

Jay David Bolter
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Remediation

Understanding New Media

Digital Photography

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If computer graphics is sometimes called on to refashion the photograph ☉ p. 119, photography is also used to refashion computer graphics. Many remediations are reciprocal in the sense that they invite us to imagine each medium as trying to remediate the other. In such cases, deciding which medium is remediating and which is remediated is a matter of interpretation, for it comes down to which medium is regarded as more important for a certain purpose.


If an image is captured with a digital camera, there is no chemical process as with analog photography. Instead, the image is recorded by photosensitive cells and never exists except as bits. Is such an image a photograph or a computer graphic? If the image began as a conventional photograph and was scanned into the computer and digitally retouched, is it then a photograph or a computer graphic? In what is called digital photography, the result is an image that is advertised as a photograph and meant to be read as such by the viewer. The digital photographer, who captures images digitally, adds computer graphic elements to conventional photographic images, or combines two or more photographs digitally, still wants us to regard the result as part of the tradition of photography. For the photographers and their audiences, digital photography (like digital compositing and animation in traditional film) ☉ p. 146 is an attempt to prevent computer graphic technology from overwhelming the older medium.

Computer photorealism is trying to achieve precisely what digital photography is trying to prevent: the overcoming and replacement of the earlier technology of photography. And yet success in overcoming photography would have consequences that the computer graphics specialists do not necessarily foresee, given that most graphics specialists

remain realists as well as photorealists. If they could achieve perfect photorealism, then they could create “photographs” without natural light. An image could be synthesized to meet the viewer’s desire for immediacy without the need for the objects in the image to have existed or to have been together at any time, which was exactly the condition that Roland Barthes considered the definition of photography in *Camera Lucida*. Complete success in computer photorealism would make nonsense of the term *photorealism*, because no one could any longer believe in a causal connection between the image and the world. Such success would remediate the term *photorealism* out of existence, which is the most radical form of remediation possible.

PHOTOGRAPHIC TRUTH

Digital photography poses a similar threat for those who believe that the traditional photograph has a special relationship to reality. William J. Mitchell (1994) acknowledges the power of digitally manipulated photographs and yet finds that power troubling: “For a century and a half photographic evidence seemed unassailably probative. . . . An interlude of false innocence has passed. Today, as we enter the post-photographic era, we must face once again the ineradicable fragility of our ontological distinctions between the imaginary and the real, the tragic elusiveness of the Cartesian dream” (225).

What Mitchell calls the postphotographic era, we characterize as an era in which photography and digital technologies are remediating each other. But in any case photographic “truth” was not unassailable even in the nineteenth and early twentieth centuries. Impressionists claimed that their paintings captured the truth of light better than photographs could.  p. 125 Furthermore, as Mitchell himself documents, in the nineteenth and early twentieth centuries, so-called combination printing could make photographs deceptive. For example, during World War I, two young girls took pictures with cardboard cutouts and managed to convince much of the English public that fairies existed (fig 5.1).

It is remarkably appropriate that these photographs have themselves become the subject of further remediation in the film *Fairy Tale: A True Story* (1997). The film uses computer graphics to let us see the fairies flying around the garden and the girls’ room and then presents the girls’ photographs as reproductions of what we have already seen to be “real” in the film itself. The original photographs and the 1917 incident were themselves the occasion for the film, but now the film seems



Figure 5.1 Cottingly fairy photograph, 1917. Brotherton Collection, Leeds University Library.

to reverse the relationship. The film and its computer graphics seem to validate the photographs and in the process the characters' and our desire for immediacy.

The truthfulness of the photograph is the issue addressed in the CD-ROM *Truths and Fictions* by the Mexican photographer Pedro Meyer (1995). He offers a collection of forty photographs together with audio and textual commentaries and supporting materials, some of which have been part of a conventional gallery exhibit. The CD-ROM in fact remediates an art gallery in which Meyer's photographs might hang. There is implied rivalry in this remediation—the suggestion that the CD-ROM can present this work more effectively to viewers. As their labels indicate, most of the photographs have been “digitally altered,” and the result is a variety of different styles. Some of the photographs are explicit digital collage. Others are realistic except for the appearance of a fantastic, presumably digital, element, such as an angel. In this respect, they are almost visual equivalents of the magic realism of Latin American authors like Gabriel Garcia Marquez. Looking at some of the photographs, we cannot be sure what the computer has changed, for nothing in the picture is unambiguously impossible in the world of light. Meyer's alterations often involve subtly combining two or more photographs, as is the case with *Emotional Crisis* (fig. 5.2). In this case, it is the digitally created wiggle in the striping that attracts our attention; we cannot know that the billboard that gives the photograph its title has been digitally cut from another photograph and

Figure 5.2 Pedro Meyer, *Emotional Crisis (Texas Highway, 1990/1993)*, altered black and white image. © Pedro Meyer. All rights reserved. Used by permission.



pasted here. Finally, Meyer labels some of the photographs “unaltered black and white image[s].”

The fact that we know that some of Meyer’s photographs have been digitally altered calls the status of all the photographs into question. The images labeled “unaltered” seem as artificial as the others. In fact, because these unaltered images are presented next to the altered ones, it is they (the unaltered) that do some of the most interesting work of remediation. One (*Cardboard People*) shows a man posing before a photographer with cardboard figures of Ronald Reagan and a beautiful woman. Another (*Mona Lisa in the Wax Museum*) shows a woman painting a copy of the *Mona Lisa* from another copy that is before her (fig. 5.3). With their multiple planes and replications of images, *Mona Lisa* and *Cardboard People* are explicitly hypermediated. They represent the desire for immediacy by multiplying media (photographs or paintings) in the image itself, although, if we can believe Meyer, they do so within the single medium of a conventional photograph.

In *Truths and Fictions* Meyer is making Mitchell’s point that with the advent of digital technology the photograph has lost the simple relationship to the real that it previously enjoyed. Because the truthfulness of any photograph is now in question, Meyer’s composite photographs are supposed to reveal truths (for example, about the banality of American culture) that are more compelling than the factual record to which photography used to lay claim. In an audio track on the CD-ROM, Meyer tells us how to read some of the images and makes

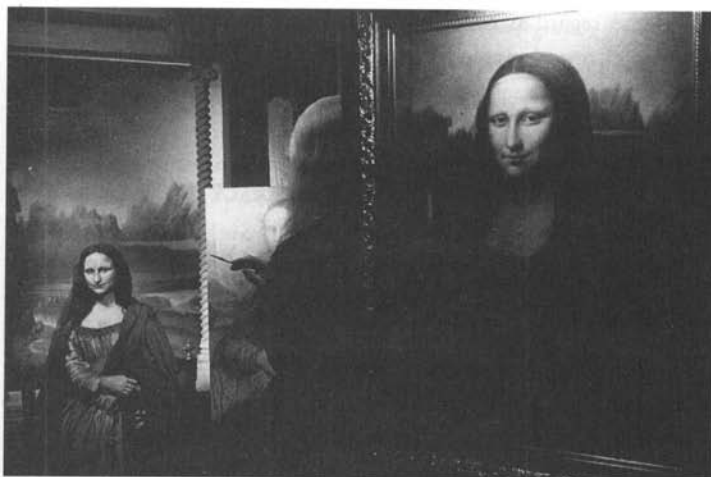


Figure 5.3 Pedro Meyer, *Mona Lisa in the Wax Museum, San Francisco, CA, 1986*. unaltered black and white image. © Pedro Meyer. All rights reserved. Used by permission.

clear his political agenda. The computer allows him to put images together to sharpen his critique of American culture or, in the Mexican photographs, to challenge by subtle disruptions in the surface of the image assumptions about third-world poverty. We can appreciate here the political dimension of remediation. With his digital reworkings, Meyer remediates the traditional photograph into an image that is supposed to be more authentic because of its clarified or intensified ideological message. The CD-ROM is at the same time a political remediation of the museum exhibit, because Meyer can offer aural hyperlinks on the CD that explain the political meaning of the images.

With the creation of digital images like those in *Truths and Fictions*, the status of photography itself has so changed that we are now troubled by Meyer's claim that *any* of his images are "unaltered." How could exposing photographic film to light, developing the negative in a chemical bath, and transferring the result to paper ever constitute an unaltered image? Because of our heightened awareness, for which Meyer and other digital photographers are responsible, we can hardly look on any photograph without taking note of our desire for immediacy. Every photograph becomes not only a failed attempt to satisfy that desire, but also to some extent a representation of that failure. Meyer is trying to exploit our desire for an authentic and immediate political response to the complex images that his camera captures. Here too, Meyer is trying to improve on traditional photography, which he and many others (for example, John Tagg in the *Burden of Representation*)

would also regard as an art with a political or ideological dimension. His digital reworkings offer to clarify the political meaning of these images, and in this sense the digital result can be simpler than the analog original.

PHOTOGRAPHING THE DESIRE FOR IMMEDIACY

It is not any one digital photograph that is disturbing. We are disturbed because we must now acknowledge that *any* photograph might be digitally altered. Digital technology may succeed—where combination printing and other analog techniques have not succeeded in the past—in shaking our culture's faith in the transparency of the photograph. However, altered images become a problem only for those who regard photography as operating under the logic of transparency. If the viewer believes that a photograph offers immediate contact with reality, he can be disappointed by a digitally altered photograph. The reason is that the logic of transparency does not accord the status of reality to the medium itself, but instead treats the medium as a mere channel for placing the viewer in contact with the objects represented. Yet a digital photograph can be as transparent as an analog one. The process of digitizing the light that comes through the lens is no more or less artificial than the chemical process of traditional photography. It is a purely cultural decision to claim that darkening the color values of a digitized image by algorithm is an alteration of the truth of the image, whereas keeping an analog negative longer in the developing bath is not.

With this in mind, we can see how digital techniques suggest a new way of understanding all photography. Instead of dividing the world of photography into true and deceptive images, or even into "untouched" and altered images, we can distinguish photographs on the basis of their claims to immediacy. A photograph may be either an expression of the desire for immediacy or a representation of that desire. The photograph that presents itself to be viewed without irony expresses the desire for immediacy, while a photograph that calls attention to itself as a photograph becomes a representation of that desire.

No one has explored the notion of photography as a desire for immediacy more eloquently than Roland Barthes in *Camera Lucida* (1981). For Barthes, photography is special. "More than other arts, Photography offers an immediate presence to the world" (84). Barthes denies the traditional interpretation that photography grows out of perspective painting, precisely because he wants to insist on the immediacy of photography:

It is often said that it was the painters who invented Photography (by bequeathing it their framing, the Albertian perspective, and the optic of the camera obscura). I say: no, it was the chemists. For the noeme "That-has-been" was possible only on the day when a scientific circumstance (the discovery that silver halogens were sensitive to light) made it possible to recover and print directly the luminous rays emitted by a variously lighted object. The photograph is literally an emanation of the referent. From a real body, which was there, proceed radiations which ultimately touch me, who am here. (80)

So photography is not "like painting only better," but is truly transparent:

The realists, of whom I am one and of whom I was already one when I asserted that the Photograph was an image without a code—even if, obviously, certain codes do infect our reading of it—the realists do not take the photograph for a "copy" of reality, but for an emanation of past reality: a magic, not an art. (88)

What makes Barthes's qualified and complicated realism so interesting is the way he uses it to articulate the theme of desire. The most moving picture in *Camera Lucida* is the one that Barthes describes in words but does not show us: a picture of his mother as a child, which becomes for him the expression of his own desire to be reunited with a mother who has just died. For Barthes, a photograph is always an expression (not a representation) of loss, of death in fact, because it is an emanation of a past that cannot be retrieved: "All those young photographers who are at work in the world, determined upon the capture of actuality, do not know that they are agents of Death" (92). Although Barthes does not discuss digital photography, clearly any reworked photograph can no longer enjoy this simple and powerful relationship to the past. It becomes instead an image of a second order, a comment on a photograph or on photography itself, and therefore a representation of the desire for immediacy.

At first, then, there seems to be a simple dichotomy: digital photography is hypermediated, while analog photography is transparent. Digital photography appears to complicate and even to mock the desire for immediacy that traditional photography promises to satisfy. On the other hand, because a digital photograph can sometimes be regarded as transparent, it too can express our desire for immediacy. And because an analog photograph can be reworked and combined with

other photographs, it can become a second-order expression, a conscious representation, of that desire. Each technology can perform the cultural function apparently belonging to the other, because transparency always implies hypermediacy, and vice versa.

Digital photography alters our understanding of the prior history of photography. This is the most radical achievement of experimenters like Meyer, far more radical than their overt political message: that they can help to redefine the cultural significance of a past technological moment. We now find ourselves looking at traditional photographs with a nostalgia for the time when digital technology did not exist and could not therefore intervene between the viewer and his desire. At the same time we become conscious of the interventions and choices required even in the analog photography of the nineteenth and early twentieth centuries. It is no accident that the voices (of theorists like Nelson Goodman in *Languages of Art*) against the immediacy of photography grew strong in the 1960s and became increasingly insistent in the following decades, for this was exactly the period in which the mechanical and digital manipulation of photographs became increasingly sophisticated. It is no accident that the French original of Barthes's nostalgic and pessimistic *Camera Lucida* appeared in 1980 (as the first desktop computers were being developed and marketed), at almost the last moment when any sophisticated writer could still claim that an analog photograph was not a representation but an emanation of its subject.

Remediation

Understanding New Media

Jay David Bolter and Richard Grusin

Media critics remain captivated by the modernist myth of the new: they assume that digital technologies such as the World Wide Web, virtual reality, and computer graphics must divorce themselves from earlier media for a new set of aesthetic and cultural principles. In this richly illustrated study, Jay David Bolter and Richard Grusin offer a theory of mediation for our digital age that challenges this assumption. They argue that new visual media achieve their cultural significance precisely by paying homage to, rivaling, and refashioning such earlier media as perspective painting, photography, film, and television. They call this process of refashioning "remediation," and they note that earlier media have also refashioned one another: photography remediated painting, film remediated stage production and photography, and television remediated film, vaudeville, and radio.

In chapters devoted to individual media or genres (such as computer games, digital photography, virtual reality, film, and television), Bolter and Grusin illustrate the process of remediation and its two principal styles or strategies: transparent immediacy and hypermediacy. Each of these strategies has a long and complicated history. A painting by the seventeenth-century artist Pieter Saenredam, a photograph by Edward Weston, and a computer system for virtual reality are all attempts to achieve transparent immediacy by ignoring or denying the presence of the medium. A medieval illuminated manuscript, an early twentieth-century photomontage, and today's buttoned and windowed multimedia applications are instances of hypermediacy—a fascination with

the medium itself. Although these two strategies appear contradictory, they are in fact the two necessary halves of remediation.

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"The authors do a splendid job of showing precisely how technologies like computer games, digital photography, film, television, the Web, and virtual reality all turn on the mutually constructive strategies of generating immediacy and making users hyperaware of the media themselves. In the final section—after a discussion on the theory of remediation and a careful examination of different media—the authors lay out a provocative theory of contemporary selfhood, one that draws on and modifies current notions of the 'virtual' and 'networked' human subject. Clearly written and not overly technical, this book will interest general readers, students, and scholars engaged with current trends in technology."

—M. Uebel, *Choice*

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