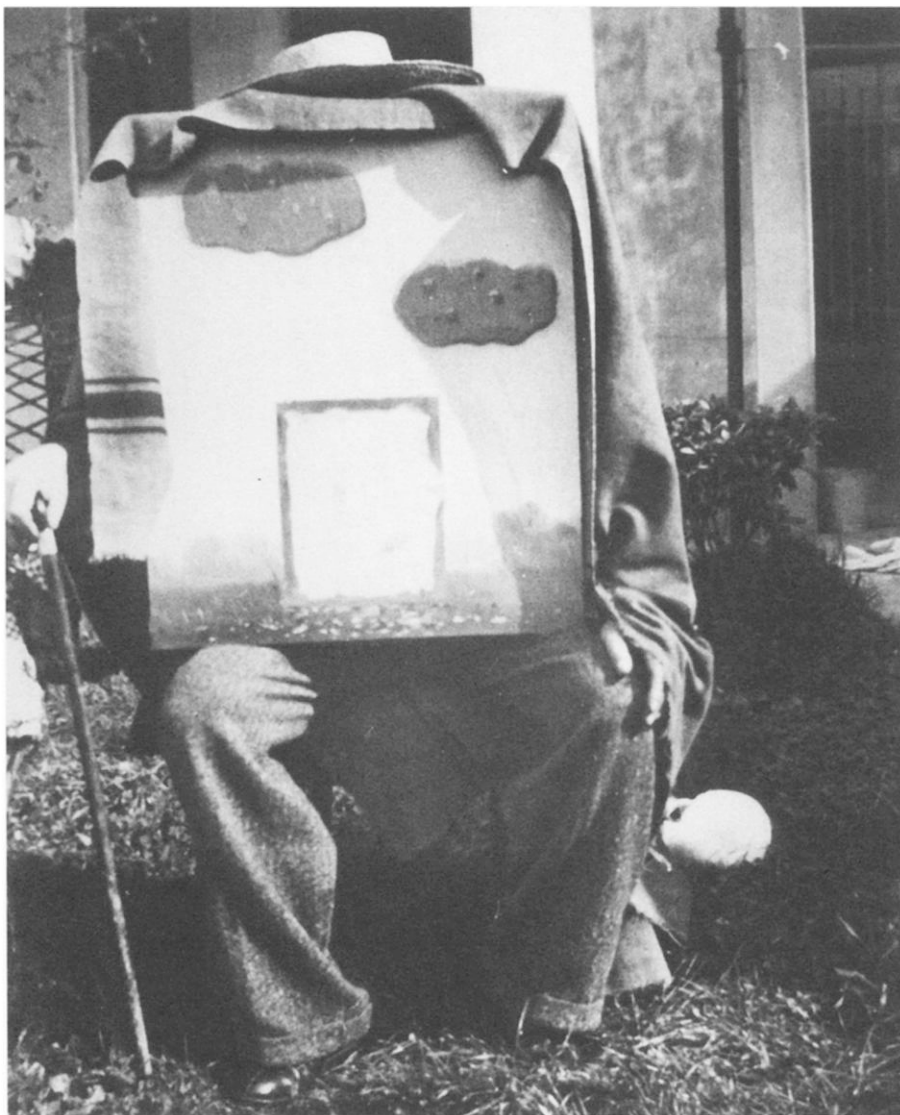


FIGURE 3. René Magritte, *God on the Eighth Day* (1937). Courtesy Galerie Christine et Isy Brachot, Brussels. © 1996 by C. Herscovici, Brussels/Artists Rights Society (ARS), New York.

Evans's *Street Scene, Brooklyn* (circa 1931),¹⁴ a bureau standing on a sidewalk reflects in its mirror a truck bed filled with chairs. We see only the top of the bureau with its mirror, behind which stands a large crate, a brick wall, and the door of a building. The mirror seems to open up a hole in the crate and the building, to show discontinuous spaces intersecting.

While reflections in mirrors create discontinuities, reflections in glass can create an intermingling of spaces. Atget's photographs of storefront windows, such as *Avenue des Gobelins, Paris* (circa 1910),¹⁵ have this effect. The mannequins in the storefront window emerge through the reflection of the street in the glass. The reflection and the directly observed win-

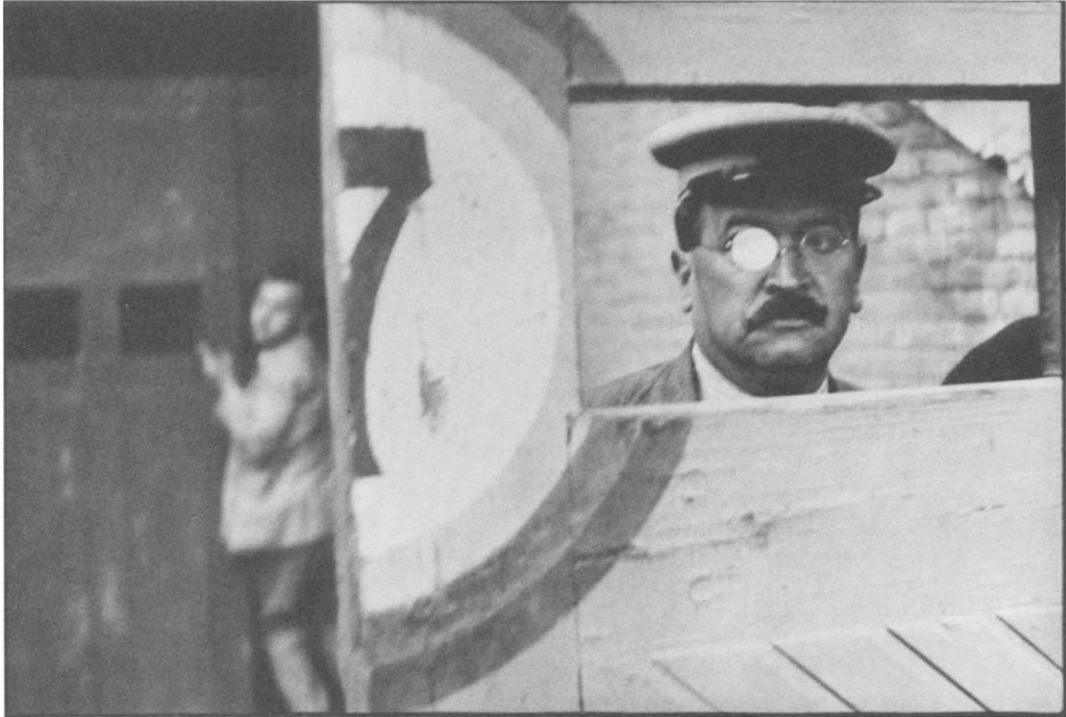


FIGURE 4. Henri Cartier-Bresson, *Valencia, Spain* (1933). © Henri Cartier-Bresson/Magnum Photos, Inc., New York.

dow scene cannot be sharply disentangled; they seem to merge.

This prevalence of reflections in photographs is matched by a prevalence of reflections in photorealist paintings, but the effects of the reflections in the two media diverge. This is not just because the image is flatter, more broadly defined, and more opaque in paint. It is also because these differences, along with the format of presentation, alert us to the fact that we are not looking at a photograph. (These differences are much less pronounced, or even obscured, in photographic reproduction, so the identity of the medium is less obvious.) A Richard Estes storefront window painting, such as *C. Camilla* (1979),¹⁶ in some ways captures the look of a photograph, but it is still very clearly a painted image. The ambiguities it creates may be interesting, but they are not the ambiguities of photography. The Atget photograph gives us the excitement of seeing a surreal intermingling of spaces emerge from the world we inhabit.

Estes's painting, because it is seen as a painting, illustrates this photographic phenomenon; it does not duplicate it.

This difference in impact between the two media might explain why the most confusing discontinuities, such as those displayed in *Valencia*, are more likely to occur in photographs than in photorealist paintings. Photographs have our confidence in their veracity, whereas the veracity of paintings is always open to question. The stronger the defamiliarization of a photorealist painting, the more likely we are to question the correspondence of the image to reality—or to a photograph—and the less “photorealistic” it becomes.

Another way in which photographs transform is the way in which they freeze an instant of time. Cartier-Bresson's *Behind the Gare St. Lazare* (1932)¹⁷ captures a man jumping over a puddle in mid-leap, allowing his image to be matched by the leaping figures on the circus posters in the background. Both he and the fig-

ures on the posters are reflected in the puddle. The fortuitous matching of movements and repetition of images delights us; but the same composition in a painting would not seem fortuitous, it would appear contrived. What for the photographer is a coup of timing and positioning can seem strained and lacking in subtlety when constructed by a painter.

The above-described differences in our reactions to paintings and photographs do not rest on differences in precision, persuasive detail, or compelling composition, though these characteristics certainly make important contributions to the effect of particular paintings and photographs. The fundamental difference in our reactions rests instead on our disparate beliefs about the genesis of each image. The fact that the difference in impact between paintings and photographs seems undiminished when the painting used for comparison is photographically precise (Estes), or very close in tone and subject to its corresponding photograph (Magritte's painting and photographic study), suggests that the critical factor in our reactions to photographs is the expectation brought to the medium, the special status attributed to the photographic image.

The divergence in the genesis of images in each medium can also help us to understand painting's special strengths. Though painting might not have the surreal power of photography, it has the potential to show anything the painter can imagine. The painter has the freedom to extend the pattern of a table cloth across the wall of a room (Matisse's *Harmony in Red*), or to make the clouds of a painting continuous with the sky behind it (Magritte's *The Human Condition*), or to give the sky the same texture as a field (van Gogh's *Road with Cypress and Star*), or to show monstrous fantasies (Bosch's *Garden of Earthly Delights*). These things delight us as products of human invention. Painting also gives a pleasure in its modeling of appearances that photography does not give. A seventeenth-century Dutch painter's mastery of the translucency of glass, the texture of carpet, or the shine of pewter and of pearls delights us because we know it is a construction of paint, whereas the mass of detail provided by a photograph delights us because it is "real."

Of course, this distinction between painting and photography is not sharp. Combination

printing, double exposure, and retouching, among other techniques, allow the photographer to put together an image not found in life. But such alteration has been relatively rare and restricted in use, and unless there is obvious evidence of manipulation, we normally assume we are dealing with straight photographs.

But there are cases where manipulation is obvious. In such cases the aura of veracity is usually, but not always completely, destroyed. Laughlin's *The Masks Grow to Us* (1947)¹⁸ uses multiple exposures to show a woman's face becoming a doll's face, a mask. Because the manipulation is obvious, the image seems rather contrived and didactic—it seems to illustrate an idea rather than to reveal something about the world.

Wanda Wulz's *Cat and I* (1932)¹⁹ also uses a multiple exposure, but this time the faces of a woman and a cat are combined to form a haunting image whose component elements are difficult to disentangle. Though an obvious superimposition, it works so well to fuse the images that we are held by the uncanny mixture, unable to disentangle the components. There seems to be some deep congruence of woman and cat. For this reason, the photograph, though an obvious composite, does nevertheless seem to have a revelatory aspect.

Even when the mechanics of alteration are virtually imperceptible, the subject matter can make the fact of alteration obvious. Jerry Uelsmann is known for his elegant and complex photomontages that look like unaltered photographs, such as his untitled 1978 photomontage that shows a sky of shimmering water. What is interesting about Uelsmann's surreal images is that they give us fantasies with the look of straight photographs, as though he had photographed his dreams. This surprises us; we do not expect seemingly straight photographs to show us fantasy images.

But once the subject matter alerts us to the fact that these images are not straight photographs, they cease to function as such. Because these images are obviously not from life, we do not feel as if we are seeing our world transformed. If we did, we would see Uelsmann's 1975 photomontage of a disembodied eye, surrounded by what seem to be dried grasses that take on the appearance of flayed skin, as more grotesque than we do. This seeming "eye

of providence” is more curiously intriguing and disconcerting than grotesque, because we realize we are seeing a “photograph” of someone’s imaginative vision. The effect is closer to painting than to photography.

Uelsmann’s affinity to Magritte gives us yet another opportunity to show that the difference in our reactions to paintings and photographs resides in our beliefs about their origins. Uelsmann’s 1991 photomontage,²⁰ which shows a woman with a white cloth draped over her head and clinging to her body, might be compared as similar in subject to Magritte’s *The Therapist* and its photographic study. Uelsmann’s image, too, seems to show a void, through bars, where a part of the body should be (in this case the face). But we can see that this void must have been achieved by altering the image. In Magritte’s photographic study, as in the photograph of J. P. Morgan, we can see how scenes in the real world, whether contrived or spontaneous, can appear transformed by photography. The distortions of photography show us a world we recognize as our own in a strange new light. Insofar as the Uelsmann photograph is quite readily identified as composite rather than straight, insofar as the void it shows is seen as constructed by the photographer rather than recorded, it does not seem to reveal something strange about our world—its impact is closer to Magritte’s painting than to his photographic study.

II. THE IMPACT OF DIGITAL TECHNOLOGY

A digital image is an image made up of a grid of discrete units known as pixels. With numbers used to specify the color or shade of each pixel, the image can be electronically stored, copied, transmitted, displayed, and printed. It can also be altered in innumerable ways.²¹

The interaction between digital imagery and photography is made possible by the fact that ordinary photographs can be scanned and converted to digital format. The smooth curves and tonal gradations of the photograph are converted into the discrete steps of a grid. More directly, digital cameras can be used to capture images from the world electronically on disk, bypassing the photo-chemical process. Once an image is in digital form, its components can be rearranged, extended, deleted, and in other ways modified before it is printed, processes made all

the easier by software designed expressly for these purposes. When we add to the enhanced ease and power of alteration the possibility of simulating photographically realistic components on computer, it appears that the “photographer” has gained complete control over the image and has acquired the freedom of the painter to depict whatever he or she can imagine.

The digital product of this new creative freedom, however, is no longer a photograph. This is argued by William J. Mitchell, who maintains that digital images are as different from photographs as photographs are from paintings. He explains how the fundamental distinction between the continuous gradations of the analog image and the discrete steps of the digital image generates differences with respect to the processes of enlargement and reproduction. With their continuous spatial and tonal variations, photographs contain an indeterminate amount of information and can be indefinitely enlarged to reveal greater detail. Digital images, however, contain a fixed amount of information; enlargement beyond the point where they reveal their component grids can yield no new data. The discrete components of a digital image do, on the other hand, allow for exact reproduction, so the copy of a digital image can be indistinguishable from its original. Not so for the photograph—its subtle gradations cannot be exactly reproduced, so the photograph of a photograph will never have the precision of the original. But perhaps the most significant difference between the two types of images is to be found in their divergent susceptibility to alteration. This divergence is significant, because it is the digital image’s enhanced alterability that precludes it from ever having the credibility attributed to photographs.

A convincing photographic alteration requires the skillful and painstaking manipulation of fragile surfaces. Digital images, however, can be electronically altered with relative speed and ease. The range of digital alteration also greatly exceeds that of conventional photographic alteration. Elements can be reshaped, repositioned, or removed at will. Images from different sources can be freely combined and blended. With digital alteration, faces can be aged or the features of several faces can be merged, as in the work of Nancy Burson.²² Furthermore, digital alteration can be done seamlessly, making it difficult, if not impossible, to detect. (This unde-

tectability, however, is often greatly overestimated. Without careful matching of tone, lighting, scale, and perspective, a digital alteration will *not* be undetectable.)

The relative ease, freedom, and undetectability of digital manipulation makes it hard to resist—and commonly employed. Whereas alteration is the exception for traditional photography, alterability and manipulability can be seen as a defining characteristic of digital imagery. According to Mitchell, “computational tools for transforming, combining, altering, and analyzing images are as essential to the digital artist as brushes and pigments are to a painter, and an understanding of them is the foundation of the craft of digital imaging.”²³

Indeed, it is already possible to see an increased tendency toward the alteration of images accompanying the increased digitization of photojournalism. Fred Ritchin provides many examples of such alteration in his book *In Our Own Image*.²⁴ He describes how the elements of a photograph can be repositioned, as in *National Geographic*'s much-discussed 1982 cover image of the pyramids of Giza. The pyramids were digitally pushed closer together so that the image would fit the magazine's vertical format.²⁵ He describes how the elements of a photograph can be deleted, as in *Rolling Stone*'s 1985 cover shot of Don Johnson, in which Johnson's shoulder holster and pistol were digitally removed for a less violent image.²⁶ And he explains how elements from different photographs can be combined in a new image, as in *Newsweek*'s combination of separate photographs of Dustin Hoffman and Tom Cruise to form what appears to be a photograph of the two actors in each other's company.²⁷

Ritchin goes on to argue that this new technology must ultimately change the way we use photographs in the mass media. As it becomes more common to digitize photographs and to use digital cameras, and as it becomes easier to alter these digital images to reflect whatever scenarios we might dream up, the documentary usefulness of news and feature photographs is severely diminished.

With the ease of digital manipulation, alteration is becoming more widespread; with the relative seamlessness of digital alteration, it becomes harder to detect (as compared with the previously available “cut and paste” methods);

and with the use of digital and still video cameras, there is no negative against which an image can be checked for tampering. There is not necessarily anything about the digitally altered image to alert us to the fact that there has been manipulation, and in a world where manipulation is on the rise, all images encountered in the media, even reproduced photographs, become suspect. We cannot necessarily tell whether the relatively coarse image in a newspaper or magazine is reproduced from a photograph, or whether it is reproduced from a digital, and possibly altered, image.

Of course there will always be some images whose altered or tampered status will be obvious, either because of technical glitches or because the scene shown is known to be utterly impossible. But when we look at the reproduction of what seems to be a straight photograph, it will become more and more difficult to be confident that no manipulation has taken place.

Photojournalism is not the only area prone to this growing skepticism. We may find ourselves viewing all reproduced photographs—the advertisement in a magazine, the textbook illustration, the duotone plate in a book of photographs—with increased uncertainty. But more significantly, we may find our skepticism extended to our first-hand encounters with photographs.

We have always had reason to view photographs with some skepticism, for they have always had the potential to mislead us. Not only such elaborate techniques as retouching and combination printing, but also such simple methods as cropping or labeling can radically alter our perception of a photographed event. Ritchin cites the example of a *Washington Star* story which was illustrated with a photograph of Ted Kennedy leaving a Kennedy Center gala.²⁸ In the first edition, the photograph was cropped in such a way that Kennedy appeared to be walking in the company of a young woman. The whole picture, however, shows Kennedy walking with a priest on his left, while the young woman walks behind, in the company of another man. Though this example is taken from a newspaper, it does not depend on the concealments of reproduction. The deception perpetrated by cropping is equally effective in the first-hand viewing of a photograph.

Mitchell also discusses the way in which pho-

tographs can be used to mislead, and cites the example of Alexander Gardner's photographs of a dead Civil War soldier.²⁹ *Fallen Sharpshooter* shows a dead Union soldier—but the same body was moved and rephotographed as *Slain Rebel Sharpshooter*.

Photographs have always had the potential to mislead, but there have always been limits to this potential. For instance, with the Gardner photographs, we can be reasonably sure that there was a man, seemingly dead, lying in front of the camera. With the cropped photograph, we can reasonably assume—given the difficulties of creating a truly convincing photographic montage—that Kennedy and the young woman were, at some point, in the same vicinity. If we allow for the possibility of digital manipulation, however, no such assumptions are safe. It becomes plausible that the figures of Kennedy and the woman came from different photographs; it becomes possible that the dead soldier is no one historical individual, but a composite figure formed by combining the images of several slain soldiers. To the extent that we can see photographs as potentially indistinguishable from their digitally altered counterparts, photographs become suspect as carriers of even the most basic information, suspect as bearers of any evidence.

This destruction of photographic credibility does not necessarily await the widespread availability of photographically printed digital images that actually do approximate the fine resolution and depth of original photographs. Even if it always remains possible to distinguish between an original photograph and a digital image, we may find ourselves coming to view photographs differently. This is because the more we encounter reproductions of photographs that have been digitized and altered—in newspapers, magazines, advertisements, and elsewhere—the more we will think of photographs as manipulable. The expectations formed in these everyday encounters with reproductions may come to condition our less frequent first-hand experiences with photographs, and we may find ourselves increasingly ready to entertain the possibility that a photograph has been altered.

Our implicit faith in the veracity of the photographic image is deeply ingrained, so it would take much more than a few digital forgeries to reshape our habits of seeing. After all, old-fashioned photographic forgeries have always been

plentiful, for example, in the composites of supermarket tabloids and in retouched high school yearbook photographs. But alongside these conventionally altered images, there have always been a much larger mass of photographs that were straight, some taken by journalists and other professionals, but many more taken by ordinary folks who send their exposed film to commercial developing labs. Digital scanners and cameras, however, put manipulation techniques at the fingertips of anyone with the appropriate software and a relatively modest amount of hardware—equipment that becomes more and more widely available. Just as computers have made it much easier to revise papers—there is no laborious retyping of a whole manuscript to go through and no messy traces of cut and paste—computers make it easier to “revise” a photograph. And when something is easier to do, people do it with more frequency and less thought. One can easily imagine the vain routinely doctoring their photographs to take a few inches off their waists and add a few hairs to their heads. Or one can imagine the newly divorced methodically deleting ex-spouses from their family pictures.

If we reach a point where photographs are as commonly digitized and altered as not, our faith in the credibility of photographs will inevitably, if slowly and painfully, weaken, and one of the major differences in our conceptions of paintings and photographs could all but disappear.

This change would not only affect our ability to use photographs as evidence, it could also have far-reaching implications for the aesthetics of photography. Most discussions of the computer's effects on art photography have emphasized the new opportunities afforded. The freedom of painting is wedded to the realism of photography; the digital artist can modify a photograph to fulfill his or her creative vision. But this freedom may be bought at the cost of photography's power, at least of one source of its power—that which derives from the photograph's perceived special connection with the world. With the loss of this perceived connection, photography's special surreal fascination may be lost.

In his most recent book, photographer Pedro Meyer discusses the way in which the computer has enabled him to overcome limitations and to expand the expressive potential of his work.³⁰

For instance, he describes how the photograph he took for *Desert Shower* (1985/1993) failed to capture a formation of warplanes that had flown overhead. With digital technology, he was able to restore the picture to match his memory of a missed opportunity; he was able to recreate the lost moment by adding warplanes to the picture. Discussing another work, *Contestant #3* (1991/1993), Meyer describes how he combined two photographs of a beauty contest. He explains that he wanted to show the striking dignity of a contestant who was noticeably overweight in comparison with her rivals, but none of the photographs he had taken contained the juxtapositions he needed. "The specific 'decisive moment' wasn't to be found, it had to be created"³¹ through digital manipulation.

Meyer's choice of words is rather jarring, since "the decisive moment" is so closely tied to the idea of perfect timing. The phrase conjures a fleeting moment of visual significance synchronically recognized and captured, not a lost moment reconstructed or an ideal moment invented. A digitally altered image can seem to capture the decisive moment only insofar as it is able to trade on the documentary aura of straight photographs. But the more widespread and sophisticated digital alteration becomes, the less this will be possible—even for straight photographs.

Consider once again Cartier-Bresson's *Behind the Gare St. Lazare*. The photograph has the potential to mislead as a putative documentary image. For instance, the leap might have been staged or the location misidentified; nevertheless, on the basis of this photograph, few of us would hesitate to say that leaping man, puddle, ladder, and posters existed, if only for an instant, in proximity to each other. Though it is perhaps possible to imagine that the photograph was created as a combination print, in the absence of any provocation to do so, we do not feel compelled to entertain this possibility. However, in an age where digital technology is widely used to create and alter images, we may come to view such a work differently. If we introduced the possibility of digital manipulation, we would not be so ready to assume that the posters bordered the puddle, or that the man attempted to leap it. We would not be so ready to dismiss the possibility that posters and man, along with their respective reflections, were electronically

added to the image from other photographs—or from the photographer's imagination, insofar as these elements of the image could be digitally simulated. Instead of the photograph being a happy confluence of reflected leaping figures caught at the decisive moment by the photographer, the possibility of digital manipulation would make the work seem much more contrived, and I believe it would give us less delight, or at least a delight of a different kind.

Valencia would also suffer if seen against a background of widespread digital manipulation. Part of what fascinates us about this photograph is the way that vantage point and framing can lead to such a startling image. If, however, we entertain the possibility of digital montage, if we no longer assume that the composition shows a unified space, it becomes considerably less intriguing.

The potential threat to photography does not rest here. If *Behind the Gare St. Lazare* were a painting, it would be of only anecdotal or historical interest whether the composition derived from a real event or was invented by the artist. If *Valencia* were a painting, it would make little difference to its aesthetic value whether its composition corresponded to an actual vantage point or was fabricated by the artist. Even when it does happen to correspond to an event or a view found in the world, a painting is essentially seen as a construction. With the rising prevalence of digital manipulation, photography may be heading in the same direction. When we encounter what looks to be a photograph, we may be increasingly likely to view it as a construction.

Our changing expectations for photographs could affect even the way we view the photographs of the past, those made long before the advent of digital technology—or could at least affect the way future generations look at such photographs. Those of us who started looking at photographs before the digital revolution will probably still retain, at least in part, our habitual ways of looking at works by Cartier-Bresson and others. But those who grow up in an age where the photographic image is seen as fluid and manipulable may have trouble appreciating the aura of evidential authority surrounding traditional photographs.

Will future generations come to see the transformations of traditional photography—the apparent disjunctions of space, the defamiliariza-

tion of ordinary objects, the fortuitously frozen moments—as constructions of the photographer, rather than as revealing something uncanny about our world? It is impossible to know for certain, but changes in the expectations surrounding photographs could very well lead to such changes in the way future viewers see photographs, altering the kind of pleasure, and the kind of pain, that photographs give.

Photographs have always served a nostalgia for the past. Perhaps the “classic” period of photography, the first one hundred and fifty years or so when we were able to see photographs as revelatory of the world, will soon itself become the object of nostalgia.³²

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1. Patrick Maynard, “Photo-opportunity: Photography as Technology,” *The Canadian Review of American Studies* 22 (1991): 501–528.

2. *Ibid.*, p. 514.

3. The foregoing discussion, and the examples, owe much to Kendall Walton’s “Transparent Pictures: On the Nature of Photographic Realism,” *Critical Inquiry* 11 (1984): 246–277. But whereas Walton argues that photographs are transparent, I only contend that photographs are *seen* as transparent. This weaker claim is sufficient for my present purpose.

4. André Bazin, “The Ontology of the Photographic Image,” in *What is Cinema?* ed. and trans. Hugh Gray (University of California Press, 1967).

5. Rudolf Arnheim, “On the Nature of Photography,” *Critical Inquiry* 1 (1974): 149–161.

6. Beaumont Newhall discusses this problem in *The History of Photography* (New York: Museum of Modern Art, 1982), pp. 73–74.

7. Since readers may be unfamiliar with many of the works I discuss, I will include references to books where good quality reproductions may be found. Of course, even the best reproductions cannot fully capture the different effects of paintings and photographs. *J. P. Morgan at Society Wedding Dodging the Camera* can be found in John

Szarkowski, *The Photographer’s Eye* (New York: Museum of Modern Art, 1966), p. 150.

8. Reproduced in Newhall, *The History of Photography*, p. 189.

9. Reproduced in *Clarence John Laughlin: The Personal Eye*, introduction by Jonathan Williams, stories by Lafcadio Hearn (New York: Aperture, 1973), p. 54.

10. Both paintings are reproduced in Jacques Meuris, *René Magritte* (Cologne: Taschen, 1991), pp. 30–31.

11. Both works are reproduced in Meuris, pp. 84–85.

12. Reproduced in Pierre Borhan, *André Kertész: His Life and Work* (Boston: Bullfinch, 1994), p. 287. (Also in Szarkowski, p. 87.)

13. Reproduced in Peter Galassi, *Henri Cartier-Bresson: The Early Work* (New York: Museum of Modern Art, 1987), p. 127. (Also in Szarkowski, p. 87.)

14. Reproduced in *Walker Evans*, introduction by John Szarkowski (New York: Museum of Modern Art, 1987, 1971), p. 32.

15. Reproduced in Newhall, p. 196.

16. Reproduced in John Arthur, *Richard Estes: Paintings and Prints* (San Francisco: Pomegranate Artbooks, 1993), p. 89.

17. Reproduced in Galassi, p. 101.

18. Reproduced in Laughlin, p. 59.

19. Reproduced in Naomi Rosenblum, *A History of Women Photographers* (New York: Abbeville Press, 1994), p. 114.

20. All three untitled photographs are reproduced in *Jerry Uelsmann: Photo Synthesis*, foreword by A. D. Coleman (University Press of Florida, 1992), pp. 85, 83, and 38.

21. William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* (MIT Press, 1992), p. 5.

22. For example, in *Warhead IV* (1985), Burson blends the images of Reagan and Gorbachev to form a composite portrait of the two leaders. (Illustrated and discussed in Mitchell, pp. 179–181.)

23. Mitchell, p. 7.

24. Fred Ritchin, *In Our Own Image: The Coming Revolution in Photography* (New York: Aperture, 1990).

25. *Ibid.*, pp. 14–17.

26. *Ibid.*, pp. 17–18.

27. *Ibid.*, pp. 8–13.

28. *Ibid.*, pp. 85–87.

29. Mitchell, pp. 43–45.

30. Pedro Meyer, *Truths and Fictions: A Journey from Documentary to Digital Photography* (New York: Aperture, 1995).

31. *Ibid.*, p. 111.

32. I would like to thank Patrick Maynard for his helpful comments on an earlier version of this paper.