THE NAKED AND THE LENS
A GUIDE FOR NUDE PHOTOGRAPHY

Louis Benjamin

Focal Press

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Dedication

To Denise, with more love than you can imagine. You always inspire me, and any magic in these pages comes from you.
And to my parents, who have unwaveringly backed my every escapade.

Louis Benjamin

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Please go to the website *www.TheNakedandTheLens.com* for more interviews and resources.

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Beauty is character and expression. However, there is nothing in Nature with more character than the human body. By its force or its grace it evokes the most varied images. At times, it resembles a flower—the flexion of the torso imitates the stem, the smile the breasts, the head and the sheen of the hair represent the blooming of the corolla… And at other times, the human body curved back is like a spring, a beautiful bow on which Eros adjusts his invisible arrows. And then there are times when it forms an urn. The human body, is above all the mirror of the soul and that is where its greatest beauty comes from.

—Auguste Rodin

This is an invitation to come exploring. If you're interested in shooting fine art nudes, whether you have shot some already or not, this book is for you. However, it's as much about art photography as it is about nudes *per se*. At its heart, the book is about four questions: What constitutes a fine art nude? How are different artists approaching the genre? How does a photo work? And what's involved in translating artistic vision into a picture?

This is an encouragement to color outside the lines. It's a demonstration of the vast range of approaches to the nude in fine art photography. If you have already been shooting nudes and you're looking for inspiration, I hope that some of the examples in this book give you fresh ideas. If you are looking for a conceptual foundation for your work, and not just a look or a theme to explore, you may be especially interested in Parts I and IV. I have also included resource lists at the end of each chapter, which may put you in touch with other sources of inspiration.

This book is about cross-pollination. We live in a culture that often overemphasizes specialization. The "Renaissance" man or woman is a rare breed, and if you look at most books on the topic of nude photography, they're narrowly focused. It's easy to find books that are only about lighting, or posing, or retouching, for example. You can find books that focus purely on art theory, and you can find monographs—the work of a single artist, often about a single project. What's harder to find is a book that attempts to integrate the various ways of thinking about making nudes. Instead of focusing narrowly, I wanted to trace the overall topography of the world of the fine art nude in photography.

It's also easy to stay anchored in the present, looking only at contemporary work, and only at photography. There are many references to art history here, beyond the history of photography. I also examine some of the technical aspects of a field that has always been the product of a marriage between art and technology.

We're in a culture that is obsessed with surface, and we are inundated with disposable imagery. This is a call to create photos that offer more in the second and subsequent viewings. In the United States, we are also living in a post-Mapplethorpe, post- "wardrobe malfunction" era, where nudity is "not safe for work" and censorship has an economic motivation. If your ideas are provocative, chances are you'll meet with resistance in showing your work. While I didn't want to grant too much importance to that resistance, I also wanted to acknowledge that it is there, and discuss some of its long history. In the end, it's about you making the art that you are inspired to make. I thought it was important to write a book that emphasizes the choices you can make, rather than telling you what to think.

Thus, you are holding my humbly submitted attempt at an interdisciplinary approach to the field of the fine art nude photograph, drawing from art, science, and history. I hope that you will find it interesting, inspiring, and perhaps even liberating.

Concept

Part ONE

1

Gallery

ABOVE: *Rock N Roll Lifestyle.* **Photo by Richard Rasner (Unique Nudes) of Nakayama Studios.**

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OPPOSITE PAGE: *Sienna* **by Louis Benjamin.**

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OPPOSITE PAGE TOP: *© 2009 Harvey Stein.*

OPPOSITE PAGE BOTTOM: *Reproduced by permission of Barney Cokeliss.*

TOP: *La Coupe de Fruits 3. Reproduced by permission of Pascal Renoux.*

BOTTOM: *Keonna, Lincoln Beach. Reproduced by permission of Saddi Khali.*
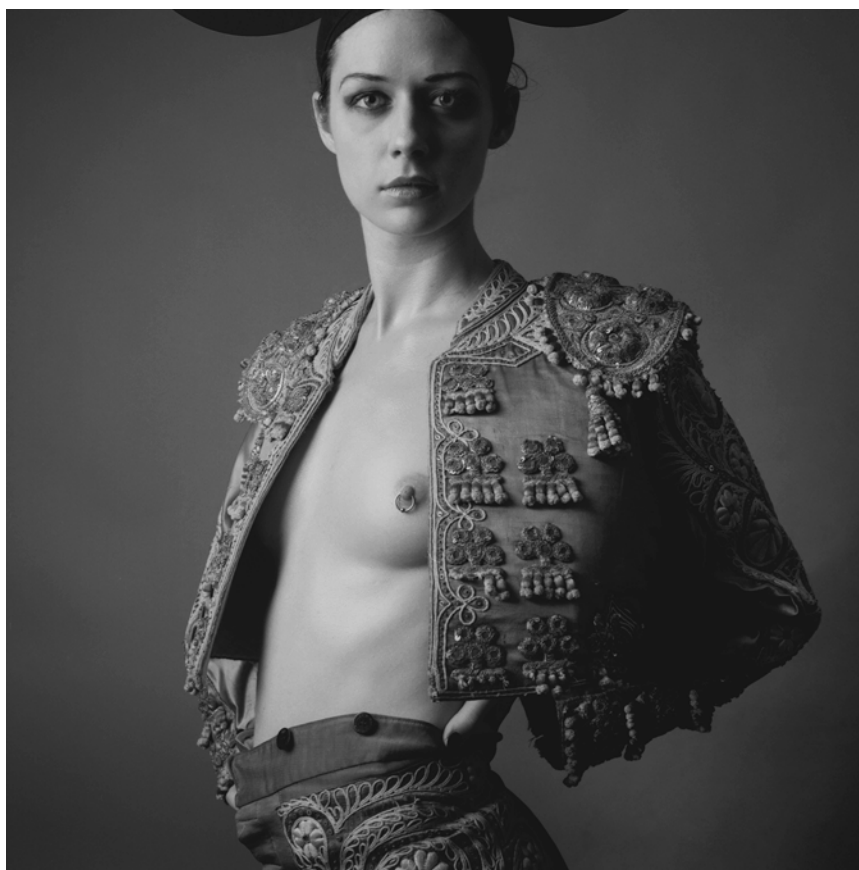
TOP: *Jordan Swimming.* **Reproduced by permission of Saelon Renkes, www.saelon.com.**

BOTTOM: **Reproduced by permission of JD Yezierski.**
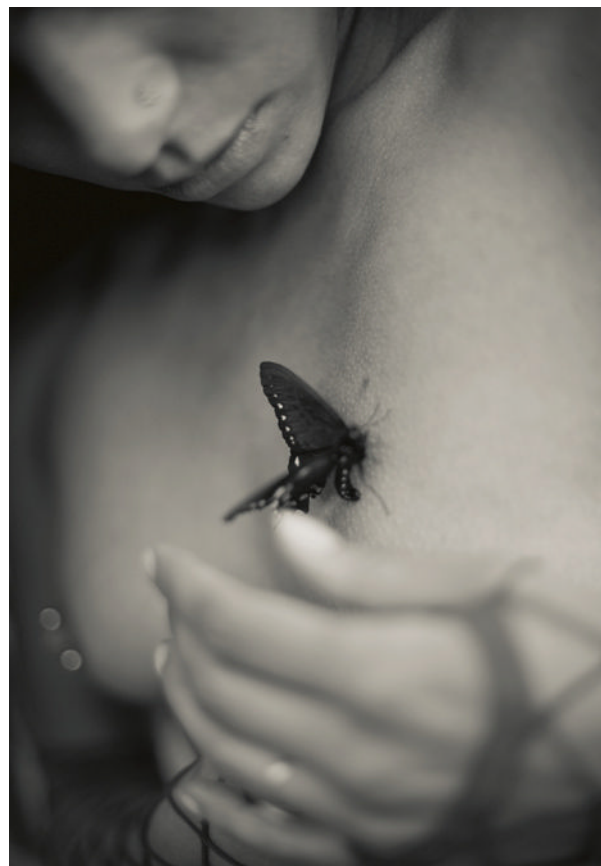
TOP LEFT: *Reproduced by permission of Terry Donovan.*

ABOVE: *Male Butterfly.* **Reproduced by permission of Alfred Laij.**

BOTTOM LEFT: *Reproduced by permission of Jafar M. Pierre.*
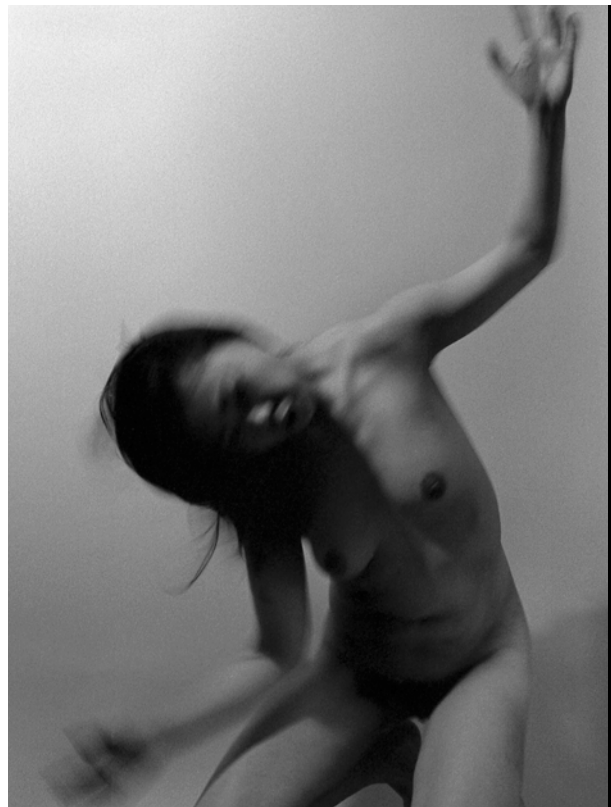
TOP: *Self Portrait.* **Reproduced by permission of Mayumi Yoshimaru.**

BOTTOM: *TV Woman.* **Reproduced by permission of Gaspar Marquez.**

TOP: *Now as Then 2.* **© 2009 Pet Silvia.**

BOTTOM: *My Turn.* **Reproduced by permission of Steve Cherrier.**
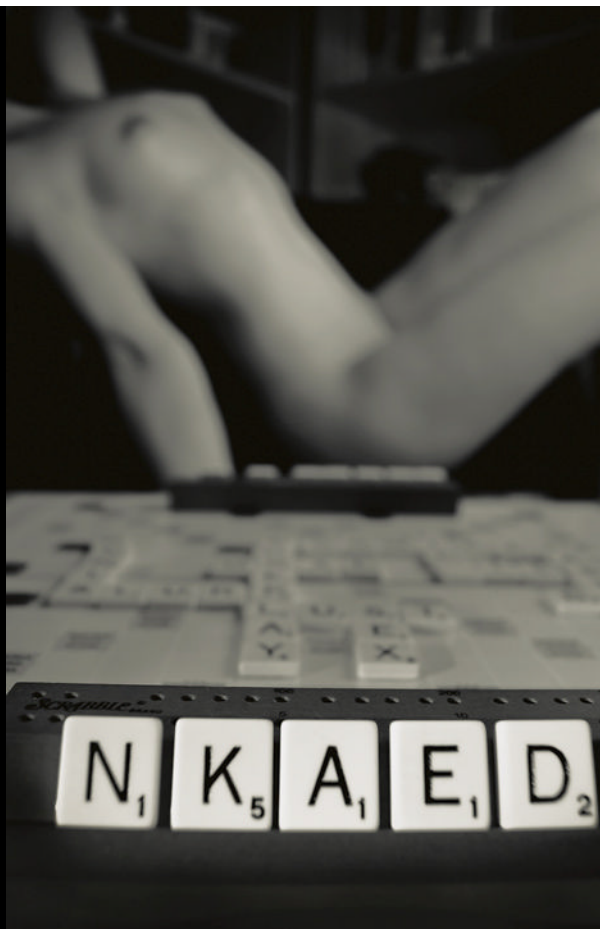
Undressing Fine Art: Approaches to the Fine Art Nude in Photography

"There is nothing worse than a sharp image of a fuzzy concept."

—Ansel Adams

The proposition seems simple enough: ask someone to take their clothes off, point a camera at them, and press the shutter release. That is the essential gesture of making a nude photograph, but we're also talking about making fine art, and that changes things a bit. Making photographic fine art nudes is often a more sophisticated prospect than it seems at first blush.

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OPPOSITE PAGE: *Reproduced by permission of Alfred Laij.*

Reproduced by permission of Ned & Aya Rosen.

FINE ART

Let's first be clear about how the phrase "fine art" is used in this book. These are works of art based solely on the vision of the artist and created in a process that is concerned with the discipline of making art. You may have visited the web sites of photographers who refer to their fine art work as "personal." We can distinguish this from applied arts (commercial work) or crafts, where the creative vision and the impetus for making the image might come largely from a client, a market segment, or some utilitarian purpose.

Fine art only has to do with the expression of an idea. The creative process is focused on the art object itself, art for art's sake. Even though creating artwork can be deeply personal, with the artists essentially making the work for themselves, the work only becomes part of the larger dialog of fine art when it is shared or made public through communities such as the web, the gallery system, or museums. At the same time, showing the work is often a by-product of a fine artist's process, not the primary objective.

There is an inner game to fine art. The strongest fine art work has to do with much more than a look, a style, or the surface of the work. These works often have to do with a statement that the artist wants to make, or a question that the artist wants to answer. Even in the case of artists who are terrible with words and only work visually, you can sense the clarity of the ideas that drive their work. Artists often work on long-term projects, or work inside a theme, exploring ideas that relate their works to each other. Working on a long-term project also gives the artist time to develop and refine the idea that might start out very vague.

Notice that nothing in our working definition of fine art has anything to do with whether the image is pretty, or even whether the image is "good." In fact, some observers think that the current art market is interested in anti-beauty and unflattering imagery as a reaction to long-standing conventions of aesthetics. Fine art can be about pure beauty and conventional aesthetics, but much contemporary work is about pushing boundaries, subverting

norms, re-examining assumptions, and seeing things with fresh eyes.

NUDE

A fair amount has been written about the difference between "naked" and "nude." The painter Lucien Freud does not refer to his works as nudes, he refers to them as naked portraits, and he further breaks from the tradition of portraiture by avoiding the temptation to portray his sitters in a flattering way. Most think of nudes as being more about the state of undress in an abstract or conceptual way that is also stripped of identity, where nakedness is simply undressed, but the subject has a clear identity. As an extreme example, a contorted, faceless body is a nude, while a candid portrait of someone skinny-dipping is a naked portrait. It's probably less important to decide which designation applies to your work than it is to decide which attitude applies. Are you more interested in form, or in persona?

The word "nude" is a loaded term that can be used to suggest how the viewer should think about the work. It can be applied in a pretentious way, and it is often used to claim legitimacy for a work. Some think the phrase "artistic nudes" represents a very specific and narrow approach. It quickly becomes clear that these terms don't mean the same thing to everyone.

At some level, most images of the nude are concerned with beauty, perfection, or propriety; all matters that relate to ideals. Kenneth Clark wrote in *The Nude: A study in Ideal form*, "Every time we criticize a figure, saying that a neck is too long, hips are too wide or breasts too small, we are admitting, in quite concrete terms, the existence of ideal beauty." He argued that the nude is not the subject of an artwork, but a form in its own right—a genre of art—and the unclothed figure functions in much the same way as the hero in an epic. When we think of nudes as a genre, we can identify many subgenres, including portraits, figurative works, abstracts, narrative tableaux, landscapes, and environmental studies.

Images of the nude convey something more than what the body looks like, and the state of nudity has symbolic power. It also carries

a charge that can be problematic. Much of that charge arises from the codified shame of being naked that so many of us learn at an early age (think Adam and Eve and the Fall From Grace). Another source of that charge can be seen in the way that fashion operates: if the "clothes make the (wo)man," then stripping her clothes also strips away a significant part of her social stature. Viewers often place themselves in the scene being depicted, and expect that the artist or the model would be embarrassed or ashamed to make the image. From there, public discourse often goes to whether the image should be displayed, and whether the work is art or pornography. This friction has been an ongoing issue with the nude in art.

John Berger, who was writing about European painting at the time, suggested that the nude is always conventionalized to the point of being a form of dress. That holds true for the nude in contemporary photography, and so does another of his observations: the protagonist of these images is the spectator; a stranger standing in front of the picture, who is presumed to be male and fully clothed. We refer to this as the male gaze.

READING IMAGES

In our highly visual culture, it's rare to stop and think specifically about how we take in photographs, but there is a form of literacy involved. Think of the times you've looked at a photograph and remarked that something about the image didn't work: perhaps a hand was cut off by the edge of the frame in an unpleasant way, something in the background was distracting, or some detail was blocked or blown out by bad exposure. That's the result of reading the
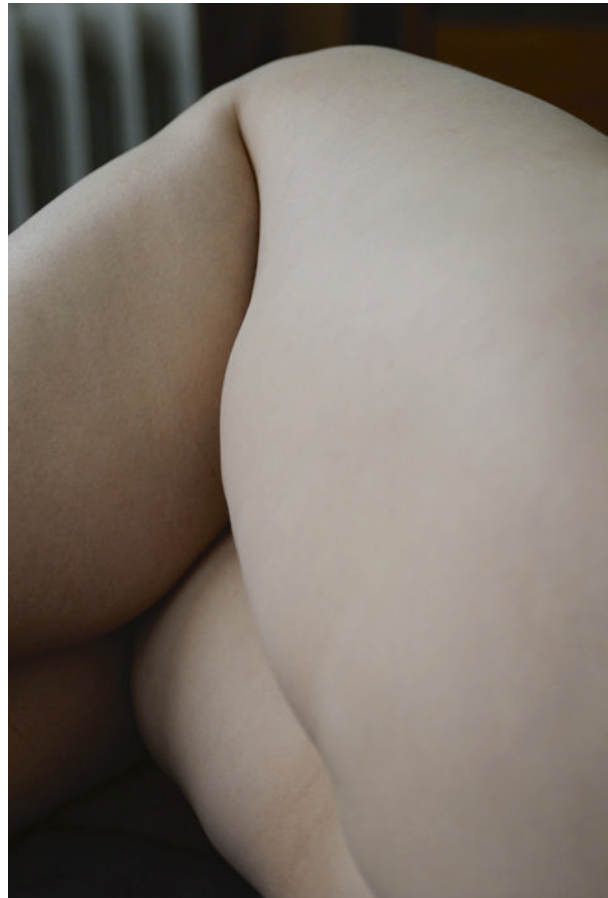
image. We learn to read photographs—often in multiple passes, and in a very complex way that involves both the content and the context of the image.

In magazines, newspapers, and often even on television, pictures are generally expected to have captions. But even in the fine art world, the words surrounding the picture are often just as impactful as the colors and tones within the picture. Consider, for example, how often you've looked at a photograph and been puzzled. You then read the title or caption, and it either became completely clear or got even murkier. How you title your work, or leaving it "Untitled," can be a very important strategy in shaping how your image is read. Painter René Magritte understood this phenomenon and used it to create a powerful effect. His titles are an integral part of his work, and were designed to have the effect of disorienting the viewer.

TOP: *The "implied nude" is a popular trope that can either conform to standards of modesty, or make a statement about them.* **Photo by Louis Benjamin.**

BOTTOM: *Le Salon Rouge.* **Reproduced by permission of Pascal Renoux.**

Visual literacy varies just as verbal literacy does, and developing an awareness of visual language and culture can give your work a powerful resonance.

When viewers begin to read a photo for the first time, they are often concerned with what is being depicted in the image, what those depictions might symbolize, and whether some part of the image alludes to something they already know in their culture. A woman wearing a pointy green crown with green face and body makeup is likely to be read as the Statue of Liberty. Showing Lady Liberty "in the buff" might be interesting, but placing her naked next

CH2   Undressing Fine Art

The effect shown here was created with a projector, rather than digital manipulation. **Reproduced by permission of JD Yezierski.**

to something that looks like a bomb would spin the image in a very different direction, upping its ante as both a political and an artistic statement.

Viewers aren't simply concerned with what an image wants to say; they're also interested in what that image conveys about the moment it was captured or how it was put together. In our guts, we often sense very quickly whether an image holds together, and its subtext can be more powerful than the intended content. If the artist is confused about what the photo is about, the viewer will sense that confusion in the reading. If the model doesn't trust the photographer, or is nervous for some reason, that unease will usually show in an image. For many photographers beginning to shoot nudes, the first thing to contend with is giving yourself permission to make the images you imagine making. If you're playing it safe, that will show up in your work, as well.

With the widespread awareness of computer manipulation in photography, a question that comes up with increasing frequency is whether Photoshop was used to manipulate or composite an image together, particularly when something in the image seems too perfect or even slightly implausible. Intentionally showing or hiding the "seams" in a constructed image can be an important visual strategy.

VISION

You may have noticed that the discussion so far has jumped straight from the artist's concept to how the viewer takes in the image, even though the practice of photography is heavily involved with what's in between those points—working with lighting, posing the subject, making the capture, and producing the final image. This is because in the most effective bodies of work, the clarity and integrity of the artist's vision is what drives everything else and gives it resonance. That doesn't mean that the artist works in a linear fashion from cerebral concept to finished product. The process of many extremely successful and effective artists can be very exploratory

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The color relationships in this photo are as important as the framing or the figure. The clouds add an allegorical quality. **Photo by Louis Benjamin.**

and improvisational, even accidental, where the artist thinks of herself or himself as a conduit for the work rather than the producer of the work.

A lot of photographers, if not most, make the photos they're compelled to make in the moment. It's very common for photographers to say that they try not to think when they're composing a shot. It's more about the feeling or gestalt of what's in the viewfinder. For artists that produce work that way, the force of vision is applied in the editing process, which could happen years after the original exposure is made.

HOW WE GOT HERE Photographs were not always considered an art form, and even as recently as the late 1970s, photography was still not fully accepted as a fine art medium. That view can be traced all the way back to the beginnings of photography, when it was referred to as "photogenic drawing." The idea was that "nature herself" reached into the camera and drew the scene. It was a view that invalidated the photographer, and it would be some time before the argument was advanced that the photographer's choices of where to place the camera and when to trip the shutter were important expressions of artistic intent.

As photography gained acceptance as a fine art medium, many of the works that helped it to gain legitimacy were nudes, perhaps because the form alludes to fine art paintings and Greco-Roman statuary. During that period, galleries dedicated to photography flourished because few photographers could get their work shown in fine art galleries.

One of the artists who worked tirelessly to legitimize fine art photography was Imogen Cunningham, who was still working hard at 91 years old in 1975. Some of her most celebrated images are nudes. Alfred Stieglitz was another standard-bearer for photographic art. His nude photographs of his wife Georgia O'Keefe, famous as an artist in her own right, are part of the canon of art photography.

Stieglitz also championed the acquisition of photography by major art museums, which further legitimized the medium. Other important figures in the history of photography include Paul Strand, Edward Weston, Man Ray, and many of the Surrealists, who all created nudes as important parts of their bodies of work.

Art is often about turning convention on its ear. Such was the case when 21-year-old Irving Penn shot the image known as Nude No 1, 1947. Penn was already successful as a fashion photographer for *Vogue*, and for the body of work that ensued two years later, he instinctively rejected the facilities of Condé Nast and the skinny idealized bodies of fashion models to create a series of images in collaboration with fleshy art models who bore physical resemblance to the Venus of Willendorf—a fertility icon thought to have been carved somewhere between 24,000 and 22,000 BC. The images were not embraced by everyone, but the process of making those images energized and transformed his image making and broadened the definition of the modern photographic nude.

The case of Penn highlights another factor in the legitimization of art photography: an uncanny alliance between fashion editors and artist photographers. Even though fashion photography is about selling clothes, the creation of fashion imagery is one of the few

(Continued)

TOP: *The figure in the foreground alludes to the painting in the background, which is reminiscent of the work of Francis Bacon.* **Reproduced by permission of Daniel Sikorskyi—chiaroscurist, www.sikorskyi.ca.**

BOTTOM: *A photograph that alludes to the work of Gustav Klimt.* **Photo by Louis Benjamin.**

CH2   Undressing Fine Art

arenas of commercial art where editors have often turned over complete creative control to artists such as Penn, Stieglitz, and diCorcia. That alliance is still strong today, and art collectors and dealers are increasingly looking at fashion photography as a legitimate art form.

Two other photographers particularly noteworthy for their use of the nude in fashion imagery are Helmut Newton and Guy Bourdin. After his first heart attack, Newton refused to take commissions from clients who would not grant him creative control. Newton's genius was in channeling the sensibilities of German aesthetics and erotic fetishism into a kind of chic that was the antithesis of fashion photography before

him, and that depicted his women protagonists as powerful and independent. Bourdin is noteworthy because his highly creative, visually sophisticated images have had a strong and lasting influence on the look of fashion and art photography right up to the present.

The implicit promotion of the artistic merit of the work of these photographers, and the work of other fashion photographers dating all the way back to the 1920s, sent a strong message to the public about the validity of photography as an artistic medium. Today, museums and galleries present fashion imagery as works of art, and the nude remains a staple of fashion imagery.

Inspired by Penn's "Earthly Bodies" exhibition at the Metropolitan Museum of Art, New York. **Photo by Louis Benjamin.**

MoMA AND SZARKOWSKI

The Museum of Modern Art in New York, also known as MoMA, was an important front in the ascendance of photography as a fine art medium. Edward Steichen headed its photography department from 1947 to 1962 and curated the exhibit "The Family of Man" in 1955. It was one of the most widely seen photographic exhibits ever, and a watershed for art photography.

Steichen chose John Szarkowski to be his successor. Under Mr. Szarkowski's leadership from 1962 to 1991, MoMA staked out the territory of art photography in the early 1960s. This was a time when other museums were just coming to grips with whether or not to show

photography at all, few galleries were showing photography, and few collectors were buying it; art photography was a new frontier.

While no one can lay claim to having single-handedly defined the entire canon of photography, we know of artists such as Ansel Adams, Diane Arbus, Eugene Atget, Walker Evans, Garry Winogrand, and Cindy Sherman (to name a few) largely through the efforts and influence of John Szarkowski. Helping to bring the exemplary works of those artists to public attention is a major contribution to the art of photography, but Szarkowski's contributions in the area of criticism have equal if not greater weight.

In 1966, he published *The Photographer's Eye*, wherein he set forth a framework of five dimensions for looking at the artistic qualities of a photograph in terms of characteristics and problems that are specific to photography. In the introduction to the book he wrote that he hoped his framework "may contribute to the formulation of a vocabulary and a critical perspective more fully responsive to the unique phenomena of photography." Szarkowski understood that being able to articulate what works or doesn't work about an image, beyond whether or not you like it, is an important part of developing an artistic vision. His five dimensions are the frame, the thing itself, vantage point, the detail, and time. These dimensions will be discussed in more detail shortly.

To his credit, Szarkowski didn't claim even then that the five issues he outlined in *The Photographer's Eye* were the medium's only issues. Art and photography have continued to change and expand since he held sway. Conceptualism and performance, in particular, have become much more important aspects of contemporary photography than they were in his time, and while they are not unique to photography, they

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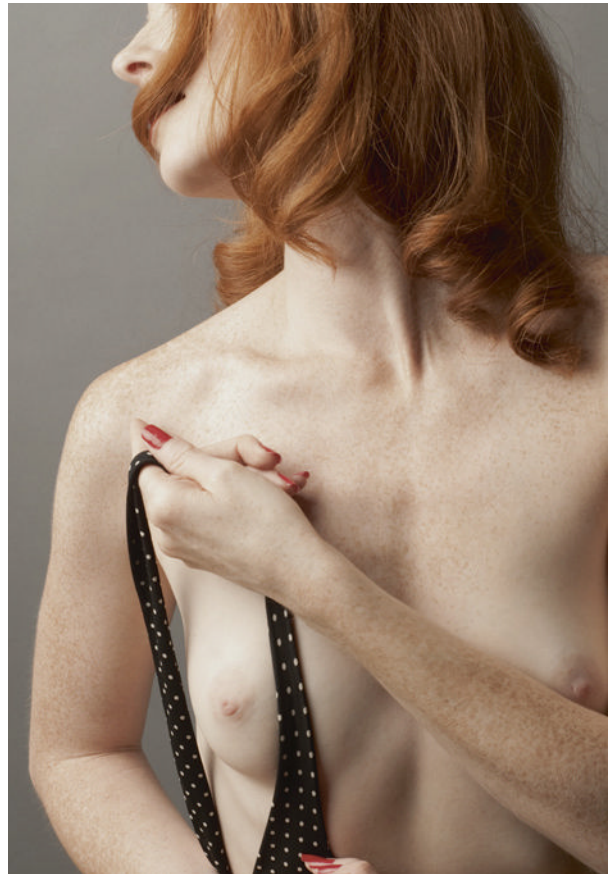
are useful ways of thinking about the artistry of a photo. You could argue that they fit within the dimension of vantage point, but you could also argue for them being something distinct from that. Still, his critical approach to art photography is well suited to exploring pertinent dimensions of the fine art nude.

LOCATING NUDES IN SZARKOWSKI'S DIMENSIONS

THE FRAME

Szarkowski described framing as "the central act of photography, the act of choosing and eliminating, [which] forces a concentration on the picture edge—the line that separates in from out—and on the shapes that are created by it."

While framing is the way the photographer positions the viewfinder around the scene just before he or she trips the shutter, cropping is re-interpreting what was shot by cutting down the area that will be printed, after the fact.

Whether by cropping or framing in-camera, the important details of a picture are defined by means of the resulting frame. The body can be enclosed in the frame, constrained or truncated by it, or included in an expanse of what graphic designers call negative space. A small figure near the bottom of the frame seems grounded. Placing the figure dead center in the frame can create a kind of ambiguity. Placing it near the top tends to give the impression of floating upward, or of an impending plunge.

Another graphic design concept is visual tension or imbalance, which is created by moving elements away from the center of the frame. A three-quarter portrait nude with the same pose and expression will have very different visual qualities depending on whether

The hands bursting out of the frame dramatize the space. The clipped fingers emphasize the edge of the frame and the difference between inside and out. **Reproduced by permission of Saddi Khali.**

Cropped to 1:1 from the in-camera aspect ratio of 2:3, the framing is an important compositional foundation for this shot.
Photo by Louis Benjamin.

it is shot with the bridge of the nose on the center line, with the right eye (camera left) on the center line, or with the shoulder touching the center.

The proportions (aspect ratio) of the frame also matter. The aspect ratio of the 35mm frame is 2:3, and that's also what most 35mm-format DSLRs conform to. That aspect ratio is thought to mimic the field of view of normal human vision most closely. The square format poses very specific compositional challenges, while 4 × 5 is considered large format. Point and shoot cameras often use a 4:3 frame that matches the shape of conventional TV. Panoramic cameras create images in a range of proportions that are short and wide and have a cinematic feeling. HD movies are typically cut in 16:9, and 70mm theatrical films like "Alien" are in 2.20:1. Still other theatrical films are in 2.35:1. Each of these formats creates a distinctive compositional space and can have a subtle, yet important, impact upon the way an image is read.

THE THING ITSELF

In a famous series of paintings called "The Treachery of Images," the Surrealist René Magritte inscribed "Ceci n'est pas une pipe" (This is not a pipe) on the canvas beneath an illustration of a pipe, emphasizing that the illustration is not the thing itself. Szarkowski asserted that even though the viewer often fails to distinguish between the picture and the thing(s) depicted, the photographer has to be clear about this distinction and to think in terms of the photo.

The camera doesn't see the way we do, enlarging the distinction between the way we see the thing itself and the way its representation appears. Artists often make use of the transformation inherent in the photographic process. Simply

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TOP: *A depiction of a person imitating representations of people.* **© 2009 Harvey Stein.**

BOTTOM: *Vantage point, framing, and high-key lighting combine to create a striking image that borders on the abstract.* **Reproduced by permission of John Evans, JohnEvansPhotography.co.uk.**

by being attuned to the physicality of the subject and the play of light, the naked body can be rendered in many ways through photography. The same body in the same pose can produce results that range from a documentary style portrait to melodrama, to abstraction; and all of these outcomes are the product of artistic choices that the photographer makes.

VANTAGE POINT

Alberto Korda's famous 1960 portrait of Che Guevara demonstrates how powerful the low "heroic angle" can be in elevating the perception of the person portrayed. That shot is so

iconic that a great number of images imitate it. The web is full of amateur cell phone nudes shot "Hail Mary" style, with the camera positioned at arm's length, above the head, and tilted downward. Pornography has turned the "upskirt" into a pop cliché. Each of these approaches emphasizes seeing the subject from a point of view that we wouldn't normally see unless we were extraordinarily tall or short at the very least.

Szarkowski suggested that there is also a more expansive interpretation of vantage point: it can be seen as a particular attitude toward the subject. For example, the body can be depicted as an inert object, a symbol of sex, or even a non sequitur. It can be photographed in a way that suggests perfection, or emphasizes deficiency. Pictures can be about nudity itself, about morality, or simply a description of what someone looks like. The artistic nude can be about embracing ideals of beauty or subverting them.

Nudity in a work of art carries a certain symbolic power, and one possible vantage point of the photographer making nudes can be that of exploring the very nature of such power. By formulating, articulating, and adopting a particular vantage point, the artistic photographer can build a cohesive and effective body of work.

THE DETAIL

In isolating fragments of the thing itself (by means of placing the frame), a photographer can elevate what seems trivial, imbuing it with symbolic meaning. John Coplans made nude self-portraits that famously isolated portions of his aging body in surprising ways.

TIME

Just as the edge of the camera frame slices through space, the opening and closing of the shutter slices through time. Photos are never really instantaneous, even if they look that way.

They can be made to emphasize the passage of time as an impressionistic smear of motion blur, or to isolate momentary events that we can only appreciate because they were recorded in less time than an eye blink.

In 1878, Eadweard Muybridge helped railroad baron Leland Stanford (the university gets its name from him) to settle a bet by photographing a horse at full gallop. He produced a succession of frames that froze the action and showed without a doubt that a horse actually lifts all four feet off the ground simultaneously when it gallops.

The Muybridge images are often referred to as being stroboscopic, but they are not. They are available-light photos. It wasn't until the early 1930s—about 50 years later—that Harold "Doc" Edgerton developed the electronic flash. For his famous sequences, Muybridge rigged an array of 12 stereoscopic cameras with an elaborate trip-wire trigger system to capture the frames at 1/1000 second.

Using this technique, Muybridge went on to document locomotion in animals and humans extensively, producing a number of sequences that feature male or female nudes. The Muybridge photos catered to gender roles of the time. His nude men were photographed performing feats of strength, such as striking a blow or wrestling. His nude women were photographed doing things like descending a staircase, turning around in surprise and running away, receiving a bouquet from a child, or pouring a bucket of water onto another woman.
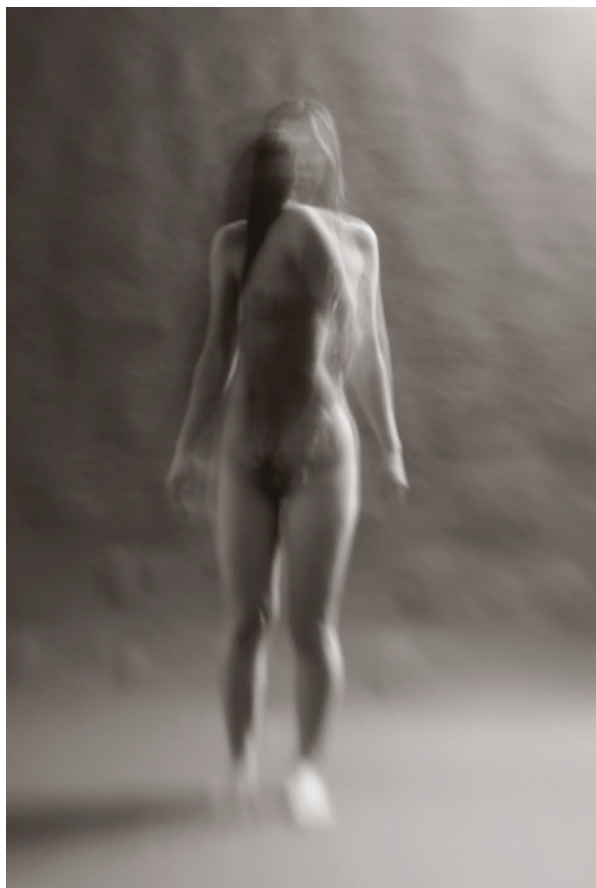
From "Waterscape Nude Series." In this photo, the dragged shutter gives flowing water an ethereal quality. The perfectly still model is rendered with sharp clarity. **Reproduced by permission of Scott Foltz.**

In the late 1970s Francesca Woodman made groundbreaking images, using her own body as subject matter. In some of those images, she would move parts of her body during long exposures to produce nude self-portraits that suggested blending into her surroundings or evanescence.

The time frame is an essential component of the classic Cartier-Bresson photograph. Szarkowski noted that his idea of the decisive moment has been misinterpreted. It's all about the photographer's awareness and exploitation of time in the context of composition and the visual frame. The photographer waits to trip the shutter at the moment when patterns and lines emerge from the flux of movement and coalesce within the frame to produce a visual crescendo.

The Body Itself:
A Survey of Modes

One way to think about nudes is in terms of modes of portrayal, or how the body is shown. Two additional aspects to consider are how much of it is shown and how clearly it is revealed. In the previous chapter, we looked at how the photographic fine art nude can be thought of as its own genre. This chapter will briefly outline some of the more recognizable modes of portraying the fine art nude. We can think of the various modes as subgenres of the nude. Just as genres can be combined (e.g., docudrama), modes can be combined.

As you explore nude photography, you will probably encounter many images that don't clearly fit any particular mode, and it is doubtful that a comprehensive listing of modes can ever be compiled. However, thinking in terms of modes can still be an informative way of surveying the wide range of approaches.

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OPPOSITE PAGE: *Photo by Louis Benjamin.*

NAKED PORTRAITS

The painter Lucien Freud refers to his works as naked portraits and avoids the word "nude." His work resists some of the norms of the art world, and Freud isn't interested in making flattering portraits. Neither was Avedon. It is possible to portray naked people in ways that are more about the person inhabiting the skin and less about conforming to a stylistic norm such as boudoir, cheesecake, or some other idealized representation.

It is worth noting here that people really do have at least one "good side," or perhaps it's more accurate to say that people look better from some angles than others. The distinctions can be amplified by your choice of lens and lighting. It's a good idea to be aware of that, and maybe even do a few test shots to evaluate first. Once you've found those stronger points of view, use them, unless you're out to do something subversive, in which case you might only shoot the "bad" angles. Word to the wise: your

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sitter might object if they don't understand that you're turning convention on its ear.

SELF-PORTRAITS

A number of artists have found that putting themselves in front of the lens, rather than working with a model, is a more effective way to get access to the ideas they are trying to express. There are technical challenges to shooting self-portraits, but for these artists, the benefits are worth the trouble.

If you read critiques of photography, you're likely to come across the notion that the photograph itself, and certainly any given photographer's body of work, acts as a kind of self-portrait. That makes a certain amount of sense, since the work is defined by the unique vision of the photographer. The stronger the artist's voice in their work, the more this holds true.

THE BODY IN MOTION

Body movement in contemporary nude photography borrows heavily from dance. The challenge is to find other kinds of activities to source our ideas from. Moving the body emphasizes the dimension of time, and the reaction of photography toward time is either to arrest movement or to render the body as evanescent, emphasizing how fleeting a moment can be and how temporal we are.

Aaron Siskind's 1956 series entitled Pleasures and Terrors of Levitation shows swimming-trunk-clad divers isolated against a blown-out white sky, freezing them in mid fall. Because there is no indication of up or down, the divers seem oddly suspended in time and space, limbs projecting in different directions. There is no blur. Siskind not only suspended time, he also disavowed gravity, and in doing

so, emphasized the movements and the form of the body as it falls through space.

COVERING THE BODY AND THE "IMPLIED" NUDE

In some circles, covered-up nudes are referred to as "implied" nudes. This relatively safe approach to making nudes can be beautiful, but it is also rife with cliché, and runs the risk of being read as timidity on the part of the photographer, the model, or both. The body can be draped in cloth, lit in a way that throws shadows over it, or posed in a way that obscures the genitals. They can also be covered with a prop, referred to as a *cache-sexe*. The hands can be used to cover the breasts—a gesture that some call a "hand bra." In each of those approaches, the suggestion of

Photo by Louis Benjamin.

nakedness beneath or behind the covering can be very strong.

A variation of this approach is photographs where the sitter is actually wearing clothes of some sort, but the use of a prop or angle and framing obscures the view such that we see only skin and imagine the sitter is naked. Sometimes, models who want "nudes" in their portfolio, but don't want to be seen as too brazen, will insist on shooting only implied nudes.

The phrase "tasteful nudes" is also commonly used on networking web sites frequented by models and photographers. In many ways this term is a bit ambiguous, since tastes vary widely, but clearly a tasteful nude is generally not very sexual, aggressive, or confrontational in style.

In some of those same communities, people use the phrase "artistic nude" in a way that suggests that they believe that artistic nudes are always devoid of eroticism. However, anyone familiar with the work of Nobuyoshi Araki will be aware that his nudes are considered fine art and that they are highly eroticized; clearly, artistic nudes are not constrained to being chaste and formal images.

Araki coined his name as an allusion to anarchy, and he openly acknowledges that he intended to objectify women in his early work. He was the first to show pubic hair in Japan, challenging the laws and creating a bad-boy buzz for himself. Araki's work doesn't go down easily, and some consider it pornographic. There are big differences aesthetically between an Araki photograph and porn, but that doesn't make his work any less shocking. His work catalogs his obsession with women, and especially their vulvas, but it also shows a fascination with and love for life in Tokyo. His photographs of flowers are very different from Mapplethorpe's work, and demonstrate how much the artist's vision can transform the presentation of a subject.

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Helmut Newton's aesthetics were very different from those of Araki, but his fine art work is certainly erotic, as well. His family referred to him as "Dirty Helmy," and in interviews his wife June has said that he sometimes went too far with his ideas. His pursuit of ideas near the edges of acceptability, coupled with his obvious love of women and the female form, produced work that still has strength decades after it was produced.

FULL-BODY

Shooting full-body has its specific challenges. It places certain constraints on lighting, and often requires the photographer to move back from the subject. In terms of the language of images, it also has a particular impact, putting emotional distance between the viewer and the subject, and it tends to make the image as much about the space around the figure as it is about the subject.
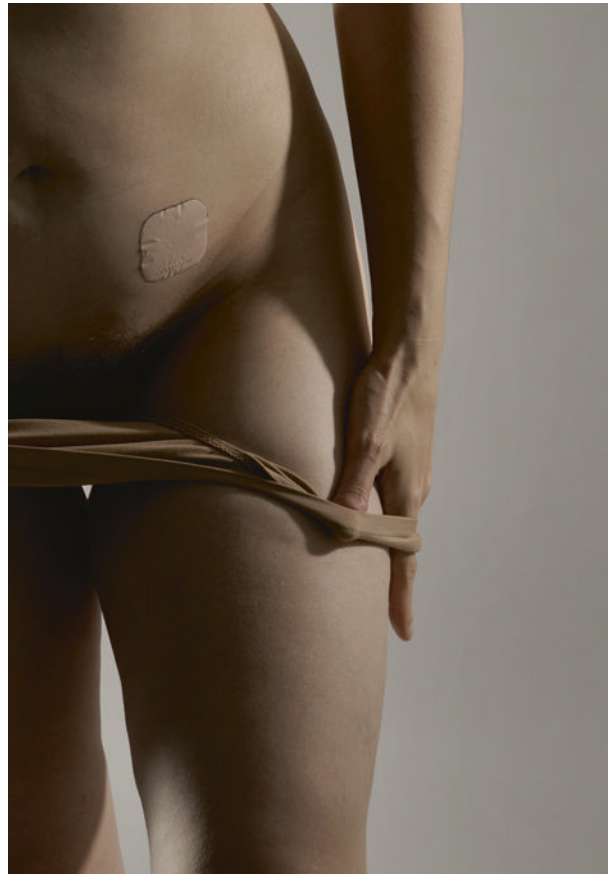
INTIMACY

As you move in closer and the subject fills more of the frame, the viewer often experiences a stronger sense of intimacy with the subject. Directing the subject's gaze into the lens can intensify this effect, which is usually read as an acknowledgment of the viewer's presence. At the same time, it is quite possible to create a sense of intimacy without even showing the face.

Slightly parting the lips is also read as a kind of openness. Eye contact and glossy lips are played out in the extreme in cheesecake photography, where the model often appears to be seducing the viewer with a "come hither" expression.

At the other end of the spectrum are fashion nudes, where the model typically breaks eye contact and doesn't acknowledge the viewer, often seeming to look above, beyond, or through the camera. John Berger observed that the effect of the detached gaze is to trigger a kind of envy in the viewer that in turn makes them want whatever fashion is being depicted. Romantic longing with a touch of envy is a central theme in the work of Bruce Weber, who routinely uses nudes and pushes boundaries in his fashion photography. Advertising, especially in America, is increasingly concerned with selling lifestyles and attitudes, rather than product benefits. When very few clothes or no clothes at all are depicted, the message that comes across can be sharply focused on attitude or lifestyle.

ABSTRACT

Moving in close to isolate parts of the body also tends to create a sense of abstraction. When the face is not visible, the contents of the frame tend to have more to do with lines, shapes, forms, or textures, rather than breasts, buttocks, or genitals. Additional degrees of abstraction can come

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from throwing the figure out of focus and using high-contrast lighting.

Often, the abstraction results at least in part from making the body less identifiable as a body and relating it to something else, but this is not always the case. Henry Horenstein's series, Humans, features isolated parts of models' bodies that are clearly recognizable for what they are, yet they are presented in a way that transcends simple recognition. An image of an eye becomes a meditation on form—it is rare that we get that close and simply stop and stare. A photograph gives us permission to stare and to see something anew.

SCULPTURAL

Sculptural nudes derive many of their qualities from lighting, the physicality of the poses, and the point of view of the camera. They can be abstract, but that abstraction is more the result of factors like foreshortening and shadow than the result of the imposition of the frame.

Some of the earliest works of Kishin Shinoyama were concerned with the body as pure form, where he posed curled naked bodies on boulders to emphasize the similarities. Austrian Andreas Bitesnich has taken a very different approach to the figure, but his works also trade on the sculptural qualities of the body.

BODY VS. NATURE

Shinoyama's boulder nudes also suggest another mode of the nude in fine art photography, which is comparing the human form to nature or to human-made things. Photos can suggest how humans are an extension of nature, or contrary to it. The body can blend in, or it can be made to stand out starkly. Placing bodies against architectural elements often exhibits how the entire
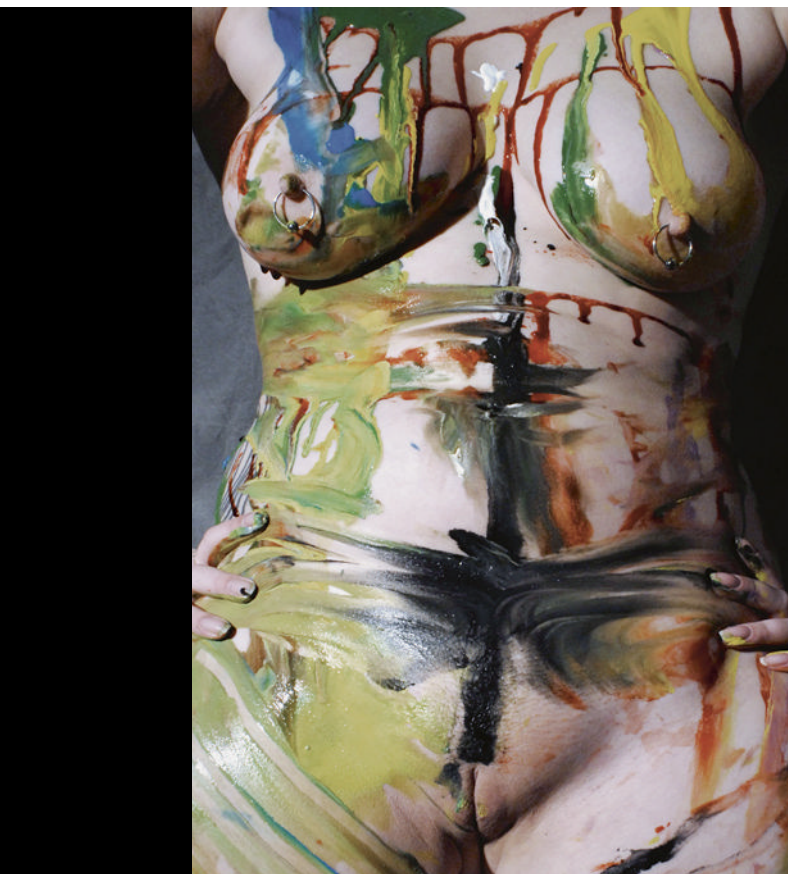
scale and proportion of architecture is based on the human form.

SKIN

Liquid latex, mud, flowers, honey, and other substances with strong textures or colors of their own can be applied to the skin. In most cases they tend to call attention to the form of the body by altering the appearance of its surface. Body paint can do that as well, particularly if it is a single color (think of the Jill Masterson character in "Goldfinger"), but it can also act as a kind of camouflage that dominates the picture and renders the body unrecognizable in ways that most clothing cannot. A potential pitfall of working with some styles of body painting is that the photograph can become about the painting or the painter, reducing the body to just another canvas.

Another approach is writing on the body and affixing signs. Text tends to dominate an image, and the effect is usually more potent than attaching a caption. If the text is not legible but is recognizable as text, it creates a particular type of visual tension.

As you move in closer, the characteristics of the skin become increasingly prominent. Macro lenses can be used to bring the viewer so close that the skin itself is transformed into something abstract. Lighting the skin from the side with a directional light source such as a grid spot will emphasize its texture. This can be a very powerful effect on the faces and bodies of older men, but it might bring protests from anyone who sees lines and bumps in the skin as flaws.
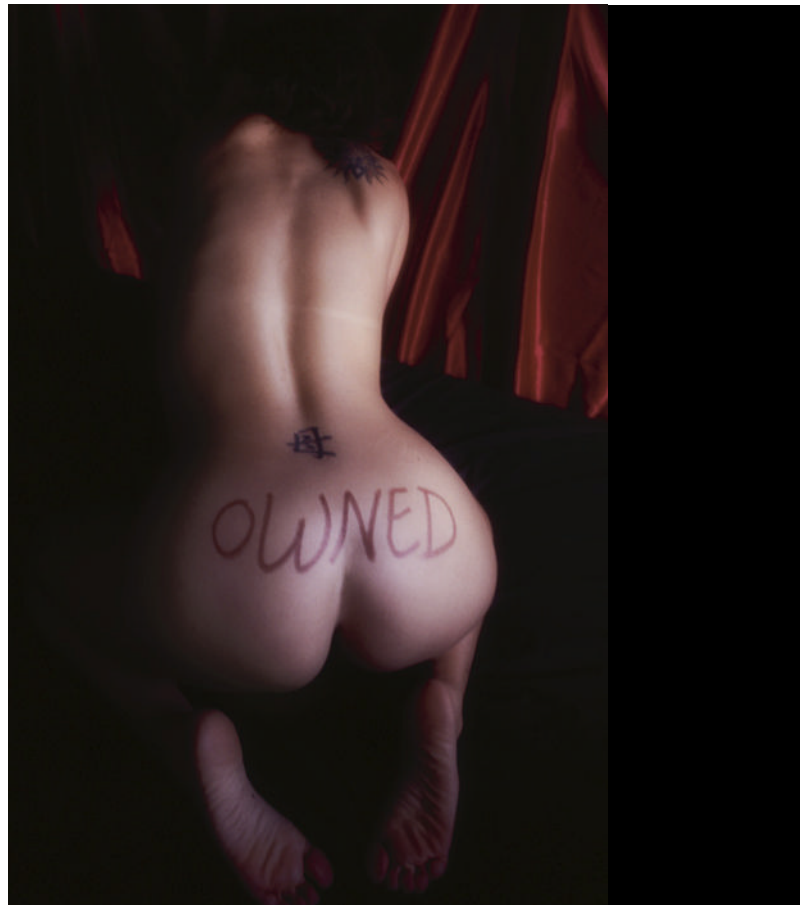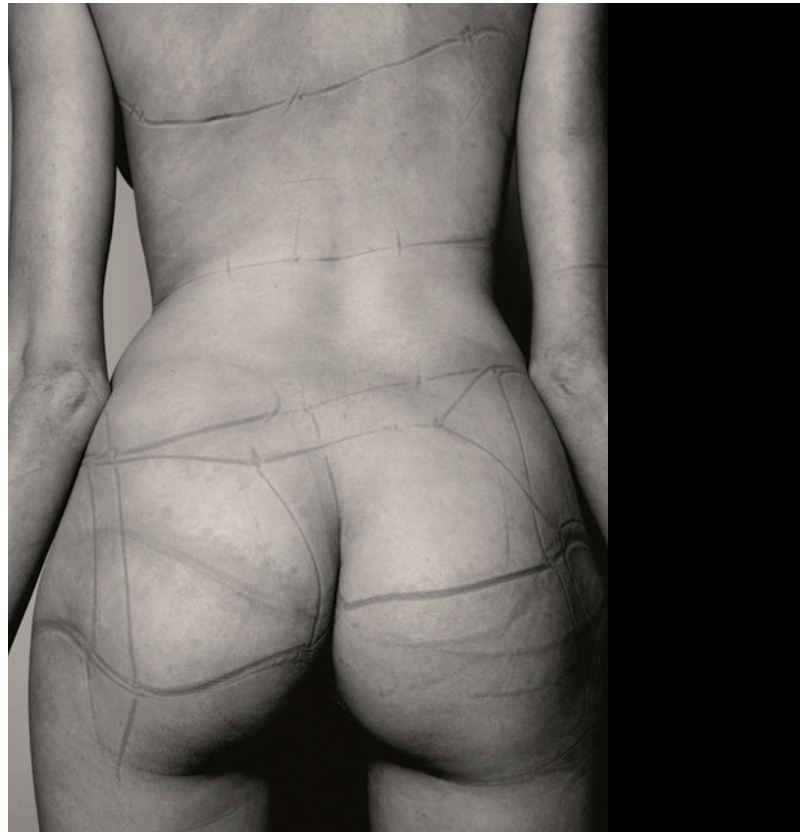
GESTURE

A famous painting in the Louvre from the late 1500s has been riffed in photography many times. It's referred to as "Portrait presumed

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to be of Gabrielle d'Estrées and her sister the Duchess of Villars." In it, two apparently nude women are standing inside a draped space facing partially toward each other and partially toward the viewer. In a seemingly exhibitionistic gesture, the sister on the left side of the canvas is reaching over to tweak the nipple of the sister on the right, whose hand gestures suggest that she is poised to respond in kind. These gestures meant something very different in the time that the painting was made, and understanding what the painting intends to signify requires a knowledge of its codified symbolism—for example, tweaking the right nipple apparently meant that the woman in the painting was pregnant.

Gestures can be powerful accents in an image. They have much richer application across the history of painting, especially in religious works, than in photography. In such paintings, gestures often have specific meanings, such as the Holy Trinity, sovereignty, protection, and more. Austrian Expressionist painter Egon Schiele often used hand gestures to convey emotion in powerful ways.

Although glamour photography makes use of gestures more frequently than other modes, many photographers overlook the hands, mainly posing the body and possibly directing the facial expression. In glamour shots, the hands are often placed to bring attention to the face, making use of the principle of leading lines.

EROTIC

It has been said that particularly in the United States, images of nudity are typically viewed in one of only two ways: either as abstract, artistic and asexual, or as erotic/pornographic. Aside from academic medical imagery, exceptions to those two views are hard to find.

If you ask ten people what makes a photograph erotic, you're likely to get a dozen answers. If you want to make things more interesting, ask them about the difference between erotica and porn. It's easy to find examples where the words erotica and pornography are used interchangeably. In 1964, Justice Potter Stewart famously declined to give a specific definition for "hard-core" pornography, but declared "I know it when I see it." This is an important distinction, since works deemed obscene are not protected as free speech in the United States, and various communities have dramatically different standards.

Robert Mapplethorpe famously blurred the line between art and erotica. While even his photos of flowers could be read sexually, his more explicit depictions of sexuality could be read aesthetically. He was a master technician, and his lighting was outstanding. Mapplethorpe was gay and some of his work depicted

gay life and sexuality in a very frank and unflinching way. Despite the obvious artistic and technical merit of his work, some people took offense with some of his subject matter, and because an exhibition that included some of his works had received funding from the National Endowment for the Arts (the NEA), he, along with photographer Andres Serrano, became lightning rods in the political movement to limit public financing of works that are controversial or portray certain content.

Whether you choose to enter into the art vs. pornography vs. obscenity fray or not, we can consider what might make an erotic image more artful. To the extent that it helps inform your artistic vision, it may be useful to come up with a personal distinction, but beyond that, the old adage applies: "one man's meat is another man's poison." If you choose to explore that kind of subject matter, be prepared to meet resistance.

BIOLOGY

The naked body, especially the female body, is often viewed as either a signifier of sex or the site of sex. Theorists observe that in advertising, even clothed females symbolize sex. If you doubt that, visit the New York City subway and take note of the graffiti applied to advertising posters featuring women: breasts or pubic hair are drawn so as to make them appear naked, penises are drawn in proximity to their crotches or mouths, and lewd captions are often added. These are not rare occurrences. One way to read such graffiti is that the scrawl is simply expressing the subtext that is already present in these images.

The act of removing our clothes is often elevated to ritual as a precursor to sexual intercourse, one of the fundamental functions of human biology. Beyond depicting copulation, many biological functions of the body have

been exploited by pornographers, and thus a pitfall for fine art photographers who explore these themes is that they are likely to have their work viewed by some as pornographic. Terry Richardson has said that he likes putting sexual images in mainstream magazines, not porn magazines. His inner game is to push the images as far as he can, and still get them run.

Pregnancy and motherhood are two of the more obvious potential outcomes of sex, but it is noteworthy that representations of sex and sexuality are strongly segregated from imagery of pregnancy, motherhood, and family. Nudes of a pregnant Demi Moore, Cindy Crawford, and Heidi Klum have all graced the covers of major magazines. The poses of pregnant nudes in these settings tend to be very stylized and conventional.

Pregnant nudes in fine art are relatively rare. One of the more controversial examples is Daniel Edwards' life-size statue of a crowning Britney Spears on all fours caressing the head of a bearskin rug while giving birth. It was presented in 2006 as a monument to the pro-life movement. The event had a lot of photographic coverage, and it is worth noting that a high proportion of the published photos of the statue were shot from angles that obscured the view of the emerging baby's head.

As problematic as art involving pregnant, and especially birthing, women can be, the depiction of naked children is even more treacherous. Jock Sturges' work with nudist families is widely known, as well as the FBI raid and the legal case surrounding it, in which a San Francisco grand jury refused to indict on any charges. Some of the photographs in Sally Mann's "Immediate Family" show her own pre-adolescent children in scenes that have been described by some as sexualizing them.

Artists who explore these areas have to become adept at defending themselves. Ironically, the controversy surrounding such cases can increase the cachet of the artist. Sturges points out that artists in such situations also run the risk of being defined by the scandal instead of the art that they produce. Mapplethorpe had said that he hadn't intended to be a poster boy for free speech. He just wanted to be written about on the merits of his art.

THE MALE NUDE

It is obvious that male nudes in fine art are far more rare than female nudes. This may be due in part to the dominance of the heterosexual male gaze as a point of reference in art culture, which may well have had as much of a shaping influence on art production as the emergence of single-point perspective in Florence during the early fifteenth century.

Regardless of the tendencies of the mainstream, photographers such as Bruce Bellas, better known as Bruce of LA, blazed the trail of photographing the male nude. Beginning in the 1940s, he shot for "physique" magazines, such as those published by Joe Weider, at a time when gay pornography was illegal. His campy style and the slightly amateurish look of his early work helped define the look of male homoerotic photography and strongly influenced the work of fashion photographers such as Herb Ritts and Bruce Weber. Mr. Weber changed the face of advertising when he portrayed a man as a sex object for the first time in the iconic Calvin Klein underwear campaign. It was the look that launched the designer underwear business. Weber's sometimes controversial advertising work has continued to push the envelope, and includes the catalog he did for Abercrombie and Fitch, which featured athletic male nudes.

Photo by Richard Rasner (Unique Nudes) of Nakayama Studios.
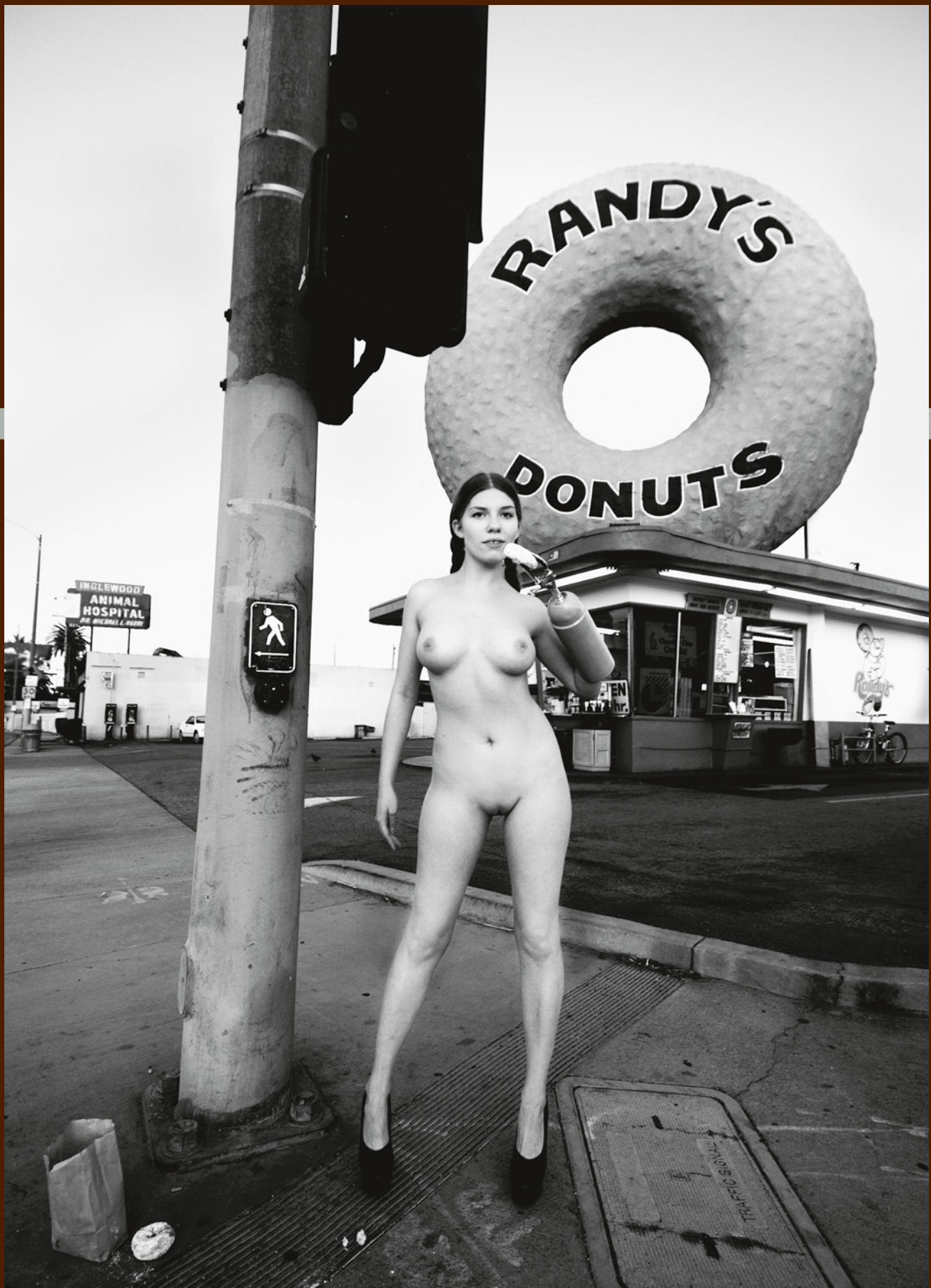
The Nude in Context

"Any photographer who says he's not a voyeur is either stupid or a liar."

—Helmut Newton

Two broad approaches that can be taken with nudes have to do with whether the image treats the body (which happens to be naked) as a formal element, or whether the very state of nakedness is the point of the photo. Formal images tend to be more restrained, downplaying the erotic, and lean toward the abstract. When nakedness itself is the point, the intended effect can often be to shock or to appeal to the libido, though more sophisticated approaches can be humorous, camp, ironic, or dramatic. These are all questions of context, and especially in more conceptual work, context is key in establishing a contemporary work as art.

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In 2004, The Museum of Modern Art presented a show called "Fashioning Fiction in Photography since 1990," in which photography that was shot for fashion was re-cast in an artistic context. In essence those pieces were converted into art works, even though they were originally created as commercial work according to a brief. This appears to be the beginning of a shift. In the years to come, curators may well view fashion photography primarily as art and not commercial work.

It has already been acknowledged that American visual culture is highly affected by pornography. Although it is doubtful that this is an exclusively American phenomenon,

TOP: *A formal nude that emphasizes curves and flirts with eroticism.* **Photo by Louis Benjamin.**

BOTTOM: *Linda (Plage). A formal nude set in a landscape.* **Reproduced by permission of Pascal Renoux.**
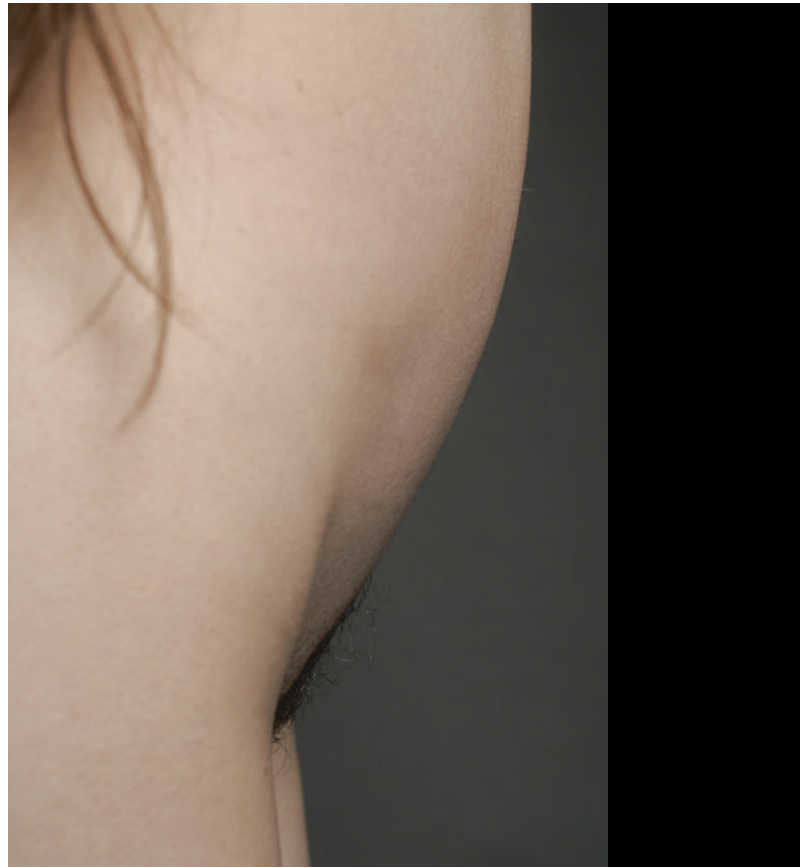
TOP: *A dramatic fashion nude features an unusual pose and point of view, lighting, and sophisticated composition.* **Reproduced by permission of Ned & Aya Rosen.**

BOTTOM: *The interaction between the model and the mannequin leans toward the surreal.* **Reproduced by permission of Terry Donovan.**

it points to a challenge for photographers, especially heterosexual males who photograph naked women: the knee-jerk reaction is to shoot and maintain such images in the context of the male erotic gaze. To go beyond that default context requires the conscious and active creation of a different context.

Many photographers create their work in the framework of a long-term project. This approach can help contextualize the image before it is made. In some cases, the artist can take years to construct a single image from very specific visual symbols. Joel-Peter Witkin is an example of an artist who works with nudes, props, and even cadavers in a very methodical way to construct his images over time. Witkin has a clear-cut idea in mind, well in advance of any shooting. Jeff Wall does not photograph nudes, but his process is even more painstaking, and he relates his work more to the tradition of painting than photography.

Other photographers shoot at a particular moment because something grabs them; they work on gut instinct, and they aren't trying to think too much during the process. Photographer Tim Davis has lectured about the importance of shooting the image that gets your attention and that you see in the moment, even if you don't know why it calls to you. It might be years before you find that it fits into a collection with other photos, and that is the moment that it becomes art. Working in that way gives a gestalt-driven process that is related to the work of Dada and Surrealism. For such artists, the context in which the work is finally presented may not even be conceived of when the image is shot, and the Surrealists shunned context altogether.

The Surrealists are particularly interesting for their use of the nude and for the way they broke up notions about photography and the photographic object. The techniques of Surrealist photography are probably the most artful of all applications of photography. Surrealist photography redefined the boundaries of lighting, of pose, and of what is now post-production. While the bulk of the debate of photography as an artistic medium centered around questions of whether a photograph was anything more than a copy of whatever was placed in front of the camera, and whether the photograph was truthful or not, the Surrealists were interested in using the photographic trace as a starting point for imagery rather than an end in itself.

As important as the techniques of Surrealist image production are, the philosophy that gave rise to the Surrealists' work is just as important. André Breton, who wrote the 1924 Surrealist manifesto, and Salvador Dalí, one of Surrealism's best-known figures, were both

LSD & The Mushroom (The Sequel). **Image by Cheirodon.**

strongly influenced by the writings of Sigmund Freud. The Surrealists, by their very name, were after something that was above realism. They were interested in the subconscious and the irrational. If anything, theirs was the antithesis of the highly conceptual curatorial vision that is at the forefront of contemporary art.

One of the nagging critiques leveled against the Surrealists is the dominance of the heterosexual male gaze in the genre. Many argue that Surrealism's treatment of the nude objectifies and reduces the female body to a fetish object. The Surrealists argued that this objectification is simply a reflection of the true state of the (male) subconscious. We shouldn't forget that, much like the Algonquin Round Table, the Surrealists were a male-dominated clique.

Photographer Lee Miller was the photo assistant, lover, and model of Man Ray, the best known of the Surrealist photographers. She is the one who discovered and refined the technique of solarization, which is generally attributed to Man Ray. Part of the reason that Miller does not receive much recognition is that she was ultimately persona non grata among the Surrealists when she left him.

Surrealistic imagery is just one mode of nude photography that makes heavy use of the symbolic value of the body itself. When the symbolic nature of the body is exploited, the body can become metaphoric. Such images may not have a caption, but they illustrate the adage that a picture is worth a thousand words and leverage a strong connection to verbal language. Photographs that demonstrate visual puns also trade heavily on the crossover between the visual and the linguistic.

The idea of narrative in photography is easy to see in photographic sequences, where the viewer creates the action by deducing what has changed between each frame. Within the single frame, narrative can arise from the relationship between compositional elements, but it also often arises out of the way in which the viewer processes an image linguistically. This starts with mentally naming the objects perceived within the picture plane.

Environmental portraiture is largely about using the surroundings to tell a story about the person depicted, and environmental nudes can have a similar narrative quality. While a portrait tends to be a story about an actual person, environmental nudes are more often about a character in a setting or an idea. Gary Breckheimer is a master of the form. He describes his work as being focused upon the juxtaposition of the female form against the environment with erotic overtones. His clever work often bristles with subtext. Breckheimer has spent 20 years refining his art, and cites Robert Farber's "Moonscape" as an early inspiration that still calls to him today. He considers himself a rule-breaker, and he gets a rush from creating his daring and beautifully crafted street nudes.

Environmental nudes often place the subject in a setting where nakedness is not acceptable or expected, emphasizing nakedness itself. In other instances, the environmental nude is more about the sculpture of the body in a space. A popular trope is placing a naked woman in a dilapidated space. The opposition of decadence and the female form in images often dramatizes the quality of beauty itself.

Another form of environmental nude is an extension of environmental portraiture, where

TOP: *Photo by Louis Benjamin.*

BOTTOM: *Snakes and moons almost always conjure magical, mystical, or religious overtones. Though much of the tonality of this image is dark, its mood is not ominous.* **Reproduced by permission of Nina Pak.**

the subjects happen to be nude. Both Nan Goldin and Elinor Carucci use photography as a kind of personal journal, photographing important people in their lives in an up close and personal way. Their photographs represent slices of their own lives and the environments are pieces of their own worlds.

Props are another means of adding narrative to an image. The subject often focuses attention on the prop, or uses the prop to relate to other characters in the scene or to the viewer. A lot of props carry a symbolic charge; for example, boas and beads carry a heavy association with burlesque. Guns and knives are often cliché, and so are crosses, but such props can still be

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CH4   The Nude in Context

used in ways that transcend. Certain props are so loaded with meaning that the challenge in shooting with them can be a matter of keeping the prop from hijacking the image!

The notion of the bodyscape borrows heavily from landscape photography that dates back to the beginning of photographic art. In most cases, framing, lighting, and surprising points of view are often used to turn body parts into visual metaphors for mountains, dunes, and other geological phenomena. The bodyscape emphasizes the body as abstraction, and the form almost requires that the figure not have a face; after all, with the exception of Mt. Rushmore, Georgia's Stone Mountain, and perhaps a few other sites around the world, landscapes usually don't have faces.

For some, the phrase "fine art nude" is almost synonymous with a body in a landscape. The framing is generally looser than the bodyscape, and the portion of the image taken up by the body varies greatly. The portion of the frame taken up by the body helps to define the significance or insignificance of the body relative to the rest of nature. Landscape nudes offer an excellent form to explore questions of whether humans are outside of nature or part of it. Urban landscape nudes tend to emphasize the footprint of humankind on nature.

There are also landscape photographs that strongly suggest the human figure, mirroring the effect of bodyscapes. An interesting twist on the idea of the bodyscape is the hybrid that comes about by dominating the foreground of a landscape image with a bodyscape. The styles of landscape and bodyscape merge, and the bodyscape returns to its roots.

Reference, parody, and commentary are three ways in which images have employed the nude very effectively, and often controversially. Terry Donovan's Model vs. Photographer series creates a kind of parody rarely seen. In it, he has reprised shots he did with models with himself as the subject. The project was invented out of necessity: he had no one to shoot with, and he wanted to keep shooting. While many photographers of nudes recommend that we get in front of the camera ourselves to experience what it's like, a male photographer assuming the poses of a female model is a proposition that ups the ante. In an e-mail exchange about the series, Donovan said this about his process:

"The early shots were done months, even years after the original shot had been taken. Most of the recent ones are taken at the same time as I'm shooting the model.… The biggest challenge is trying to match the pose when I'm not using a mirror, and … I have to rely on my memory of the model's pose as my only guide. As you can see, I miss more often than hit."

Donovan eventually took the idea a step further with "The Model's Revenge," a project where he turned over creative control to the model and allowed himself to be photographed in whatever way the model asked, with no limits. The intention was to make himself as vulnerable as the models in his routine shoots.

Renee Cox did a body of work that was collectively known as "Flipping the Script," which reinterpreted European religious masterpieces including the Pietà, Adam and Eve, and Michelangelo's David, using contemporary African-American figures.
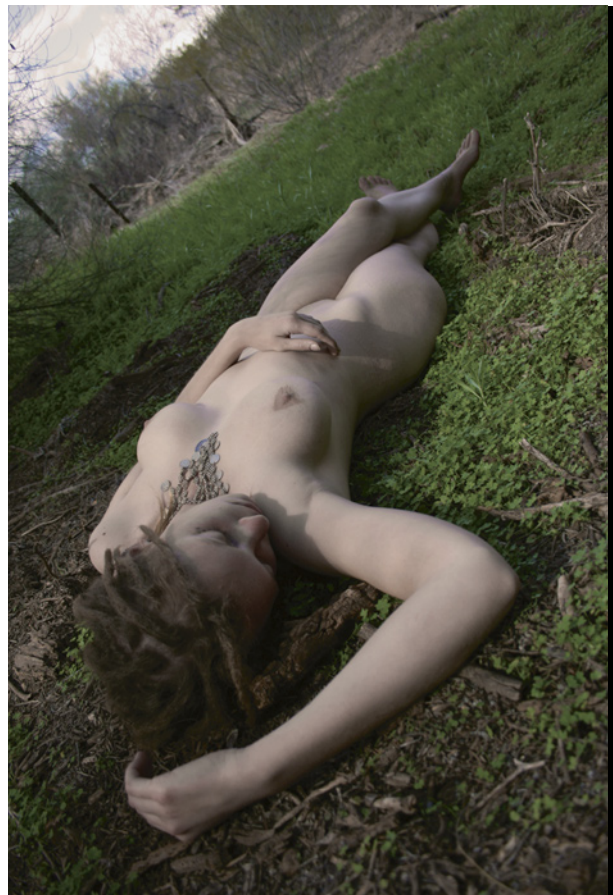
The lightning rod of the series is a piece called "Yo Mama's Last Supper,"in which a nude Renee Cox stands in for Jesus in a rendition of the Leonardo da Vinci work that inspired it. When the photo was exhibited at the Brooklyn Museum in 2001, New York Mayor Rudolph Giuliani labeled it "anti-catholic" and called for the formation of a "decency standards" commission to keep such works from being shown in any New York museum that received public funds. Giuliani's position echoed the attitude of Senator Jesse Helms during the controversy over funding the National Endowment for the Arts.

TOP: *"I find it amazing that people are so concerned about whether a complete stranger is fat, or thin, or tattooed, or—whatever. As if it's their business, somehow? Well, if it's my business, I make sure my models are well-fed." Model: Kaitlin.* **Photo by Marcus J. Ranum/http://photography.ranum.com.**

BOTTOM: **Reproduced by permission of Terry Donovan.**

Vs.

Cox says her work is about breaking down stereotypes, and describes "Yo Mama's Last Supper" as a tongue-in-cheek piece dealing with issues of race, gender, and stereotypes. Provocative, yes, but she says she wanted to have fun with it. She also acknowledges that one of the inspirations for her work is that while Christianity is big in the African-American community, its iconography does not include images of black people. As a response, she took it upon herself to re-envision those classic images. That is a powerful, and controversial, context.

We return to the role of context in validating a work of art. The painter Gustav Courbet was probably courting controversy when he painted "L'Origine du Monde" (The Origin of the World) in 1866. It depicts a woman's bushy, spread-legged vulva from an up close and personal perspective. Her torso fills the frame, with an undraped nipple kissing the top of the canvas.

The interesting thing about this work is that it is on open display at the museum, and it is not treated as something dirty on the museum's web site. This suggests a difference in attitude about exhibitions of art in European culture, and yet the museum's curators seem a little defensive. This disclaimer appears on the site:

"… The almost anatomical description of female sex organs is not attenuated by any historical or literary device. Yet thanks to Courbet's great virtuosity and the refinement of his amber colour scheme, the painting escapes pornographic status. This audacious, forthright new language had nonetheless not severed all links with tradition: the ample, sensual brushstrokes and the use of colour recall Venetian painting and Courbet himself claimed descent from Titian and Veronese, Correggio and the tradition of carnal, lyrical painting.

"The Origin of the World, now openly displayed, has taken its proper place in the history of modern painting. But it still raises the troubling question of voyeurism."

In short, the curators are saying, "folks, this is art, not smut, and here's why, even if there is that troubling little issue of the male gaze."

Contemporary painting has inherited a certain immunity owing to the legacy of works like Courbet's, and so there is a split: a photograph treating the same subject material in this way is likely to have its artistic merit more vigorously challenged, whether it has a clever title or not.

Though the Greeks idealized the nude form and third century Hindus even carved erotic statues into their temples, there is a long history of societal suppression of imagery that shows nudity, especially when it can be read sexually. Painters such as Egon Schiele and Amedeo Modigliani are celebrated artists today, but in

Sister's Got a Habit. **Photo by Gary Breckheimer/ www.GaryBreckheimer.com.**

their time, some of their works were removed or banned from shows, some had entire shows shut down, and some had works destroyed. Schiele was jailed for obscenity in 1912.

Photographer Paul Outerbridge is respected for his artistic genius today, and was a pioneer of color photography, nudes, and fetish photography. In 1935, he sent a roll of film to Kodak for processing. When it came back to him, the "offending" areas in his images had been scratched out. His frustration with what he considered to be "infantile and ridiculous" attempts to legislate morality caused him to retire from photography sometime around 1945, saying that he felt he was being forced into making clandestine a matter that should be public.

Charis Weston, the model in some of his most famous nudes, recalls that about a year after Outerbridge had his Kodak moment, Edward Weston was using a magnifying glass to carefully inspect his print of "Nude, 1936" to decide whether he could ship it through the mail. If you look very closely at the image, you can see a few pubic hairs.

Pulling Images Apart

Part TWO

2

Light, Shadow, Color, and the Qualities of Lighting

I t may seem to be stating the obvious to say that light and lighting are what put the "photo" in photography, but a quick survey of the offerings of professional and amateur photographers alike suggests that many have an uneasy relationship with light and lighting. That's not meant as an indictment; it's an acknowledgment. Many photographers say they only use natural light because they don't like working with flash, and many more admit that they don't understand how to light. Yet many of these same photographers do recognize when the available light has a quality they like, and use it to their advantage. This chapter is about seeing light and describing some of the possibilities of using it. It is also more theoretical and less specifically about nudes than the preceding chapters have been.

When we start to think about light, it's useful to differentiate among qualities of light. Skiers don't just see snow; they see hard pack, moguls, powder, crud, crust, slush, corn snow, loose or wet granular snow, fresh snow, spring snow, and ice. Seasoned skiers may have an even larger vocabulary for snow, and each distinct type of snow can have a profound

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OPPOSITE PAGE: *Nu à la Fleur Rose.* **Reproduced by permission of Pascal Renoux.**

Strong light from camera left illuminates the subject and the smoke, which needs to be side-lit or backlit to register clearly.
Reproduced by permission of Jafar M. Pierre.

effect on the skiing experience. Developing a similar sensitivity to various types of light and its visual impact will give you a significant advantage in making more effective photographs. To create a particular look in location photography, some shooters might exploit on-camera flash, while others insist on natural lighting. In the studio, photographers often choose from window light, continuous light, strobes, or a mix of light sources. These choices are based upon qualities of light and have both technical and aesthetic implications. They affect the process of shooting and the look of the image, but they can also impact the psychology of the interaction between the artist and the subject.

When applied artfully, light can profoundly affect how we perceive the sculpture and spatial qualities of a subject. It can also inject drama and establish its emotional tone. Viewed in this way, light is as much about visual language as it is about registering an image.

Working with light is a bit like cooking. Even after you learn how to use the basic utensils and figure out a couple of recipes, there is a process

of experience to go through, and there are no shortcuts. Grappling with light is not new. While the technology of digital photography dates back roughly three decades (longer than many of us imagine), many common approaches to lighting in use today were established seven centuries ago, even before Columbus sailed the ocean blue.

HARD AND SOFT LIGHT

One of the first aspects of light to contend with has to do with how shadows are rendered. Hard light creates hard-edged shadows, while soft light creates shadows with a diffuse, feathered edge. Of course, there is a continuum between hard and soft light, and the art of working with these qualities is figuring out when to use each, and how they can be combined to best effect.

Hard light is sometimes called specular light, because it tends to create bright, "hot" highlights. The shadows produced under hard lighting tend to be dense and show very little detail, with a crisp, distinct edge. Shadow play in front of a projector works because the light from the projector lamp is focused into a hard beam.

Hard light comes from relatively small light sources. On a clear day, the midday sun is a high-contrast pinpoint light source that creates hard shadows that can be very hard to deal with.

Soft light produces shadows that show a lot more detail, and tends to make colors look less saturated. If the edge is diffuse enough, these shadows can be nearly undetectable. Light can be softened by shining it through material that diffuses it or by bouncing it off a large surface. Multiple lighting instruments can be arranged behind a large piece of diffusing material to create an expansive soft light source. The larger the surface of the light source, relative to the subject, the softer the light. This means that even with a soft light source, the light will gradually get harder as you move the light away from the subject, because its relative size decreases.

Windows, especially large ones, can be a great source of soft light. The softness of the light depends on the conditions outdoors and the direction the window is facing. North light is a favorite among sculptors and is extremely

TOP: *The hard light of 2 PM sunlight creates the dramatic finger shadows in this image.* **Photo by Louis Benjamin.**

BOTTOM: *Soft light can produce subtle sculptural effects. Notice the gentle tonal gradient on the thigh, characteristic of soft light. The light source was a window behind and slightly above the subject.* **Photo by Louis Benjamin.**

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Medium-soft window light creates a backlit image with luminous highlights that wrap around the surface of the skin. The effect is essentially a bodyscape. **Photo by Louis Benjamin.**
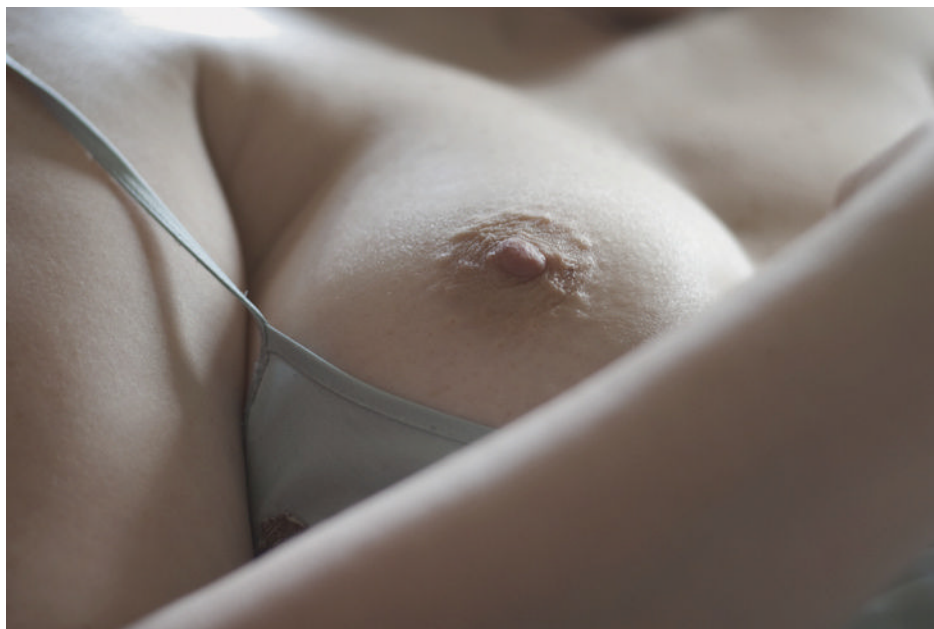
consistent in intensity throughout the day, while windows facing east or west are the most variable. Windows facing south tend to have hotter, harder light.

On overcast days, cloud cover can diffuse the sun's light to the point where shadows are undetectable. This omnidirectional light can be used to create great portraits, though it can sometimes lack contrast and make colors look washed out. When that happens, a bit of fill flash, especially off axis, and kept to a minimum, can add dimension and put a sparkle in the eyes. The light on overcast days is also extremely blue, and imparts a cool tone on everything if it isn't compensated for.

Regardless of the cloud cover, open shade can be a great lighting condition. Where do you find open shade? Look for the shadow side of a large building or under a canopy of trees. The building obstructs the hard, direct sunlight and even, filtered light reflects down from the sky. This light can still have some direction to it, so you may still get interesting shadows, and color saturation is not a problem the way it is with extremely diffuse light. As the color temperature chart on page 91 shows, open shade has a high

color temperature and is very blue. North light is essentially a variation on open shade.

A ring light or ringflash is a special lighting instrument that is mainly used in the studio. It was invented for medical photography and has been widely adopted by fashion and art photographers. It is fitted around the lens of the camera and throws light in a pattern that causes most of the shadows to be canceled. Helmut Newton pioneered the distinctive look of the light for fashion. When the subject is near a wall, the light creates a halo-like shadow that outlines the subject.

If you duck under a canopy of trees, you may well get dappled light. This occurs when the trees block most of the direct sunlight, but an irregular pattern of highlights is projected onto your sitter. This can be a beautiful and dramatic effect, worth seeking out, or a complete nuisance. Keep in mind that the highlights might be very bright, and you may have to choose between blowing out the highlights or blocking up the shadows. The other thing to realize with the shade of trees is that the leaves are likely to create a strong green color cast in your image, which your white balance generally will not
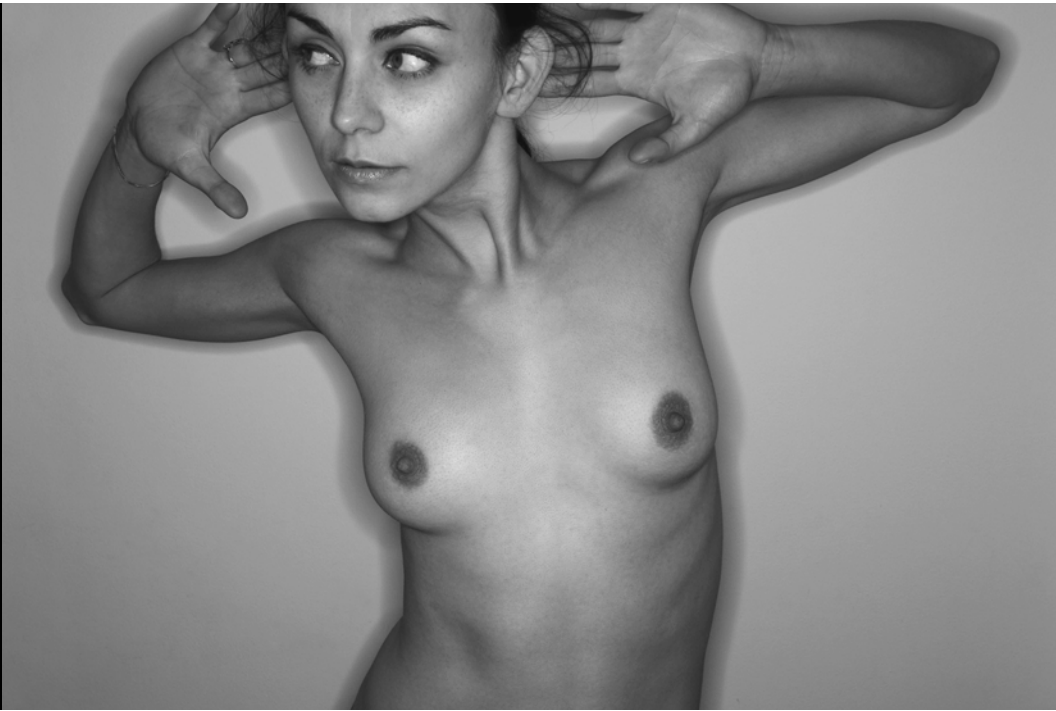
TOP: *Portrait of a Muse III 2009. Part of the most beautiful woman in town series, Shot in Justyna's apartment 2008, Lit with ringflash.*
Reproduced by permission of Tobias Slater-Hunt.

BOTTOM: *Dappled light is produced whenever something blocks the light and casts a rhythmic pattern, whether it is tree leaves or something man-made.* **Photo by Louis Benjamin.**

compensate for. In Adobe Camera Raw, you can compensate for the green by moving the Tint slider toward magenta.

Many nudes with Venetian blind lighting take their cue from Man Ray. Venetian blinds create a distinctive dappling pattern that has been used extensively in figurative photography. Lace curtains can also create striking dappled effects.

DIRECTION

Where the light is coming from has as much impact on your image as how hard or soft the light is. Even with simple flash photography, moving the light off-camera can substantially improve the look of the image. We have an expectation that natural light will come from above for the most part, firelight being one exception.

Because a hard light source throws distinct shadows, there is a creative opportunity in setting the lights so as to place those shadows within the frame. Placing a light at an oblique angle to the skin will bring out its texture and sculptural form. The harder the light, the more pronounced this effect will be.

Soft light from the sides of and slightly behind the subject can create the dramatic effect known as rim lighting. When a hard light source is positioned at an extreme angle beneath the subject, the upward shadows can be very unsettling. This is known as horror lighting. Some lighting teachers declare that you should never direct light upward at your sitter, but there are exceptions. As one example,
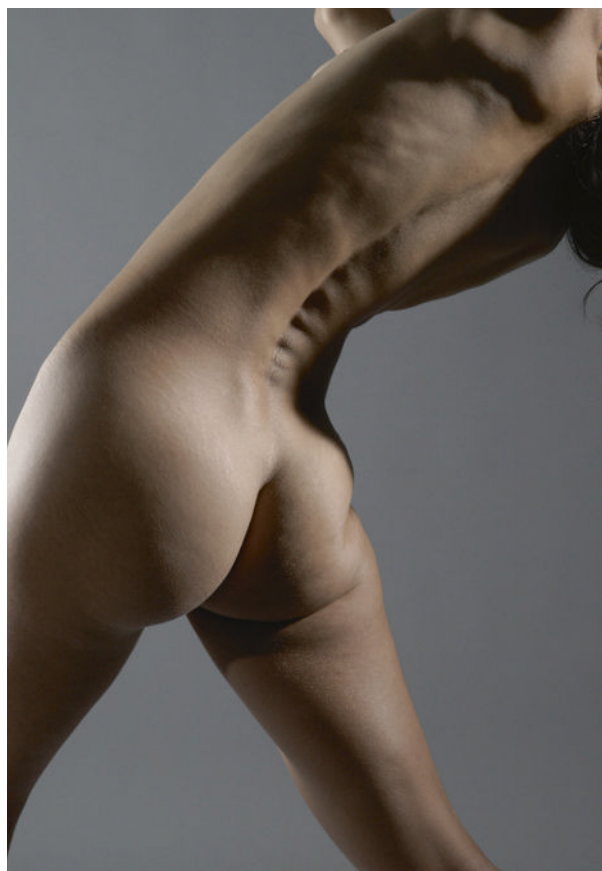
angling a smaller lighting instrument slightly upward and focusing a pool of light on just one part of the body can produce a striking and unusual visual counterpoint or accent that is aesthetically pleasing.

You can often read the lighting arrangement used to create a photograph, though the clues can sometimes be obscured by post-production. The two things to look at are the catch lights in the subject's eyes and where shadows fall. The size and shape of the catch lights can also be a clue as to the type of lighting instruments used.

SCULPTURAL AND TEXTURAL EFFECTS

Lighting that comes from a side angle causes parts of the body to throw shadows, which emphasizes the spatial and sculptural qualities of the body. The harder the light, the more pronounced the texture. The feathered shadows produced by softening the light can bring out the sculpture while minimizing the texture.

ONE LIGHT

Many well-known portrait photographers' signature looks use only one light. It's a simple, unconfused way of lighting. One successful strategy is to use a very large, soft light source situated behind the photographer. A completely different look can be achieved by placing a hard source above and to the side of the model.

KEY AND FILL

When more than one light is used, there is generally one dominant light, known as the key light. The other lights are typically placed for effect, to open the shadows, to separate the subject from the background, or to create highlights. The strong key light may cast an overly heavy shadow on some part of the body. In that case, it can be useful to throw light into the shadow areas. This can be done with a light or with a simple reflector. This technique is referred to as filling or opening the shadows.

When working with fill, nuance is often the essential difference between an everyday photo and one that really stands out. The shadow areas provide a sense of depth, which is lost as you add more fill. The challenge is to find a balance

between showing detail in the shadows and making the subject look too flat. The relative intensities of the lights come into play here. If you use a light meter to read the light, you will quickly find that you need a difference of at least one f-stop for the difference in brightness to register clearly, while four or more stops creates a high-contrast look. While you need a difference of one or more stops between lights to clearly register lighting contrast, opening or closing the aperture on the camera by as little as 1/3 stop can make a significant difference in the overall exposure.

LIGHTING RATIOS

Lighting Ratio	Difference in F-stops
1:1	(Same intensity)
1:2	1 stop
1:4	2 stops
1:8	3 stops
1:16	4 stops
1:32	5 stops
1:64	6 stops

F-NUMBERS

0.5, 0.7, 1.0, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32, 45, 64, 90, 128

The range of standard f-numbers. Most lenses do not support the entire range.

We're talking about lighting ratios here. These are often expressed numerically in terms of power, such as 1:2, 1:8, etc., but that can be problematic, since you have to first translate the different ratios into the number of stops (e.g., 1:8 is three stops) and then figure out what f-number that refers to (e.g., if you want the light to be three stops dimmer than f/8, your meter should read f/2.8).

CONTRAST, CHIAROSCURO, AND NOIR

The word "chiaroscuro" is Italian for light/dark, and it is typically used to describe high-contrast, sometimes low-key, images. Sixteenth century Baroque and Mannerist painting made heavy use of chiaroscuro, and Caravaggio is particularly well known for employing the look. It is a useful technique for adding drama to a portrait that has been widely adopted by photographers. In nude photography, dense shadows are often used to create a draping effect for the genitals.

Shadow also creates a sense of mystery. Slightly opening the shadows, so that we get just hints of detail, can pique the viewer's curiosity.

"Rembrandt" lighting is a specific application of chiaroscuro. The light is placed roughly 45 degrees to the side, and at an elevation of about 45 degrees, though this will vary, depending upon the shape of the subject's face and the attitude of their head. The key characteristic of this style of lighting is that one side of the face is illuminated and the other side is dark, except for a triangular area beneath the eye. The triangle is produced by the intersection of the shadow extending from the nose and the shadow on the cheek. Ideally, it is the same width as the eye. When the subject is facing away from the camera, the shadow side is closest to the camera.

The silhouette effect in this shot is modified by light wrapping around the thigh in the background. A second, much weaker, light at camera right gently fills the shadows and shows sculpting on her arm and shoulder. **Photo by Louis Benjamin.**

Spot lights, snoots, and grids all focus the light in ways that create restricted pools of light. Some lights use a lens that can create a very sharp-edged area of illumination. Grids are generally rated between 10 and 40 degrees, and the smaller the number, the narrower the spread of the beam. Narrow grids also soak up a lot of light, reducing the intensity of the light dramatically.

Film noir (French for black film) is known for its low-key, high-contrast, black-and-white look. Often, scenes are backlit. Noir, however, has as much to do with its subject matter and dramatic treatment as it has to do with the look.

Rendering an image in black and white and using moderate to high contrast tends to emphasize the form and space of the figure. A soft, feathered light that wraps around the figure can have a subtle, sculptural effect, while a harder light tends to emphasize edges and make the figure more abstract.

SILHOUETTES

These are simple enough to shoot, but there are ways to modulate the look. To make a strong silhouette, it's often necessary to actually light the background. When you illuminate a light-colored background, a fair amount of light can bounce around the room. Sometimes that bounced light can be strong enough to fill the shadows in the foreground and diminish the silhouette effect. You can use a "black bounce" in front of the model and around the shooting area to control the unwanted reflections. Black bounce can be a matte black cloth material that is taped or draped over walls and surfaces or large sheets of foam core with a matte black surface. Some studios even paint the ceiling black. Of course, you can amplify the effect of the lighting with post-production in Photoshop, but it takes skill to make the result look convincing.

Even with the black bounce, the light bouncing off the background can be a problem or a benefit, depending on the look you're going for. Pulling the figure away from the background keeps light from spilling around the edges of the figure. Conversely, placing the figure close to
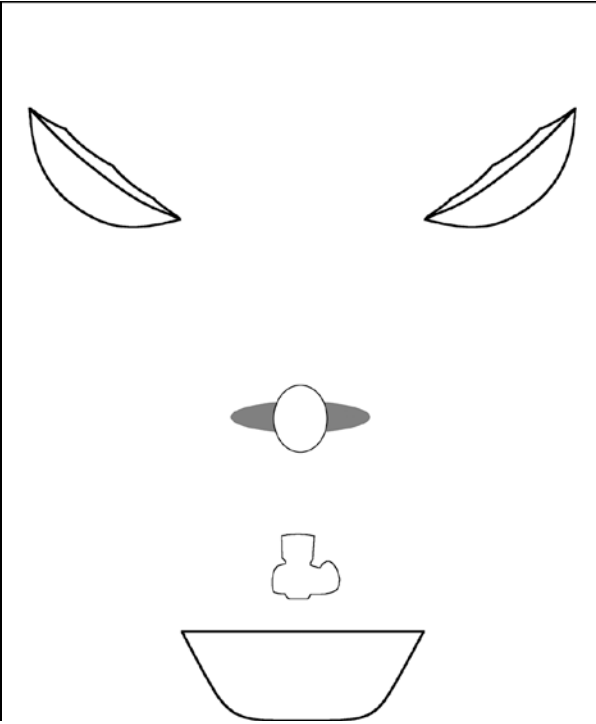
the background can give the effect of the figure merging with the brightly lit background.

The technique that photographer and teacher Frank Franca calls "shooting into the shadow" is an extension silhouetting. The subject is placed between the photographer and the lighting instrument so that some light spills over onto the camera side of the shot. The effect can be very moody, featuring large, dark areas that can have a very abstract feel.

AVEDON LIGHTING

Richard Avedon's signature look was a subject standing in front of a plain white background. The evenness of that white background and the fact that it registers as white in the photo are two clues that the look is not as simple to achieve as it appears.

If a seamless paper background simplifies the image and directs attention to the sitter, then the stark white background is the ultimate extension of this look. The plain white gives us nothing to work with, not even color or tone, and so we look that much more closely at the subject.

One way to think of Avedon lighting is as an illuminated silhouette. You start by throwing an even illumination on the background. Umbrellas are particularly useful for this purpose. What you're looking for is a brightness that is at least two f-stops brighter than the light reading at the model. For best results, you need some distance between the sitter and the background, so that you don't have to contend with spill from the background wrapping around the sitter. That lighting will essentially produce a silhouette. From there, you add the appropriate amount and type of lighting for the model. Avedon himself typically used a large soft box, but your variation on that look could use any instrument you like—a grid spot in the Rembrandt position, for example.

SPILL, FLARE, AND HALATION

When you place the sitter between a light source and the camera, there is always the potential for some light to travel from the light source directly into the lens. If the light is strong enough, you will get a colored flare pattern in the image. If not, you will generally get a soft, foggy, reduced-contrast look known as halation.

The wider the focal length, and the more wide open the aperture, the more you'll have to contend with flare and halation. You can intentionally produce this effect and use it artistically, but if you don't want it, your first line of defense is a lens hood. In more difficult cases, the important thing to recognize is that these effects come from light that is not illuminating the scene and is spilling into the lens instead. Then you can find the offending light and block it from the lens, while still allowing the light to fall on the model. This is known as "flagging." Often, it is easiest to put the flag close to the lens, but sometimes it is sufficient to place the flag on or near the light source.

If the lighting instrument you're using spreads light, there is always the potential for spill, meaning light that is falling onto surfaces that you didn't intend to illuminate. Flare and halation are two particular issues of spill, but the problem can be as simple as too much light falling onto the background. The trick is to position the light, the camera, or both so as to minimize unwanted spill.

Bouncing light off walls is a way to soften light that is essentially a creative use of spill; in this case you're intentionally causing it, instead of trying to contain the spill. Cinematographers often create soft lighting for large areas by bouncing lights off a pebbled foam surface called bead board. It's important to consider the
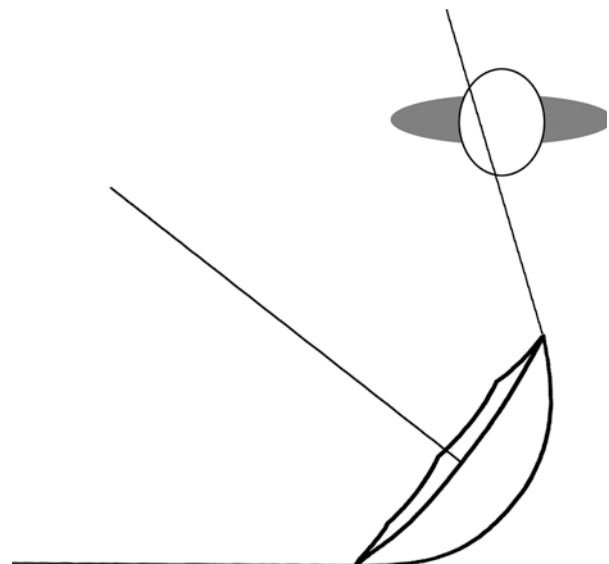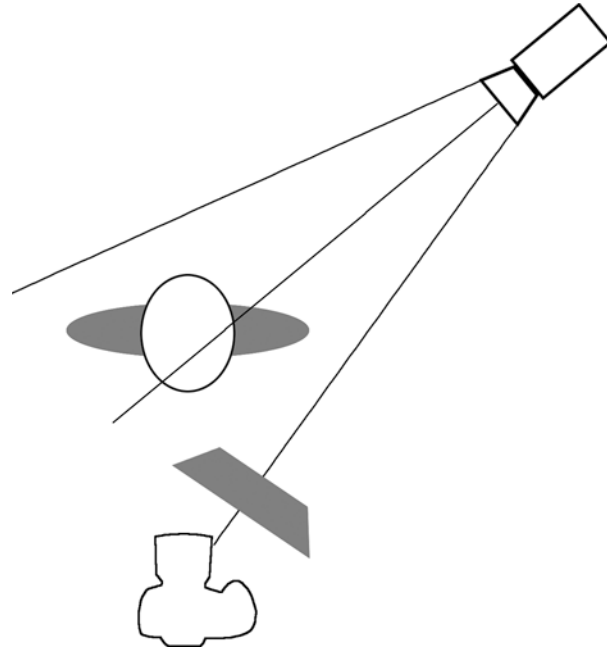
TOP: *A diagram of flagging.*

BOTTOM: *A diagram of feathering.*

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color of the surface you are bouncing the light off of. It can substantially change the color of the illumination with some unpleasant results.

FEATHERING

A related issue is feathering, which can be used to make a subtle improvement in the look of your lighting. If you were to illuminate a flat wall with an umbrella and take a photo, you would notice that the center of the illuminated area is "hotter," or brighter, than the edges. It turns out that this edge light is a bit softer and tends to have less specular highlights than the light from the center of the umbrella. It also has lower intensity. Many seasoned photographers only use the feathered portion of the light from an umbrella. The lighting from a soft box is more even than the light from an umbrella, but you can also position it to take advantage of feathering. Lighting your subject with the feather has the additional benefit that it throws less light onto the background.

INTENSITY

The brightness of the light source(s) has a few important effects upon the shot. The most obvious is that the overall intensity of the light determines the combination of the ISO, f-stop (aperture setting), and shutter speed that will be necessary to register your image. Second, the intensity of the light can effect how deep, and potentially problematic, the shadows in your image will be. Bright light can be challenging to the eyes, making your sitter squint in the face of a bright constant light or cringe in anticipation of the flash going off. The somewhat dazed

expression in some old Hollywood portraits was a compensation for the intense illumination of the lights that were used. As the light becomes stronger, there is an increased risk of spill.

To use multiple lights effectively, you will need to know how to control the relative intensity of the light from each instrument. In the digital age, many photographers simply take a test shot and look at the histogram to determine exposure. That approach can work very effectively with a simple light setup, but when there are multiple lights involved, getting the intensities of the lights into the right ballpark can go much faster with the aid of a light meter.

Adjusting the intensity of the light can be done in different ways, depending on the lighting instrument, but you can adjust the intensity of any light by simply moving the instrument closer to or farther from the subject. Even though most strobes allow you to vary the intensity of the light over a range of three to five f-stops, you may still find that it is easier to move the light head, especially if you have two heads connected to one power pack.

To increase or decrease the lighting intensity by two f-stops, simply double the distance, or cut it in half. Doubling the distance decreases the intensity, and halving the distance increases it.

It's slightly less obvious what to do to make a one-stop change in intensity. To decrease the intensity of a light by one f-stop, increase the distance to the subject by 1/2. To increase
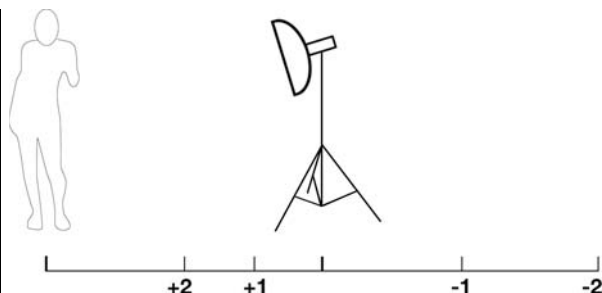
A diagram showing how to move a light source to change its intensity one to two stops.

the intensity by one stop, decrease the distance by 1/4. In other words, if the light was six feet from the model and you want the light one stop dimmer, move it to nine feet—an increase of three feet. If your light was eight feet from the subject and you want to make it one stop brighter, move it two feet closer.

We end up with 1/4 and 1/2 for one stop because the intensity of the light is related to the square of the distance. Since the exact numbers are not very memorable and we don't need to be that precise, the rule of thumb numbers are rounded for the sake of simplicity.

LOW-KEY, HIGH-KEY, MID-KEY

Low-key images have an overall impression of darkness, while high-key images seem bright. There are no hard lines between these characterizations. This is not simply a matter of underexposing or overexposing the scene, but choosing a particular exposure in conjunction with setting the lights a certain way.

TOP: *A classic low-key image with strong graphic qualities.*
Reproduced by permission of Saddi Khali.

BOTTOM: *This high-key image creates mystery with a diffuse glow, rather than dense shadows.*
Reproduced by permission of Gaspar Marquez.

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Low-key images tend to have one or more small pools of light that show good detail and moderate tone. The lighting in such images is often called "mood lighting." You can create a low-key image with a single lighting instrument. Often, this is a hard light source with a light-shaping tool that limits the lighting to one area.

High-key images are bright and have less contrast than low-key images. They tend to be illuminated with more instruments. There is often separate lighting for the background and the model, and the model is often pulled away from the background to avoid spill.

Most images are mid-key, and as you would expect, mid-key falls in between low-key and high-key.

OTHER WAYS OF LIGHTING

Anything that emits light can be a light source for an art photograph. Light painting with a flashlight is an interesting process that truly makes one-of-a-kind images. You can also drape

TOP: *A light-painted nude illuminated with a two-color LED flashlight. Thirty-second exposure. 35mm lens at f/2.0.* **Photo by Louis Benjamin.**

BOTTOM: *Small globe lights turn the body into a light source. Ambient light brings out the details of the figure.* **Reproduced by permission of Barney Cokeliss.**

lights on the body. If the lights are colored, you need to carefully control the exposure to capture the color of the lights. Some of the light will illuminate the body, but much more of it will illuminate the room, so the body becomes a light source. The body becomes even more of a light source if you apply fluorescent paint to the skin and light it with a black light. Some black-light nudes aren't even recognizable as bodies. Ultraviolet light is damaging to the eyes, so it's important to take proper precautions if you work with this technique.

EXPOSING TO THE RIGHT

Sometimes the most compelling elements of a photo are the details in the shadows, and shadow detail is one of the weakest areas of digital photography. Many shooters who work with film
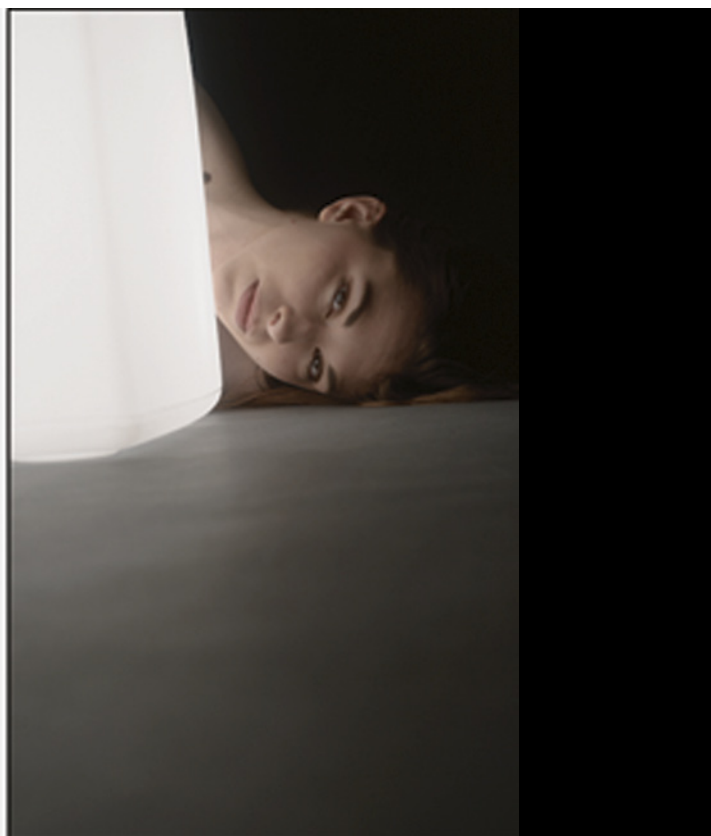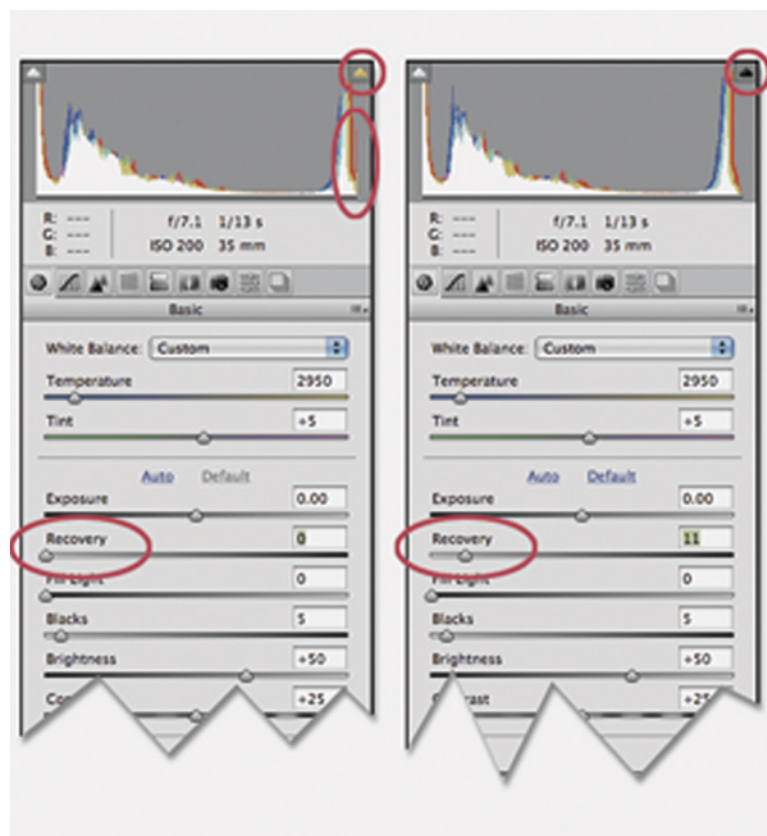
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were taught to "expose for the shadows and process for the highlights," which is the basis of the technique of "exposing to the right," which you can do if you shoot in RAW. It works because you can recover the highlight detail in a RAW image. Generally speaking, you can over-expose by nearly one full f-stop, and then use the Recovery and Brightness sliders to restore the highlight details. By doing this, you are giving more light to the shadow areas, allowing you to register more detail.

Exposing for the shadows is an idea that comes from the Zone System, which was developed by Ansel Adams to allow film photographers to pre-visualize the effect of exposure choices on the amount of shadow and highlight detail in the final image, as well as the tonal balance of the print.

COLOR

Light also gives us color, from the cool blue of the sky to the warm yellow-orange of candle-light, and color can often convey emotional overtones or symbolism. There is a sensory and psychological dimension to color, which can work entirely at the subconscious level. The symbolic use of color is a subject dense enough to merit its own book. Certain colors have very different meanings in other cultures. One of the better-known examples is white, which symbolizes purity in many Western cultures, but symbolizes death in a number of Asian cultures. Limousines are often painted black because of the way it conveys power.

Of particular interest to the photographer working with nudes is the class of colors that are

referred to as memory colors—sky blue is one, and healthy skin is another. When these colors are off, it can send a strong signal about the picture we are viewing. There is even a cultural component to these memory colors: the color that is preferred in print magazines to represent healthy olive skin by Westerners is considered dark and cadaverous in many Asian cultures.

Colors also interact, and surrounding one color with another can change how we perceive the first color. This phenomenon is known as simultaneous color contrast. A practical result of this is that surrounding your model's warm skin tones with a cool background (e.g., blue sky or green foliage) will make his or her skin look even warmer. It works the other way, too—your sitter's skin will look cooler when set against a warm colored background (e.g., a bright red backdrop).

COLOR AND MOOD

Our perception of color arises in the nervous system as a response to stimuli. As such, it makes sense that there would be a psychological aspect to color and that each person's response to color is unique. That's one reason, for example, that people have different favorite colors. Black-and-white photographers tacitly acknowledge the psychological impact of color by embracing the practice of toning prints and selecting photographic paper based on its warm or cool tonality.

Anecdotal evidence of the emotional aspect of color is easy to find. For example, we have colorful phrases that describe states of mind, such as "got the blues" and "green with envy." During Picasso's famous "Blue Period," he painted in blues and blue-greens, colors that are described as "austere." One branch of psychology studies the impact of certain colors upon the emotions and is of particular value in the treatment of psychosomatic illness.

In 1810, Johann Wolfgang von Goethe (probably known more for his literary contributions than for his scientific work) published a theory of color. Goethe's observations about the emotional impact of colors and optical effects still carry weight, particularly in the art world, where perception is of prime importance.

Master cinematographer Vittorio Storaro (whose credits include "The Last Emperor," "Apocalypse Now," "Reds," and "Dick Tracy") bases his philosophy of color on Goethe's work. On his web site www.storarovittorio.com/ingles/index.html, Storaro says, "I have always thought that film was capable of registering the emotions of the people who participated in the making of a movie.… As cinematographers, we write with light and motion, using shade and

A colored gel was applied to the light that is filling the shadow side of this photo. Colored lights lose saturation and become washed out as you increase their intensity, so they work best in low-key or shadow-side applications. **Photo by Louis Benjamin.**
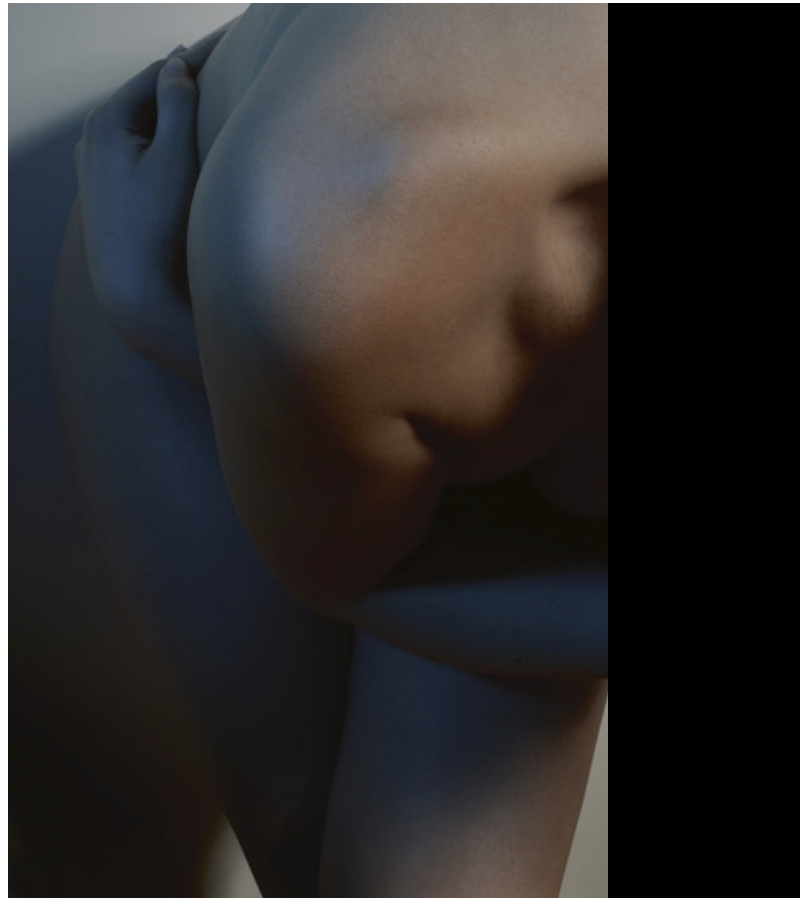
color to punctuate one important part of the vocabulary of cinema."

Storaro collaborated with manufacturer Rosco to produce a set of colored lighting gels called the Storaro Selection. Gels are thin filters that can be placed over a lighting instrument to color the light. Rosco's literature describes the Storaro gels this way: "These ten colors represent key chromatic elements of the visible spectrum, and are intended for dramatic effect and strong emotional response." His ten colors are red, orange, yellow, green, cyan, azure, blue, indigo, violet, and magenta; that's the R-O-Y-G-B-I-V we learned in school, plus cyan, azure, and magenta.

Projections are another alternative light source that can function much like gels by

Reproduced by permission of JD Yezierski.

applying color to the body, but they can also add layers of imagery. The colored elements of the image being projected interact with the skin pigments, often producing surprising results. The three-dimensional form of the body also distorts the projection, so that the body interferes with the reading of the projection and the projection interferes with the reading of the body.

WHITE BALANCE AND COLOR TEMPERATURE

In practical terms, all light has a color, and each type of light source emits light in a characteristic range of colors. For example, daylight is bluish, while candlelight is yellowish orange. If you stand outside a building around dusk, you are likely to see bluish light coming from the sky and yellowish light coming from the fixtures inside the building. If you happen to have a white handkerchief in your pocket, and look at it in the outdoor light, it will look white. If you go into the building, the indoor light quickly ceases to look yellow, but the handkerchief will still look white. This phenomenon is called color constancy. Our eyes are constantly adjusting to (neutralizing) the color of the ambient light, and that is what the white balance controls in your digital camera and Photoshop's Camera RAW, as well as the gray balance dropper in Photoshop, are intended to do.

By shooting a frame with a spectrally neutral gray card, you can have Camera RAW calculate a more accurate white balance than your camera's auto white balance feature can. Once you have a white balance for your reference frame, you can open groups of RAW files together and synchronize their white balance settings in Camera RAW.

Film-based photography has a simplified version of white balance. There are only two choices. In digital, we can be more specific about the color of the light that we are compensating for. Films for shooting indoors are said to

be tungsten (incandescent light) balanced. These films effectively have a blue filter built into them, which makes the yellow light look neutral. Daylight film "sees" blue light as if it is white.

We can exploit the white balance setting in the camera creatively. Film photographers have often shot indoors with daylight film to emphasize the golden color of incandescent light, or shot with tungsten film outdoors, rendering the entire image a cool blue. There's nothing to stop you from doing the same thing in digital. You can use the preset color temperatures (typically tungsten, flash, daylight, and cloud), or dial in your own numbers.

If you learned about "warm" and "cool" colors in art, there's an obvious discrepancy inherent in the way we talk about color temperature: high color temperatures describe "cool" hues, and low color temperatures describe "warm" hues. This is not really a problem, because the white balance system compensates for the color of the light by reversing this relationship. In other words, increasing the color temperature setting in the camera (or in Photoshop's Camera Raw) gives the resultant capture a warmer tone, and decreasing the color temperature setting gives the resultant capture a cooler tone.

If you're going to use this technique aesthetically, you want to pick a color temperature that makes it clear that you are intentionally pushing the color. If you select a value that is only slightly off, it may be lost on the viewer or be read as a mistake.
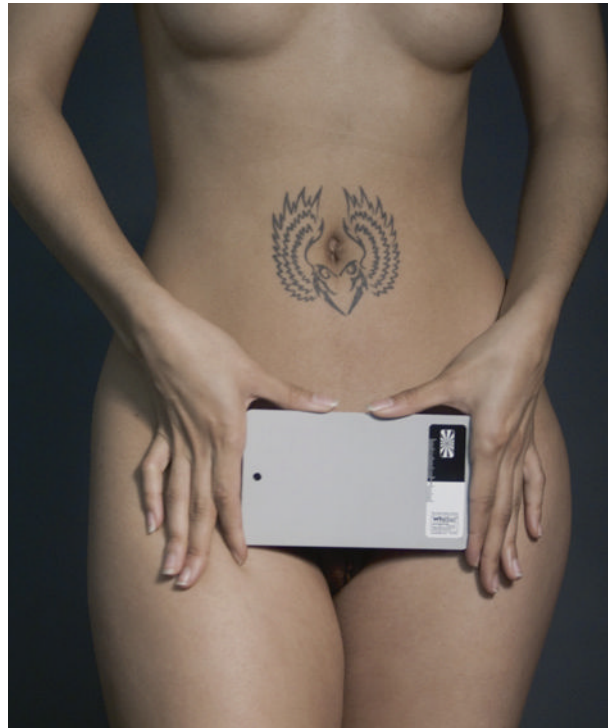
MORE ON COLOR TEMPERATURE Color temperature is a simple way of assigning specific numerical values to each of the hues in the range between matchlight orange and deep sky blue. It gets its name from a principle in Physics, where heating an object called a "black body" to a particular temperature will cause it to glow at a specific color. The Kelvin scale is one of the main temperature scales used in Physics.

The color temperature of "daylight" varies over a range of about 5000 Kelvin! (By the way, even though Kelvin is a unit of temperature, we don't say the word "degree.")

Sunrise, sunset	3200 K
High noon	5000–5400 K
Open sky	5500–6500 K
Overcast sky	6000–7500 K
Open shade	7000–8000 K
Partly cloudy sky	8000–10,000 K
Blue sky	9000–12,000 K

Similarly, all incandescent light isn't one color. You may have noticed that a tungsten light on a dimmer ranges between a warm amber color at low intensity (and temperature) to a very pale yellow at high intensity.

Match	1700–1800 K
Candle	1850–1930 K
Household bulbs	2500–2900 K
Quartz/Halogen bulbs	2800–3400 K

There are special fluorescent lights that were developed for the film and digital still industry. These use bulbs and special electronics that have been designed to emit light that is more consistent with either daylight or tungsten light sources.

The fluorescent lights used in home and institutional settings are a bit problematic for photography. These emit a kind of light that is not full-spectrum, and does not fit well into the white-balance scheme. While you can ascertain a color temperature for these lights, the range is extremely broad, and goes from 3200 K to 7500 K, so one setting does not fit all.

In addition, fluorescent light from such fixtures tends to have a very strong green component, which white balance alone does not compensate for. You will notice a green/magenta tint slider in Adobe Camera RAW. It is there specifically to neutralize light that is either too green or too magenta. When you use the color temperature preset for fluorescent light in Camera RAW, the tint slider moves dramatically to the right. If you shoot in indoor light or daylight with your white balance set to fluorescent, your images will have a strong magenta cast.

Composition

Both photography and painting have a notion of composition, and though they are related, they are actually different processes. In painting, individual elements of the composition are assembled in a layered process of construction, or addition. Often, there are revisions, and elements of the painting are moved, added, or even removed. In photography, the composition is based upon an act of exclusion—pointing the camera imposes the camera's frame on the scene, and subtracts everything that falls outside of the frame. From there, the event being photographed can further be framed in terms of selective focus and the duration of the exposure. Each of these additional frames is a compositional choice.

In some cases, the photographer can direct some of the action and move people or objects on a set to construct the scene in a way that is more akin to what a painter does, but more often than not, it is the photographer who stands on tiptoe, squats, climbs a ladder, or rolls onto his or her belly to find a compelling view.

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Once the shutter falls, the process of composition is complete. Cropping after the fact can further reduce the framing, but with the exception of montage or some other joining of images, no other revision of the latent image is possible; there is only starting on a new image.

There is a danger in thinking too rigidly about composition. We explore principles of composition as a way of philosophizing about what makes a picture work, but these principles should be taken as suggestions, not immutable laws. With that caveat in mind, we can look at ideas of composition that are drawn from graphic design as well as photography.

In Chapter 2, we mentioned that for any given image, the shape of its frame (its aspect ratio) could affect the way the image is perceived. In particular, the corners of the frame and its dimensions create expectations in the viewer about where important elements should fall within the frame.

Students of basic graphic design are taught about the "rule of thirds." To apply this rule, we can draw imaginary lines to divide the frame into thirds, both vertically and horizontally. Some cameras even have an option to display grid lines in the viewfinder that illustrate the rule of thirds. It is unfortunate that this principle is referred to as a rule, since it is no more than a suggestion. While the principle generally works, calling it a rule gives it more weight than it deserves.

One successful way of working with the rule of thirds is to use the image segments, whether vertical or horizontal, as containers. For example, if your sitter is in an outdoor setting, you might frame the image so that the sky occupies the top two-thirds of the frame and the ground occupies the bottom third. Looking horizontally, the sitter could be positioned so

that most of the body occupies the middle third.

The points where the dividing lines meet have additional weight. You could call them pressure points. Placing an element of your composition on one of these points will focus attention upon it. One way to call attention to your model's breast is to place the nipple on the pressure point at one of the intersecting thirds.

The regimental evenness of 1/3 divisions can make composing on the basis of the rule of thirds a bit staid. Renaissance artists and architects, and even Leonardo da Vinci, often used

Dividing this image into three equal segments from top to bottom demonstrates an application of the "rule" of thirds. **Photo by Louis Benjamin.**

the golden ratio as a reference for determining proportions that are perceived as being beautiful. The golden section proportion is based on the Greek ratio phi, or 1.618. Applied to the rectangular frame of a photo, the golden ratio lines hug the center more than do the rule of thirds lines. The best way to learn to employ this proportion is to develop a feel for where the proportion lines fall. The extra effort will often pay off.

The absolute center of a picture is often referred to as "dead center," and from a perceptual standpoint, placing something in the center deadens it. As we move the point of interest away from the center, visual tension increases.

Related to visual tension is lead room. As we read an image, we work out scenarios that

Rule of thirds (above), versus golden section (below).

explain what is happening. If a person is facing right, that is generally interpreted as the direction the person is heading. Directing the model's gaze in the same direction strengthens the sense of intent. If we place the model's nose against the right edge of the frame, it will seem as if she or he has run out of room, but if we place her or him on the left side of the frame, not only is there tension, there is lead room. The viewer looks for open space in the direction that the character is expected to move.

If we think of a photograph as a kind of dialog between the photographer and the viewer, composition can be seen as a mechanism for telling the viewer where to look. One of the constant questions in the mind of the viewer is "what is this picture about?" One way of answering that question is by isolating the subject. Techniques such as controlling depth of field, selective focus, and placing the focal point of the image on one of the pressure points direct the viewer's attention and tell the viewer what the image is about. Selective focus works, because the eye gravitates toward the sharpest part of the image.

Cropping after the fact is a way of rethinking compositional decisions that you made when you shot the image. Think of cropping as recomposing your image. It's really restating the visual problem you're setting out to solve. Too often, it is done to eliminate a problematic element from the frame. That is cropping for the wrong reasons. Cropping done in this way usually does not respect the proportions of the image, and you end up with a composition that lacks integrity.

If you must crop, it's best to perform your crop in Camera RAW, because the crop does not throw away any of your original image data. This is especially useful for JPEG and TIFF files, which you can open in Camera RAW.
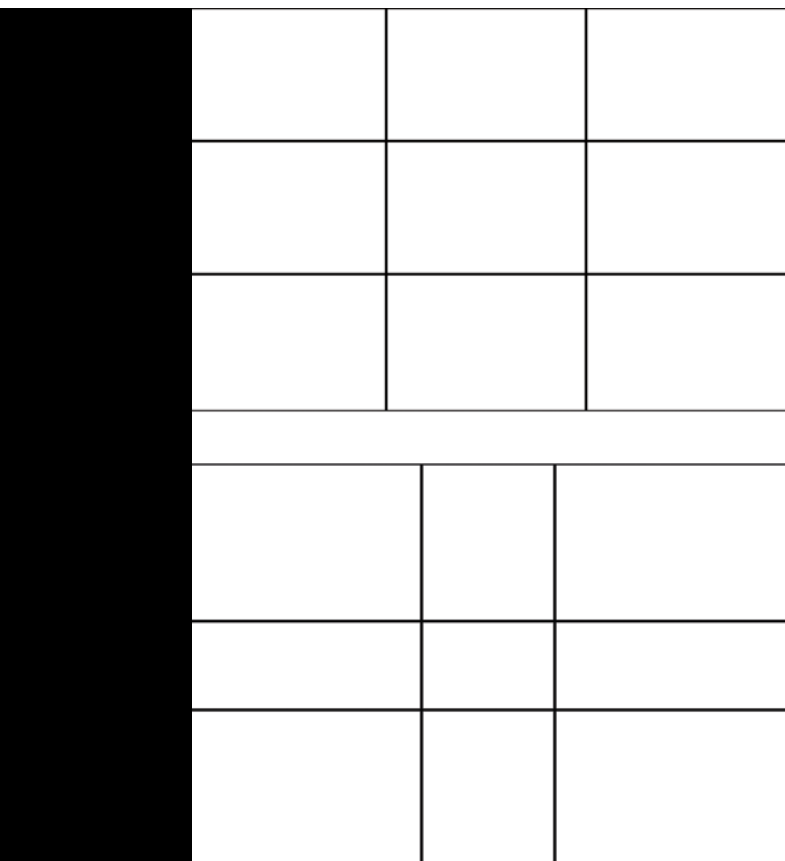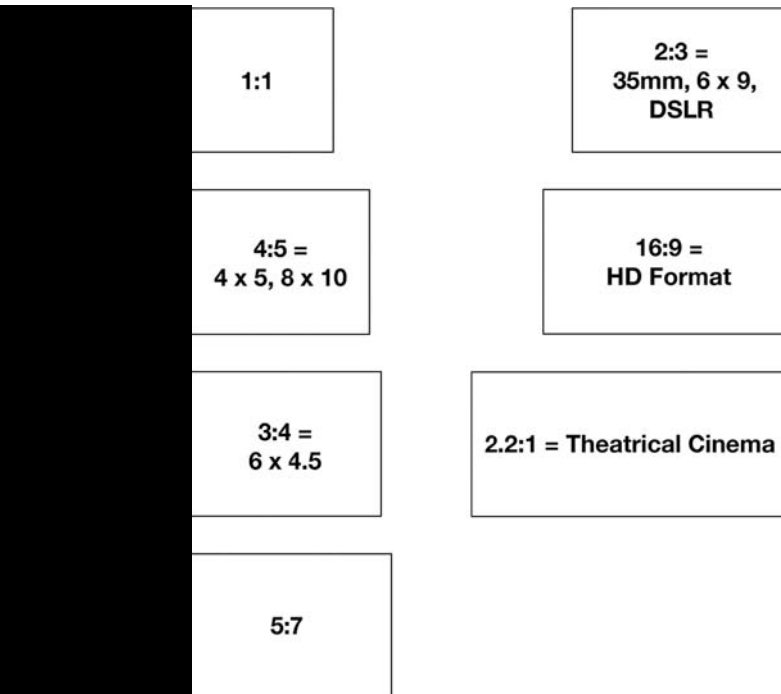
TOP: *Visual tension was created by moving the subject to the right, though the figure still connects with the center line. Directing her gaze to the right suggests something outside the frame. If her body were facing that way, she would appear to be out of lead room.* **Reproduced by permission of Saddi Khali.**

BOTTOM: *Selective focus and a pool of light emphasize the knee bandage over the figure.* **Photo by Louis Benjamin.**

1:1	2:3 = 35mm, 6 x 9, DSLR
4:5 = 4 x 5, 8 x 10	16:9 = HD Format
3:4 = 6 x 4.5	2.2:1 = Theatrical Cinema
5:7	

TOP: *Framing proportions can have a profound effect on composition.*

BOTTOM: *Moving in close omits contextual cues. Often the viewer has to read the image carefully to resolve what is being depicted. The result is often a compelling abstraction.* **Photo by Louis Benjamin.**

A good approach is to crop in a way that maintains the proportions of the original image. If you want to crop to a different shape, consider using one of the standard proportions, such as 1:1, 4:5, 5:7, or something cinematic, like 2.2:1. If you crop arbitrarily, you will probably find that it is harder to get groups of photos to go well together when you exhibit them. It will certainly make mounting and framing your prints more problematic.

Framing can have a profound effect on how the viewer relates to the nude figure. The body's relationship to the space imposed by the frame is often critical to how the overall image works.

When the full body is shown, we often relate to the image as a complete person, not an abstract body. If the face is visible, that aspect is even stronger. It is challenging to create a sense of intimacy with a full-body view. In most cases, that framing puts the viewer in the position of the detached observer. If there is a lot of space around the figure, the body can be read symbolically, and the image often takes on overtones about the relationship of humanity to the larger environment.

Closeness can be read as either intimacy or abstraction, depending on how close the framing is and whether the face appears or not. If the model's face is not visible, the shot will tend more toward the abstract or the erotic. Posing, expression, and use of lighting further help to establish the tenor that framing creates a context for.

If you are interested in creating intimacy, an eye-level angle or slightly below is a very powerful way of inviting the viewer to relate

to the person in the photo and creating a sense of involvement. Many classic intimate portraits have been shot with the lens positioned somewhere between the eyes and the solar plexus.

Cutting the top of the head with the frame can accentuate the emotional dimension of an image, especially if the sitter fills most of the frame. It imposes a view that is akin to looking the sitter in the eye. Viewers with more formal sensibilities are likely to object, but having parts of the sitter's body extend beyond the boundaries of the box can also emphasize the imposition of the frame itself.

"Amputations" are a special case. Sometimes, a hand, foot, or some other part of the body collides with the frame so that just a part of the extremity is cut. Such framing usually looks like a painful amputation and is distracting. The viewer's attention is focused upon the missing body part, instead of whatever else you are hoping to put across. Such unfortunate framing can be avoided by intentionally running your eye around the edge of the viewfinder before you trip the shutter.

When we view the subject from a high angle, it often comes across as victimizing, especially if the model is a woman in a prone position. However, as you elevate the camera, the viewer's perspective becomes increasingly detached. If you elevate the camera enough, the shot becomes the omniscient bird's-eye view of cinema and graphic novels.

When you are shooting from a low angle, the model moves by degrees from being heroic, to menacing, to dominating. At some point, you get a worm's-eye view, which is again detached and omniscient.

Finally, we come to the question of how the rectangular frame is oriented. When the frame is taller than it is wide (vertical), we refer to that

as "portrait," and when it is wider than it is tall (horizontal), we refer to that as "landscape." Our natural perceptual field of view is landscape, and so it should be of little surprise that cameras create landscape images in their normal orientation. You have to consciously rotate the camera, often jutting your elbow into space, to shoot in portrait, but the two orientations tell different stories.

There are also practical aspects to shooting in portrait versus landscape: if your work is to be published in a magazine, the orientations of the pages are typically vertical. Portrait images are optimal for magazine pages, and landscape pictures either have to be run in reduced size, or run as a spread across the pages. When that happens, the "gutter" often cuts through the middle of the picture and disrupts or obscures valuable details. Both the Nikon D3 and Canon 1D series cameras have an integrated vertical grip, which places a second set of controls on the camera body so that you don't have to stick your elbow out and reach across the camera when you shoot verticals. Many mid-range cameras have an optional "battery grip" that attaches to the bottom of the camera and provides similar functionality. This is more than just convenience. Keeping your elbow down gives you a more stable shooting posture.

If your intent is about the person, rotating to portrait and framing with the pressure points in mind can create a powerful portrait that isolates the sitter from the environment and hints about their "inner landscape." If the subject is standing, you can pull back to shoot the full body in portrait. The body will fill much of the frame, and even though the shot includes the environment, the emphasis tends to stay with the figure.

With landscape framing, there is the issue of all that field of view to the left and the right. Head and shoulders views can fill the frame

Careful asymmetrical framing, perspective lines, and dramatic tonal contrast add to the mix with bird's-eye perspective to make an eye-catching image. **Reproduced by permission of Daniel Sikorskyi—chiaroscurist, www.sikorskyi.ca.**

nicely, especially if you are willing to cut the top of the head. However, landscape generally compels us to either shoot head and shoulders, pushing the subject to one side or another, or to pull way back and place the figure in a tableau. In landscape, the environment naturally dominates the full-body figure.

Particularly when framing in portrait, photographers often intentionally tilt the camera, causing the subject to lean across the frame. This tilt can add a lot of visual energy to the shot, but can also come across as a gimmick. Formalism often dictates that the horizon should be perfectly horizontal across the picture plane, but you do not have to slavishly comply with this dictum. An interesting issue of framing comes up when shooting with a wide-angle lens, particularly if you are tilting

the lens upward or downward. In that case, "verticals" in the shot will normally be tilting, and the horizon may even look skewed. A great way to deal with this circumstance is to find a vertical at camera left and close to the model, then align that so that it parallels the left side of the frame. The other "verticals" are less critical. If there is no such vertical in the shot, figure out where the dominant vertical should be, and make sure it's vertical.

A CLOSER LOOK INSIDE THE FRAME

The emphasis of the early part of this chapter was from the perspective of imposing the photographic frame on the scene. The remainder of the chapter will shift the emphasis and look at additional ways to think about what happens inside the frame.

In a word, simplify. That is an important, and often challenging, mantra. Be clear about what your image is about, and try to distill your compositions down to the elements that express that. Some models react negatively to a seamless background because of the way it functions. It is a powerful simplification tool that creates a quiet, relatively unobtrusive background and focuses attention on the model.

Graphic designers often speak in terms of negative space. This is a way of thinking about the visual problem from the standpoint of shaping the space that surrounds the figure, rather than the figure itself. Emphasizing the negative space can create powerful sculptural effects, or enhance the abstract qualities of an image.

When the model places her hand on her hip and pushes her elbow away from her body to create a diamond-shaped space between her torso and her arm, we are dealing with a specific type of negative space, namely, trapped space.

Windows, doors, and mirrors in a shot can all have the effect of creating a frame within the frame. A framing element does not have to be a literal frame. It can have as few as two sides and consist of a striking color, texture, or shape. Portrait photographers often project a circular or oval pool of light onto the background behind the sitter to create a framing element. The frame within a frame can be a powerful compositional element, because it doubly focuses attention on the subject. For fashion, portrait, and glamour photos, models often create a framing effect by surrounding their faces with their arms. The mirror is especially interesting when used as a frame, because it can show two perspectives on the same scene, perspectives that can even seem to disagree. When shot so that you cannot see the mirror's frame, mirrors can be particularly disorienting.

Any pronounced line in a photo, such as the edge of an object, will lead the eyes somewhere.

The trapped space in this image mimics the shape of the breasts. Multiple diagonals add energy to the composition. **Photo by Louis Benjamin.**
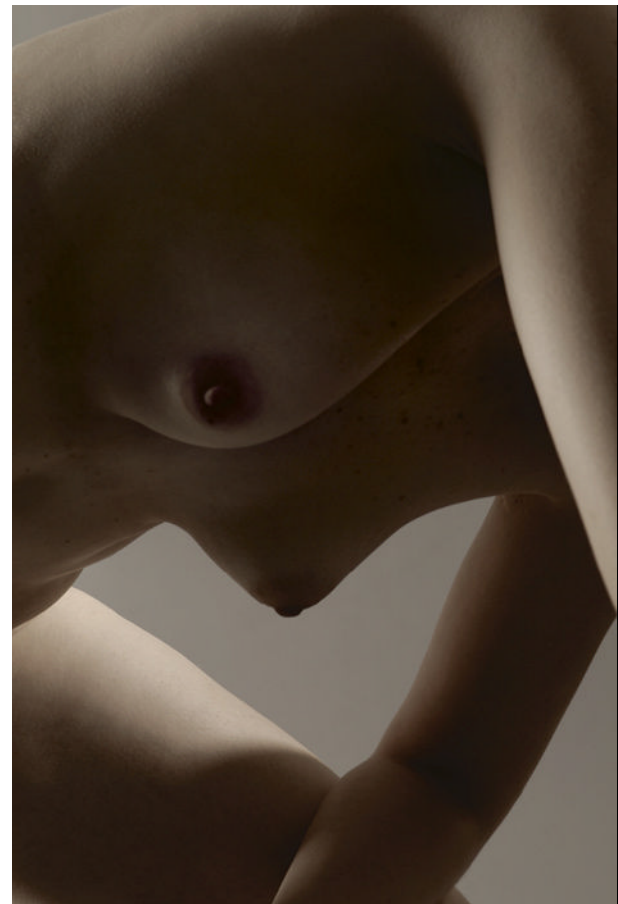
TOP: *In this layered image, the concrete cylinder creates a frame in frame effect for the figure. The earthen shapes beneath it and to the right of the cylinder frame it in turn. Finally, the concrete wall in the background reinforces the figure, and the sloping roof lines direct the eye to the framed body.* **Photo by Richard Rasner (Unique Nudes) of Nakayama Studios.**

BOTTOM: *The lines in this image add a sense of movement while seeming to divide the frame into puzzle-like segments.* **Photo by Louis Benjamin.**

When used strategically in a composition, we refer to them as leading lines. Leading lines often direct the viewer's attention to the sitter, but they can also help to describe the space around the sitter. For example, a model sitting on a road can be shot so that the sides of the road act as leading lines that emphasize a vanishing point. Our eyes are particularly attuned to finding lines, especially verticals, horizontals, and diagonals. The key thing to watch out for is that you don't capture or emphasize lines that lead the eye completely out of the frame.

Sloping, curved, and bent lines are particularly good for adding a sense of energy and

TOP: *The limbs and extremities imply lines that can create visual rhythms. The linear qualities of the limbs are emphasized here with asymmetrical rim lighting. The shadows indicate that the light on the left is stronger than the light on the right.* **Photo by Louis Benjamin.**

BOTTOM: *The composition here is based on a strong diagonal that flirts with the frame's built-in diagonal. The model's head and arms interact strongly with the edge and upper corner of the frame.* **Photo by Louis Benjamin.**

motion to an image. André Kertész produced a dramatic series of distorted nudes, photographed with the aid of a funhouse mirror. These images make lyrical use of curved lines.

The nude offers many compositional opportunities to isolate and emphasize curved elements of the body. Gentle curves can have a particularly sensual quality. S-curves, Z-curves, and zigzag lines inject increasingly more energy and edginess into your image.

The linea alba, which literally means "white line," is a visible structure that runs down the center of the abdomen between the solar plexus and the top of the pelvis. Art students use it as

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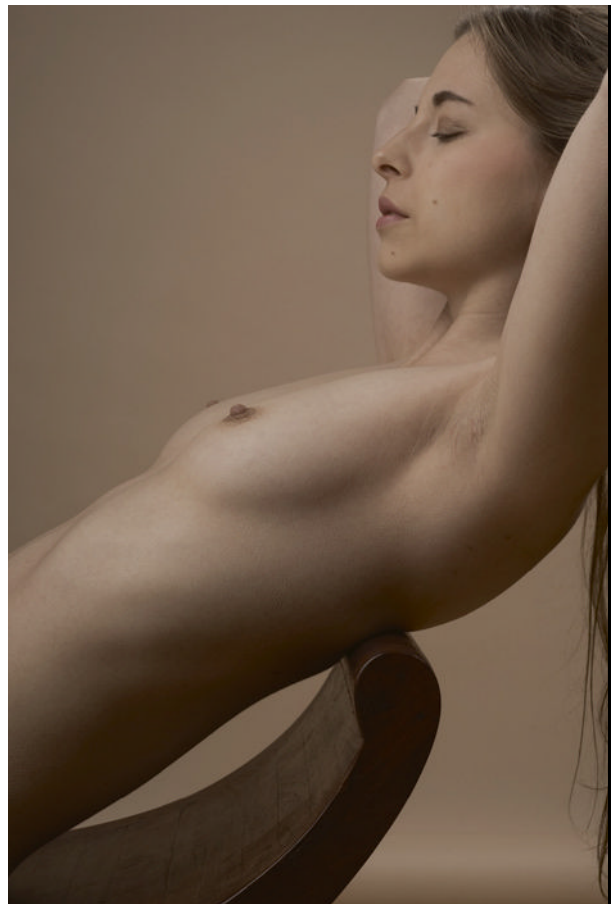
TOP: *The folded figure creates a family of curved lines that gives a swirling spiral effect.* **Photo by Louis Benjamin.**

BOTTOM: *The model's hair suggests a gentle reverse-S curve, which interacts with the curve of the yellow seat.* **Photo by Louis Benjamin.**

a key reference point in learning to draw, and it can be a powerful focus in photographic compositions. Posing and lighting your model in a way that emphasizes the linea alba can produce lyrical and sculptural results.

Your compositions can also be made up of implied lines, such as the line that connects the pupils, the line that connects the nipples, and the vertical from the forehead to the chin. Objects inside the frame can function as anchor points for imaginary lines that provide structure to the image and keep circulating the eye inside the frame.

Triangles, diamonds, circles, and squares are all primitive, flat shapes that our eyes are particularly attuned to find. Many Renaissance paintings were composed on the basis of triangles.

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These shapes do not have to literally appear in the image, but can be implied. For example, Weston's famous Nude, 1936, strongly suggests a triangle connecting the top of Charis' head to each of her feet. Part of what makes that triangle more interesting is that none of its sides parallels any edge of the frame. The triangle is also not equilateral.

Spatial dividers are lines that separate a picture into two parts. The division can be foreground/background, right/left, above/below, or anything else. A doorway is an obvious example (inside/outside), but the water line of a stream also functions as a spatial divider. A shadow can work in this way, too.

In a photo, 3-D form is, of course, an illusion, but it can be an important pictorial element. Form is revealed by shadow, and the deeper the shadow, the greater the depth of the image. Flat, soft lighting reduces the sense of form, while higher contrast, edge-wise lighting brings out the sculptural form. Texture is really a special case of form. It is three-dimensional, and is brought out strongly by hard side lighting. Sculpture and texture are both powerful, and often sensual, compositional elements.

Patterns are about repetition, and work a bit like texture. Lighting effects like louver slats and dappled light are examples of patterns, but artists such as Spencer Tunick are able to make patterns out of whole bodies. Using shallow depth of field, backgrounds can be reduced to patterns of repeating soft forms.

Patterns are generally perceived on the basis of similar shapes, but the shaped elements in a pattern do not have to be the same size. For example, a vanishing-point perspective shot of a
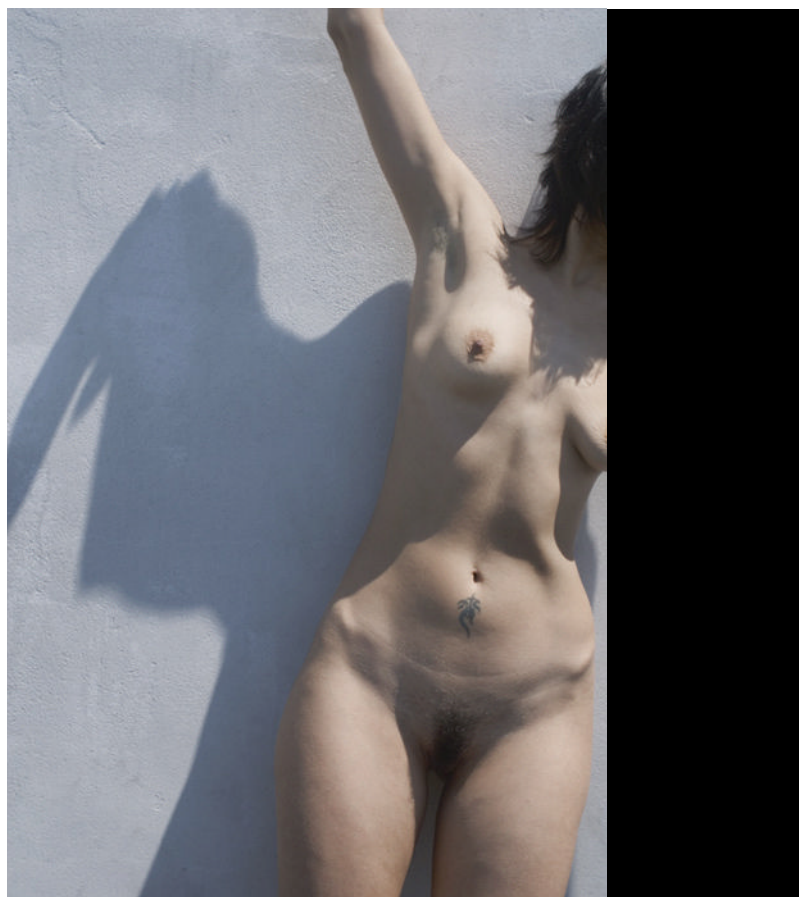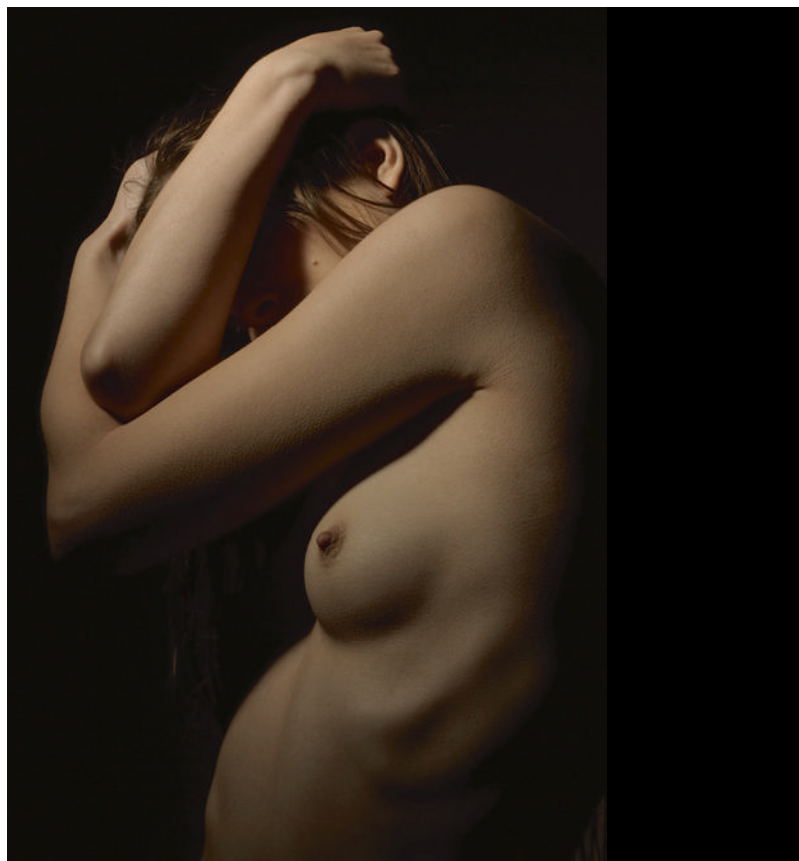
BOTTOM: *An image that relies heavily on shape and color. The trapped spaces all approximate triangles. The model interacts with the yellow sphere and the frame. The sphere and the background are complementary colors. The soft lighting emphasizes the three-dimensional form of the figure and the sphere.* **Photo by Louis Benjamin.**

stone path shows the pattern of stepping stones in decreasing size. An interesting set of size relationships to be aware of is the Fibonacci (pronounced fib-uh-nah-chee) sequence. It is a pattern that can be seen in natural structures such as the inside of a sunflower, the spiral of shells, and the branching of trees, and it can be applied to the graphic design of a photograph. This principle probably has greater application in manipulated images than in directly shot situations.

The first part of the Fibonacci sequence is 0, 1, 1, 2, 3, 5, 8, 13. You can find the next number in the sequence by adding the previous two numbers together (e.g., 13 + 8 = 21, then 21 + 13 = 34, etc.). The sequence is employed throughout architecture and manufacturing. For example, the sizes of 3 × 5 and 5 × 8 index cards are an expression of Fibonacci proportions.

Using Fibonacci in a composition could involve scaling the proportions of shapes according to the sequence, or dividing the space into appropriately scaled sections. A simplistic example of how this might work is to create a composite, showing the body in different scales within the frame. You could pick any dimensions as your reference scale, then distribute figures that are twice, three times, five times, and eight times that size around the frame.

An image can often benefit from balance, which is perceived primarily along the horizontal axis and can be achieved in a number of ways. Symmetrical balance is the easiest to understand and the most straightforward. With symmetry, the elements being balanced are equally distributed on either side of the vertical centerline of the picture. It's no muss, no fuss, and too often it can be boring.

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Earlier, we talked about creating tension in an image by pulling the sitter off the centerline. As you pull the sitter farther from the center, the composition becomes increasingly asymmetrical, and yet many of the most effective of such images will still be balanced. There are no hard and fast rules to define how to achieve asymmetric balance, but balance works on the basis of visual weight. The trick in creating this type of balance is in learning how to read the relative weight of the elements you are framing.

A small object with a lot of visual weight can balance a large object that is not as visually dense. Visual weight is often determined by color or complexity. Mondrian was a master at
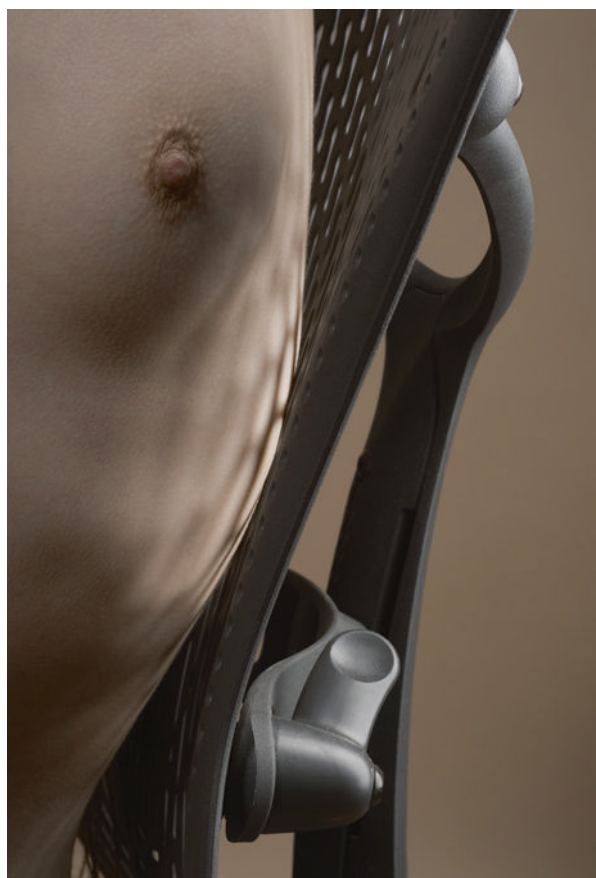
balancing images based on the relative weights of the colors that he used in his compositions.

Another balancing strategy is to think in terms of a lever. If you think of the centerline of your image as the fulcrum, and you place the sitter slightly left of center, a smaller object, such as a pillow, placed to the extreme right will balance the image. Asymmetric balance is something that is done by feel, and once you get it, you will find it relatively easy to do.

Color is one of the most powerful and confounding elements that you can work with in your compositions. Color in photography is relatively "new school" and was not taken seriously in art circles until the late 1970s, when artists such as William Eggleston emerged.

We are speaking here of the creative uses of color, which sometimes means manipulating colors in ways that no photojournalist would. Some photographers have completely avoided color and work purely in black and white, because color can easily overpower an image. While we have indicated elsewhere that some images really do work best in black and white, there are a number of ways to make the color of a straight "capture" work better, rather than stripping it of its color.

Monochromatic doesn't have to mean black and white. Toning or split toning a black-and-white image can add an emotional dimension and richness to an image. Toning was a technique that was popular among the Surrealists and the Photo Secessionists. With split toning, generally the highlights are given one color tone, and a complementary tone is applied to the shadows. In Camera RAW, you can use the HSL/Grayscale tab to convert to black and white, and then use the Split Toning tab to create the effect.

In comparing digital and analog photography, one observation that many photographers have made is that digital color is often much more saturated than film-based work. This may be due in part to the nature of color capture in digital in the first place, but the differences are often unwittingly amplified further in post-production. As one adjusts the tonality of an image with curves or levels in Photoshop, the saturation often increases. The hue/saturation adjustment can help you to create a more restrained color palette. Some photographers
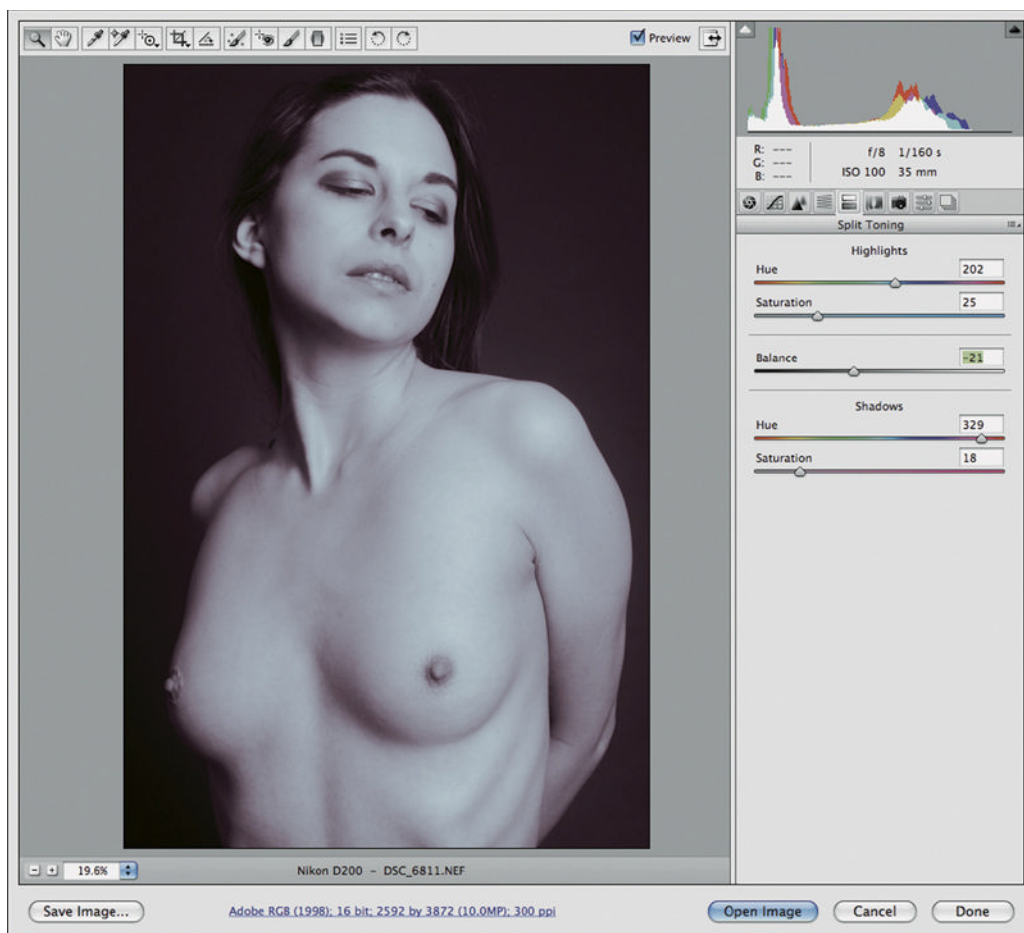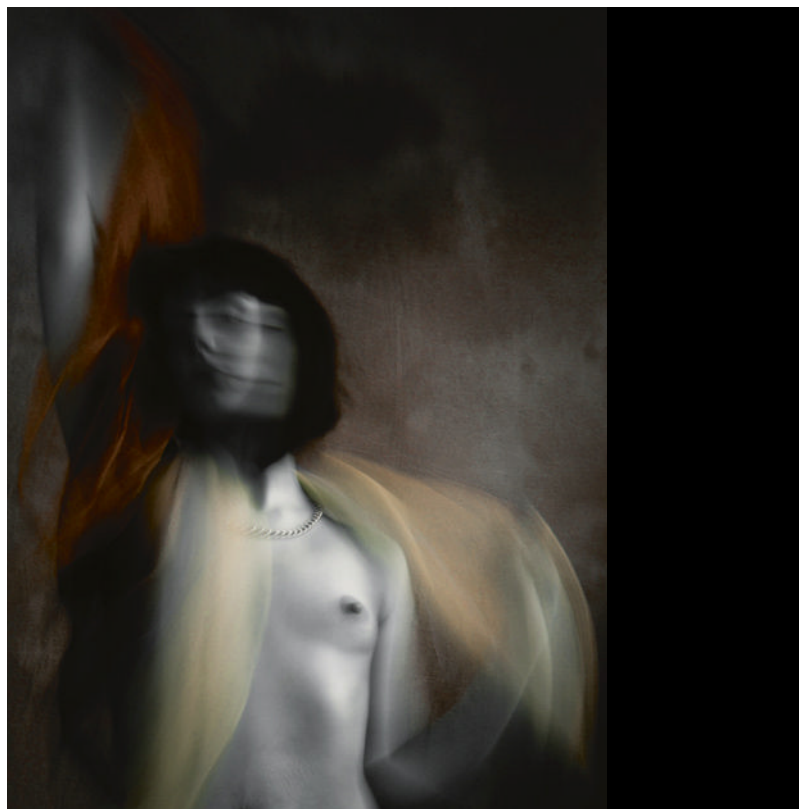
only decrease the saturation enough to compensate for any changes induced by tonal adjustments, while others seek a more desaturated look, reminiscent of the work produced by German photographers in recent years.

A different color strategy is to intentionally induce a color cast. Many Photoshop students are taught to remove color casts, but those casts are generally accidental casts created either by camera errors or lighting problems, and are often aesthetically unpleasant. Inducing a color cast is equivalent to what some painters do by putting a colored glaze over a painting: it unifies the color palette. One way to do this is by intentionally assigning a white balance in Camera RAW that drives the color toward either amber or blue, as we've seen elsewhere. Other

techniques include either applying a photo filter adjustment layer or using the colorize effect in a hue/saturation adjustment layer.

Up to this point, we have talked in terms of making pictures that use a limited color palette. Other color strategies involve being aware of opposing, or "complementary," colors. Opposing colors are the basis of color contrast, and opposing colors are set out for us on the color wheel. However, there is a problem—there are several color wheels, and they don't match up. The different color wheels arise from different ways of looking at color, whether it's mixing light, mixing pigment, or working with perception. For our purposes, the main concerns are the RGB color wheel that we use in Photoshop and the RYB color wheel that is taught in art classes.

THE TWO COLOR WHEELS The RGB color wheel is based on mixing prismatic light. It is the cleanest, most mathematically consistent color model, and it is an additive color model. You can mix R, G, and B to get any color, even if you can't find a monitor capable of displaying it. The RYB color wheel, sometimes known as the psychological color wheel, is based upon mixing pigments, and is a subtractive color model. An important practical implication of mixing pigments is that the resultant color is always darker than the two colors it was mixed from, which means that certain colors cannot be achieved by mixing pigment colors.

RYB has its origin in the work of Johann Wolfgang von Goethe and Michel-Eugène Chevreul (1786–1889). In Chapter 5, we touched upon the work of Goethe, who made important observations about how people perceive color

and developed theories on the psychology of color. Chevreul was a French chemist who was interested in solving problems related to dyeing fabric. In his research, he realized that when colors are placed next to each other, they have a reaction that has nothing to do with the pigments interacting chemically. From that realization, he set off to study the phenomena in a scientific way. His observations in *The Law of Simultaneous Color Contrast*, first published in 1839, influenced the Impressionists, Seurat, and Delacroix.

The preceding information implies that for practical purposes, much of our work needs to be based in the RGB color wheel, but that for artistic purposes, learning to exploit the RYB color wheel will provide opportunities to work more effectively within the psychological dimensions of color.

RGB Opposing Colors	RYB Opposing Colors
Red: Cyan	Red: Green
Green: Magenta	Yellow: Violet
Blue: Yellow	Blue: Orange

Your compositions can be based on color contrasts and color harmonies, and there are essentially three types of color contrast. The first is a nonspecific warm/cool contrast. Warm colors are on the redder end of the spectrum, and cool colors tend toward blue or blue-green.

The second type of color contrast is a harmonic scheme based upon opposing hues on the color wheel of your choice. Simple color harmonies are based on opposing pairs of colors such as orange and blue, but color harmonies based on different triads of colors are also possible.

A third type of color contrast opposes saturated and desaturated color. A near-cliché example of this is the effect of showing a black-and-white figure holding a bright red apple.

A sophisticated approach to saturation contrast.
Reproduced by permission of Nina Pak.

Color harmony is a very large territory to explore. If this is of interest to you, there are dozens of books that elaborate on approaches to color harmony.

In some cases, you may encounter a photo where most of the colors work, but one particular color is a problem. It may be a pool of light that has too much or too little color, or maybe there is a red jacket that has a bit too much orange in it. You can target these specific colors in Photoshop and change them with a hue/saturation adjustment. As the name suggests, you can shift the hue a tiny bit, or change it altogether, and you can increase or decrease the saturation. The adjustment can be further constrained by using the adjustment layer's mask.

We come full circle to simplification. Just as the visual layout of your image can benefit from simplification, the color palette of your image can be simplified. If you look critically at the colors in your photo and see that one doesn't fit with the dominant colors, you can target that color and shift it to a more harmonious hue or reduce its saturation to make it less obvious.

The Camera Is Not an Eye

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"The camera is something of a nuisance in a way. It's recalcitrant. It's determined to do one thing, and you may want to do something else. You have to fuse what you want and what the camera wants."

—Diane Arbus

The camera has often been viewed as a stand-in for the human eye. It has also been held out as a validation of single-point perspective. Neither view is really accurate, but it's instructive to think about these factoids, because it opens the door to a more artistic relationship with the camera. The camera's dynamic range is more limited than that of the eye, and unlike the eye, most lenses are sharp across the entire image plane. Those are just some initial differences. A lot of discussion about creative image production revolves around Photoshop and post-production, but there is much that can and probably should be done in-camera.

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OPPOSITE PAGE: *This layered image was produced in-camera with a projector.* **Reproduced by permission of JD Yezierski.**

A key element of many artistic photographs is a sense of atmosphere and mood. While light and color often has a lot to do with that, the contrast, sharpness, or softness of the image can be key factors, too. Those factors are all products of the lens. The lens also affects the rendering of space, essentially folding or bending space onto the picture plane in different ways.

SHOOT LIKE A PICTORIALIST

A big reason for the popularity of the 35mm format, which ultimately gave rise to DSLRs, was the development of extremely sharp lenses, but for some artistic approaches, a concern with sharpness is anathema.

Around the beginning of the twentieth century, the Photo-Secessionists took up the cause of Pictorialism, which aimed to make photography emulate painting and etching, two dominant forms of art that had legitimacy at the

Reproduced by permission of Alfred Laij.

time. Many of the techniques of Pictorialism involve darkroom work, but soft focus, effects filters, and lens coatings were popular in-camera techniques.

Many effects approximating Pictorialist work can be accomplished by placing an inexpensive UV or skylight filter over your lens and applying clear nail polish to it. Once the nail polish is hardened, you can scratch it to modify the effect. To reuse the filter, be sure to take it off your lens first, and clean with nail polish remover or acetone. Another technique is to spray a fine mist of hairspray up into the air, and wave a skylight filter under the mist until you've built up the right thickness. The hairspray washes off with warm water.

You may have heard that cinematographers smeared Vaseline over their lenses (skylight filters) to get a soft focus effect. Vaseline works, but believe it or not, K-Y Jelly works better, and it's easier to remove. You can try applying it
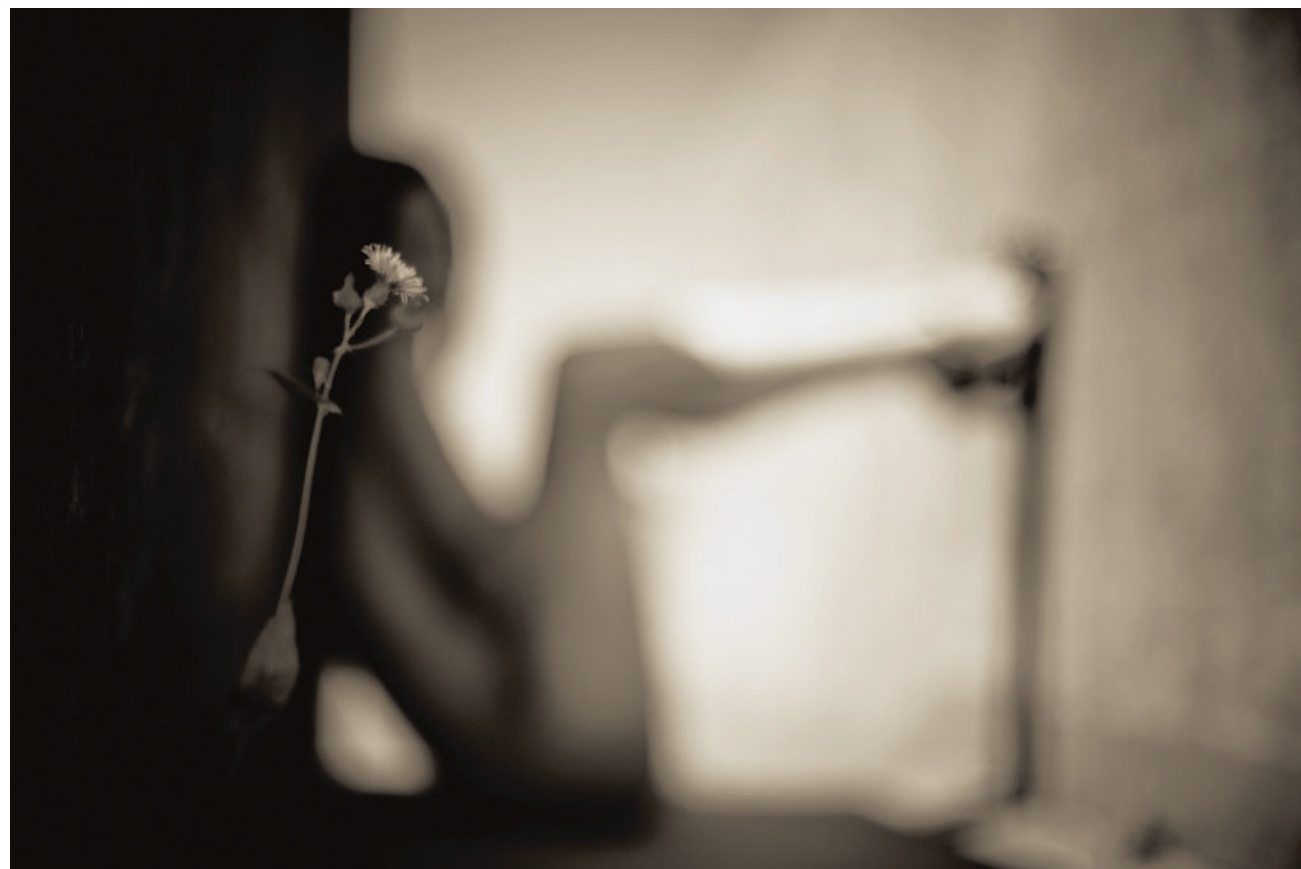
around the edge of the filter, leaving the center clear, or you can spread it more evenly and then smudge it with your thumb. Another way to alter your camera's vision is to attach a skylight filter and stretch a translucent material such as pantyhose or tulle over the lens. This is purely improvisational, and anything goes.

Smoke creates a layered atmospheric effect that can reveal the shape of light beams and functions something like a variable filter. It is heavily used in cinema, and also in fashion photography. It is almost invisible when lit from the front, but shows up clearly when lit from the side or behind. Beyond the more obvious applications, it can be used in subtle ways.

BOKEH We refer to the quality of the part of the image that is out of focus as the bokeh, or boke (pronounced "boke-uh"), an obscure term that apparently originated in Japan. Lenses render images by creating thousands of tiny circles, and these circles become more apparent in the part of the image that is out of focus. With bad bokeh, these circles have hard edges, or worse, edges that are brighter than the center. The look of bad bokeh creates distracting highlights that can undermine the image. With good bokeh, the circles are soft-edged. This characteristic actually has to be designed into the lenses, and certain lenses have a reputation for either good or bad bokeh. Interestingly, Nikon makes a range of lenses with "defocus control," designed to let you vary the bokeh.

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SELECTIVE FOCUS

Selective focus is a variation of soft focus. One type of selective focus can be achieved by creating a very shallow depth of field, using a fast lens with the aperture opened wide (e.g., an 85mm lens at f/1, f/1.4, or f1.8). An example of an image using this technique might be a person holding their hands out, with the hands in sharp focus while the body is blurry. In that case the selective focus is based on foreground vs. background.

LENSBABIES

A different type of selective focus happens when you have an island of sharp focus in the image, and everything around it is defocused. That is a bit more like the way we actually see, in that we have foveal and peripheral vision. Foveal vision is sharp, and peripheral vision is much softer. The two work a bit like picture in picture, and our attention can be focused on one or the other, but most of the time we're seeing both.

The Lensbaby Composer was introduced in 2008, and it offers a complete, easy-to-use selective focus system based on the idea of tilting the lens, a technique that has essentially been available only through the use of expensive precision bellows attachments. The manual-focus Lensbaby is available in both Canon and Nikon mount, and consists of a lens barrel that holds interchangeable optics, fitted into a ball and socket joint. The lens barrel has a knurled focusing ring, and there is a locking dial for the ball and socket joint.

Each optic produces a central sweet spot of sharp focus surrounded by a field of bokeh that gradually gets softer as you move toward the edge of the frame. You can move the sweet spot around the frame by applying tilt. To do
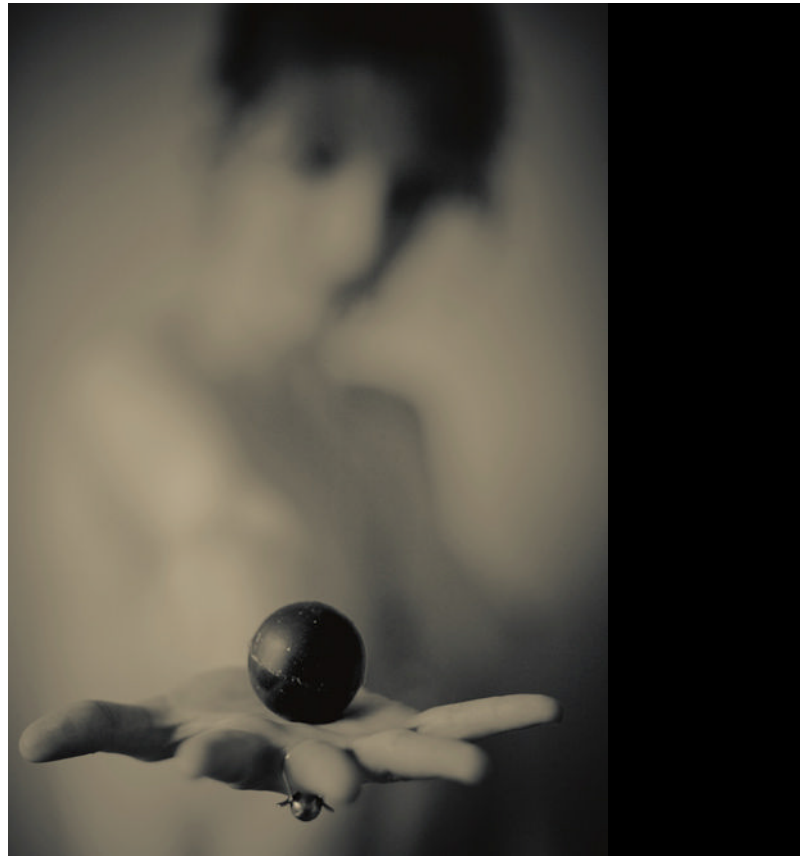
so, you loosen the locking dial on the ball joint and push the barrel in any direction. The locking dial can also be set to a gentle friction that holds the barrel where you put it, but allows you to reposition it without having to constantly lock and unlock the ball.

The interchangeable optics have a focal length of 50mm and include double glass, single glass, plastic, and pinhole/zone plate. The out-of-focus area of each of the optics has very different characteristics, which impart very different moods or attitudes. The pinhole/zone plate optic produces a very striking look, but it is literally an open hole into the camera body, and that raises some concern about introducing dust into the camera.

The sharpness of the optics also increases as you make the aperture smaller. You control the aperture by placing little numbered rings into a recess at the front of the optic, using a magnetic wand. The rings are held in place by magnetic levitation. The approach works and keeps the engineering of the lens simple, but there is a risk of losing aperture rings. You should probably plan on replacing them from time to time.

The lens requires you to practice your manual focusing skills, but remember, only the sweet spot gets completely sharp, and the nature of the lens means that focusing is a bit more forgiving.

On some cameras, attaching the Composer switches off the metering system altogether, but on cameras such as the Nikon D200, D300, and D700 the metering works, and switches into a mode that indicates that only the shutter speed is under your control.

The Lensbaby system has several conversion lenses that screw onto the front of the basic 50mm optic. An available macro kit has +4 and +10 filters that can be used together, and

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a wide-angle/telephoto kit comes with a 0.6× wide-angle lens and a 1.6× telephoto lens.

MORE ON LENSES

In the 35mm film world, lenses with a focal length around 50mm are called "normal" lenses, because their spatial perspective best matches "normal" vision. Lenses in the 28mm to 35mm range are typically thought of as wide-angle lenses, and wider lenses, such as 12mm, are described as "fish-eye" lenses. As the lens gets wider, you will notice that objects that appear straight to the eye begin to appear curved in a wide-angle photo, and the wider the lens, the greater the curvature.

Foreshortening is also emphasized in wide-angle images, meaning that objects in the foreground appear exceptionally large, and objects in the background appear exceptionally small. If you take a picture of someone's face with a wide-angle lens, their nose is likely to dominate the frame, and their ears might look minuscule. Tilting a wide-angle lens also exaggerates the proportions of people and things.

TOP: *Captured with a 12–24mm wide-angle zoom at 13mm on a Nikon D100. The focal length is equivalent to a 19mm lens on a full-frame camera.* **Photo by Louis Benjamin.**

BOTTOM: *Shot with a 28–105mm zoom at 62mm (equivalent to 92mm) at f/4.3.* **Photo by Louis Benjamin.**
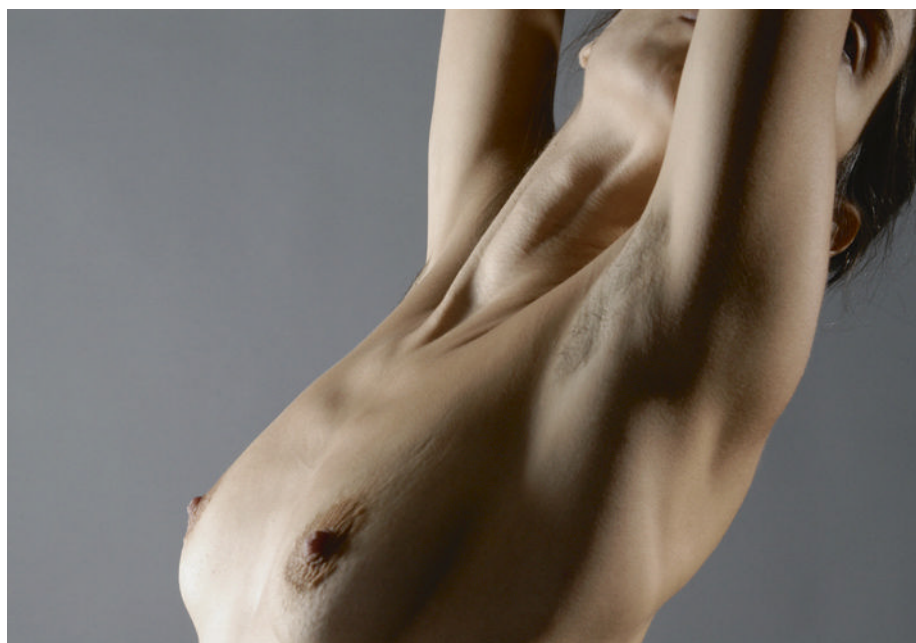
Lenses with focal lengths of 80mm and above are considered telephoto lenses. These lenses compress space, and the effect of fore-shortening is minimized. Lenses in the range of 85mm to 150mm are particularly popular for portraiture, because they can bring you in close to the face, without distorting it.

That brings us to the "speed" of the lens. "Fast" lenses are lenses with a low-numbered maximum aperture, such as f/1.4 or f/1.8. Canon once marketed a 50mm f/1.0 lens, and Stanley Kubrick had a 50mm f/0.7 lens fitted to a movie camera for the making of "Barry Lyndon." In the case of "Lyndon," the fast lens allowed Kubrick to shoot scenes that were literally candle-lit. To make a lens fast requires larger, heavier optics, and consequently, such lenses can be much more expensive.

Dragging the shutter emphasizes the difference between what is moving and what is stationary. **Photo by Louis Benjamin.**

Lenses have a "sweet spot." Even if we have a lens that can open all the way to f/1.0, its performance may be slightly degraded when it is "wide open," and lenses often show degradation when they are "stopped down" all the way, as well. The sweet spot is the range of apertures between the extremes, where the optical performance of the lens is at its peak.

In normal and telephoto lenses, aperture strongly affects depth of field, while with wide-angle lenses, the effect is far less pronounced. Depth of field describes the parts of the image that are in focus, relative to the parts that are out of focus. The longer (higher focal length) the lens, the more pronounced the effect. With a shallow depth of field, the sitter's eyes could be tack-sharp, while his or her ears are "soft."

In the 1970s and 1980s, advances in lens design made the zoom lens standard fare for 35mm cameras, and today, the "kit lenses" sold with most cameras are zooms. While zoom lenses are convenient, single focal length "prime" lenses are much lighter and cheaper.

Sharpness is another reason to like prime lenses. Even with the sharpest zoom lenses, a quality prime lens at the same focal length will be sharper and substantially cheaper. If that hasn't piqued your interest enough, prime lenses can typically be made much faster than zooms at a fraction of the weight. If you're interested in handheld low-light photography, switching to a prime lens will allow you to make images that are far sharper, with dramatically less camera shake. For example, a number of Nikon prime lenses, including a 50mm f/1.4 and an 85mm f/1.8, can easily be purchased new for under $500, while an 80–200 f/2.8 zoom costs nearly twice as much.

It's often still a good idea to have a zoom lens in your arsenal. Something to be aware of is that some zooms lose as much as two stops over the range of the zoom. As the lens stops down, the shutter speed has to decrease to compensate.

DRAGGING THE SHUTTER

Dragging the shutter is the term used for working with low shutter speeds, primarily to take advantage of motion blur. You can place the camera on a tripod and have the subject move, you can have the subject sit still and move the camera, or you can move both subject and camera. You can even do drag shutter work outside in strong sunlight. To make the sunlight dim, place one or more neutral density filters over the lens. Combining drag shutter effects with selective focus has the potential to create some extremely compelling images. Many early street photographs show what appear to be empty streets. The sensitivity of early film required such long exposures that only objects that remained completely stationary registered an image.

Often, high-contrast light will make drag shutter results more interesting. If you mix ambient light and flash, and have the subject move, the flash will freeze the subject and the ambient light will record a ghost trail.

LIGHT PAINTING

Light painting is an interesting application of dragging the shutter. It works best if you black out the windows, place the camera on a tripod, and pre-focus the camera. Set the exposure to 30 seconds, and when you trip the shutter, begin to move the flashlight around to illuminate your subject from different directions.

Be careful about standing too long in one place, or you may be recorded in the image. If you let the light stay for a while in one place, you'll get a hot spot. Diffusion material and colored gels can also be used to modify the look and output of your flashlight. You can also use cardboard or Cinefoil to make a snoot that keeps the flashlight beam narrow. The light

Light painting can have the look of conventional lighting, or the light source can be made very obvious. **Photo by Louis Benjamin.**

source can be shaded to prevent light trails from showing up in the image, or you can intentionally allow the flashlight to register, and even point it directly at the camera.

You can have your sitter hold still for part of the time, then quickly change position and hold again, to create images that look like step-wise superimpositions. Alternately, you can have the model move slowly and constantly for a different effect. Turning the light on and off during the process can allow your subject to change position without registering a motion trail.

The results of this technique are extremely variable. To succeed with it requires a willingness to give up control to some degree, and experiment. Even successful results are hard to duplicate, a process that is artistic at its very heart.

Reproduced by permission of JD Yezierski.

PROJECTIONS

A projected image can be used to create layered images in-camera. More than one projector can be used, and the resulting image can be a challenging visual puzzle. The relatively dim light of the projector opens the possibility of having the subject move, adding a layer of movement.

YOUR CHOICE OF WEAPON

Depending on the kind of work you intend to produce, your choice of camera can be very important. The ease of use and responsiveness of the camera affect the flow of the shoot and even the images that you are able to produce.

Infrared film radically changes the way the camera sees, and offers rich aesthetic opportunities. There are a few digital alternatives. Techniques in Photoshop, mainly centered around emphasizing the red channel content over others, attempt to emulate the look of infrared, but they are not the same thing. Fuji makes the FinePix IS-1 (www.fujifilmusa.com), a nine-megapixel digital camera designed specifically for IR photography. Its target market is law enforcement, but it certainly has artistic applications. Other ways of doing digital IR involve either adding filters that make the viewfinder useless and require tediously long exposures, or modifying your camera for dedicated use. (See www.wrotniak.net/photo/infrared/.)

When your sitter is aware that you're using a special camera, they're likely to relate to you in a different way, and that will come across in your photos. Timothy Greenfield-Sanders, who did the book *XXX: 30 Porn Star Portraits*, uses a vintage 8 × 10 Deardorf view camera. The antique-looking plain wooden box with a lens in the front and a bulb shutter release is a very different animal from the present-day DSLR that most sitters are used to.

Many photographers have said that they chose large-format cameras because it forces them to slow down their process. The nature

and expense of operation of those cameras demanded a careful, thoughtful approach. The long exposures needed when the early photographs were made also affected the behavior of the sitters: photographers would tell the sitters not to smile, because it made them look like corpses, and of course they had to sit very still. Stephen Shore continues to apply the lessons he learned over his years of shooting with an 8 × 10 camera to his work with a digital camera: "I never bracket, and never take more than one picture of the same thing," he says (*Image Makers/Image Takers*, p. 51).

Employing an approach that is quite different from the likes of Shore, Leica shooter Garry Winogrand typically shot three rolls of Tri-X (at least 108 frames) every single day (*Modern Photography*, 06/1988). It has been widely reported that when he died in 1984, he left 2500 rolls of undeveloped film, 6500 rolls of processed film that he had not proofed, and 3000 rolls of contact sheets that he apparently had not looked at. Part of the reason he could produce so many images was the relatively economical cost of 35mm film and the ease of operation of the camera. It was also because his fundamental process was about seeing in the edit, rather than shooting with preconceived notions about the images he wanted to make. He also knew the workings of his camera extremely well.

The advent of the Leica transformed photojournalism because its exceptionally sharp optics, small size, and nearly silent operation made it fast and unobtrusive. The M4 rangefinder camera was the camera of choice of a legion of photojournalistic photographers. It remains to be seen whether Leica's M8 digital camera will enjoy anything close to the popularity and cult status of the M4.

The digital SLR is very popular in today's market, in part because the SLR format doesn't have the potential problems of parallax that are inherent in rangefinder (e.g., Leica M series)
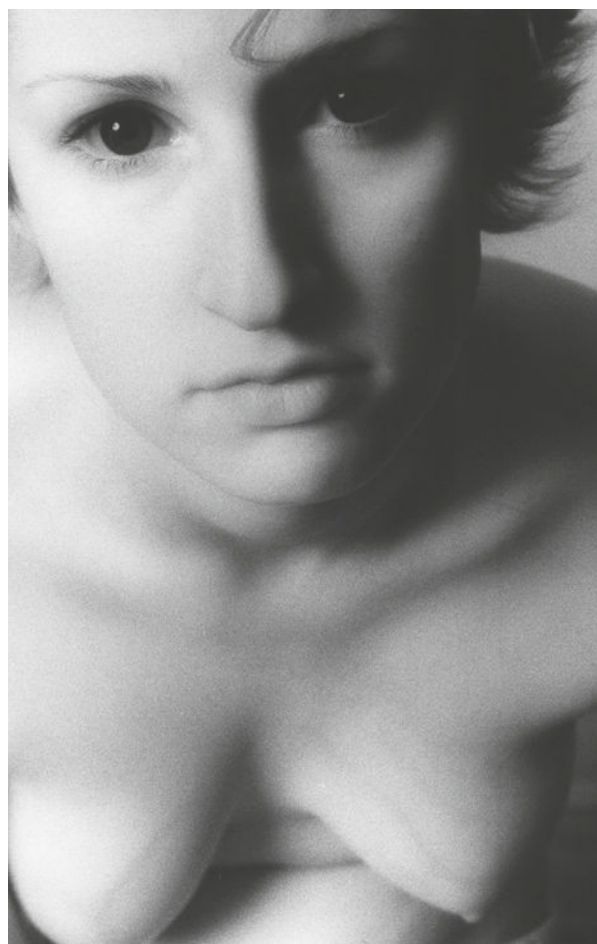
Luminous white skin and coal-black eyes were rendered with infrared film. © **2009 Harvey Stein.**

and twin-lens reflex designs. Most think the term SLR means a camera based on the 35mm format, but it simply means single-lens reflex.

There are really two distinct SLR formats in the digital world. Cameras like the Hasselblad H3D, the Mamiya ZD, and the Sinar Hy6 are all medium-format digital SLR cameras. Phase One and Leaf also make digital backs that fit onto cameras that were originally designed to shoot medium-format film, and in recent years, they have entered into partnerships to build new camera bodies.

The excitement over medium-format digital has some technical merit as well as psychological weight, but it comes at a price: these cameras can cost anywhere from $20,000

to $44,000 with just one lens. These cameras derive most of the technical benefits from their larger sensors, which exhibit better shadow detail because of larger pixels in the sensor. The cameras also capture true 16-bit color, while 35mm-style DSLRs like the Canon 1D series and the Nikon D3x have 14-bit color. The extra two bits of color depth are marginal relative to the jump between 8-bit and 14-bit, but the psychological benefit cannot be understated. When you're using a special camera, that affects your attitude, which in turn affects the sitter.

Digital cameras based on the 35mm format have really split into two categories at this point. Canon and Nikon both offer several models with "full-frame" or "FX format" sensors. The full-frame sensors are about the size of a full 35mm film frame, while earlier cameras are based on sensors that are at least 1/3 smaller. As we saw with the even larger sensors found in the medium-format cameras, full-frame sensors offer larger pixels with better shadow detail than their smaller predecessors. They also produce dramatically less digital noise at ISO settings as high as 3200. This means that in low light, they are capable of making noise-free images at much higher shutter speeds. When you consider that some of the low-end cameras exhibit noise issues at ISO 800, that's at least three stops—which could mean the difference between having to shoot at 1/15 second and being able to shoot at 1/125.

The size of the sensor also has a cropping effect on the image, which is where the focal length multiplier comes from. On all Nikon models, cameras with the smaller-format sensors are designated "DX" format, and the multiplier is 1.5. On Canons, the equivalent multiplier is usually 1.6. On cameras equipped with an FX sensor, there is no multiplier. That means that a 50mm lens on a DX camera is effectively 75mm, and a 100mm lens is effectively 150mm.

The practical implication of this is that FX cameras have complete optical parity with film-based cameras, and can use any lens that was designed for a film-based 35mm camera. There are no special "digital" lenses for these cameras. Lens manufacturers can design lenses for the smaller DX sensor that project an image that covers a smaller area on the film/sensor plane. Such lenses can be made smaller, lighter, and cheaper than the equivalent lenses designed for use with an FX sensor or film. And since DX lenses can't cover the full area of an FX sensor, Nikon's cameras automatically crop down when you attach a DX lens to an FX camera. The issue is most acute with wide-angle lenses, and most, if not all, DX-type lenses are wide-angle.

We've seen that for certain technical applications and ways of working, a specific type of camera can make a huge difference, but for the rest of us, the way you use the camera matters far more than what camera you use. While high-end cameras will likely be of interest to well-heeled hobbyists and photographers who shoot both art and commercial campaigns, lots of high-quality fine art work will continue to be shot with cameras like the Canon Digital Rebel XSi (450D) and the Nikon D60, which both sell for well under $1000. Some artists are even using cheaper, simpler, point-and-shoot models very effectively.

One key to making better photos with your camera is to learn the essential controls so that it vanishes as much as possible. The array of features can be overwhelming, so it's a good idea to prioritize the features of interest and learn how they work one at a time. If you've always only used program mode, learn to use manual mode. Play with over- and underexposing images to understand how the camera sees and how exposure relates to expression.

Making Images

Part THREE

3

Working with Models

FINDING MODELS

Finding a sitter is essentially a casting process. Even in a portrait, you're telling a kind of story, and not everyone can express the qualities that you're looking to show. Thus, it helps to be clear about what you're looking for, and be selective. Some photographers prefer novices or amateurs, because they haven't developed ingrained habits and preconceived notions about how to model. Sometimes new models can bring a little nervous energy to a shoot that can be good for the images.

One of the simplest ways to find models is to join a networking web site and build a profile with a portfolio of your images. Many sites have a free membership option and make this easy to do. Sites such as ModelMayhem.com, OneModelPlace.com, and Book.fr are specific to modeling, while others such as deviantART.com are

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OPPOSITE PAGE: *"Working title: 'After Rheims' in honor of one of my favourite photographers." Part of the "Most Beautiful Woman in Town" project, a collaboration with Justyna Neryng, 2007, UK.* **Reproduced by permission of Tobias Slater-Hunt.**

broader, but still have an artistic focus. Sites like Facebook and MySpace are broader still. Finally, sites such as meetup.com have interest groups organized around activities like photography or modeling. On Craigslist, you can find listings by models who want to build their portfolios, and you can place your own listings. It is not uncommon for these listings to include links to a portfolio page.

Whatever online presence you establish, you will find that prospecting for people to work with is not a passive process. No matter how good your photos are, people are not likely to just show up asking to be photographed, at least not until you have a lot of friends and links to lots of other profiles. It's best to make a habit of browsing the site from time to time to make new contacts. Some sites allow you to search for models within a certain number of miles, and some allow you to search by criteria such as models who pose for art nudes.

There is a certain etiquette to having an online presence. If you see someone online that you're interested in working with, it's helpful to give some indication of what you like about that person's modeling. Most of the sites allow you to leave public comments on the images themselves. They also have some sort of private message mechanism. Some have something akin to the friends feature on MySpace. It's a good idea to post a comment or establish some other communication with the model before you send a friend request.

What you see is not necessarily what you get. Operating through the networking sites can put you in touch with a lot of models fast, but that doesn't mean that you'll get the best results. Expect no-shows, last-minute cancellations, and awkward novices among the good connections. You may get in touch with a model who seems enthusiastic to work with you at the start, but somehow never manages to schedule a shoot. Other seemingly good prospects will just delete their profiles without notice, leaving you with no way to keep in touch with them.

Web sites are not the only way to network. Finding sitters through your own social circles can often put you in touch with more interesting people who will even afford you a certain amount of trust up front. You can literally meet subjects in a coffee shop or a bar. Justine Kurland, who has made a name for herself making photographs of earthy mothers in wilderness settings, describes prospecting for subjects this way: "I hang out in health food stores and playgrounds with a box of prints and talk to strangers, try to show them pictures, tell them what it's about. The ones who believe in the vision are the ones who come." (*New York Times*, 2/25/07, "So They All Get Naked and Play, Like Mom Did." www.nytimes.com/2007/02/25/arts/design/25kino.html.)

Modeling agencies understand the value of high-quality photos for their models' portfolios and they often send them out for test shoots. Some test shoot models will agree to do nude or semi-nude shots after the portfolio work is done. The fashion model look isn't what every fine art photographer is looking for, but if it fits your aesthetic, all you need to get started is about a dozen quality samples of your work to show the agencies.

The expectation is that you will shoot some number of photos that they can use in the models' books. If you do great work, you can have access to a large pool of talent that has been vetted and has high professional standards, but if you don't produce images of high enough quality and in a timely fashion, you won't have the opportunity to shoot any more tests with their models.

In larger cities, photographers often arrange meet-'n-greet events and shoot-offs, where you have the opportunity to bring a portfolio, business cards, or leave-behinds, and even your camera. These can be great events for finding new talent to work with, and even for shooting new portfolio images.

A MATTER OF COMFORT, COLLABORATION, AND TRUST

Perhaps the most important thing to be aware of is that your sitter brings expectations to the shoot, and it is important to manage those expectations. If you're offering photos as any part of the compensation for shooting, it's important to get the images to the model in a timely fashion. A kind of negotiation happens whenever you make a picture of someone, and that involves reconciling the image that you want to make with the way that person wants to be seen. You can often see this in play after the shoot. If you give the model the opportunity to select photos for his or her portfolio, very often, he or she will select different photos than you would.

The words "model," "subject," and "sitter" are all somewhat problematic as a way of referring to the person who will be in front of the camera, because each term implies a certain power relationship and almost constrains the nature of the ways in which the person on either side of the camera will think about the collaboration.

In a similar way, we often talk in terms of the model "posing," a concept that has its own built-in limitations. As you read the rest of this chapter, it is hoped that you will take these terms in the most expansive context. A lot of creative juice comes from bending or breaking with the norms. The model does not have to be a plastic figure that strikes poses. Certainly, in the case of a portrait, you're trying to capture some "realistic" aspect of a personality that will communicate visually. In the case of a tableau, the sitter can breathe life into a believable character that you create collaboratively and photograph in the context of a kind of performance. The photographer does not have to play the detached observer, but can operate more like a stage or screen director who gives the actor what they need to elicit the best performance. You can be coach, cheerleader, or provocateur, as well.

A condition of trust is crucial. It's unfortunate that art models, whether they model for drawing studios or photographers, are compelled to protect themselves from predatory behavior. GWC, short for "guy with camera," is a term models have for hacks that use their cameras as a pretense to leer at them naked or to get them into bed. Art history may be full of lore about sexual liaisons between artists and their muses, but it's risky. Bear in mind that word about any transgressions can spread widely and efficiently with the aid of social networking sites.

Some models will want to meet, and some will want to talk on the phone in advance of shooting for the first time. This is often so that they can give you a "sniff test." If you're shooting with a model for the first time, she or he may want to bring someone along for security.

During the shoot, you shouldn't forget that even without clothing, your sitter has a personal space that you don't want to violate. Touching is risky and should be avoided, but if you feel you must touch in a way that gives direction, ask permission, and don't forget that "no" means "no."

Models on some of the networking sites will often post disclaimers like "no pornography" or "tasteful nudes only." These statements are boundary markers, and because everyone defines concepts like pornography and tastefulness differently, it's important to come to an understanding of what your potential model means by that language ahead of time. In the worst case, not doing so could mean a complete waste of time.

It is often useful to show your sitter work samples, sketches, or reference material in advance of shooting, so that they will have an idea of where you are going with your concept, but don't overwhelm them. The British have a lyrical phrase for giving too much information: "you're blinding me with science." You want

to develop a sense of how much information your model wants and needs, and keep them in the loop without overdoing it. Particularly with more conceptual or performance-oriented work, your model may need more background information to strike the right tone, but too much info will probably have the opposite effect.

COMPENSATION

You can expect to negotiate the terms of compensation every time you book a shoot. There are professional art models who make a living from posing, there are hobbyist models who just do it for the love and adventure of it, and there are novice models who hope to be paid well in the future, but need a portfolio to get started. You can expect to pay as much as $150 per hour or more for high-end models, while some other models just want good pictures out of the deal. Art models often work for schools and drawing or painting sessions at $25–$50 per hour, but charge substantially more to be photographed.

Another form of compensation in common use on the networking sites is abbreviated TFCD or TFP. The abbreviations mean time for CD and time for print, respectively, and they are sometimes shortened to TF or TF*. Agency models will often agree to similar arrangements as a test shoot or a trade. The idea is that the model gives his or her time in exchange for images. The phrases mean very different things to different people. If you plan to shoot with these kinds of agreements, you should develop your own clear and consistent set of terms for entering into them, and state your policy before you begin your shoot.

The essence of a TF agreement comes down to the value of your images and time versus the value of the model's time and talent. In valuing your images, you should consider that even if you don't pay out of pocket at the time of

the shoot, there is sill some cost associated with each shoot. There are a number of books that devote one or more chapters to assessing your cost of doing business, so we won't go into that here. However, it is important for you to make some determination of the value of your images based in part on your cost of producing work when you develop your TF policy.

Whether you're doing TF or licensing your images to a client, the same pricing considerations should apply. This includes the basic creative fee, any retouching and post-production fees, and licensing fees based on usage. A fair deal works out to parity between what you would charge and what the model would charge. Any model that describes a TF arrangement as "working for free" does not see any value in the photographer's work.

Some models expect to leave a TF shoot with a CD containing every frame that was captured during the session. That is tantamount to using your talents as a photo booth. If you are interested in promoting your work and developing your reputation based on the quality of your images, it's never a good idea to agree to that sort of arrangement. Often, those same models will take your images and edit them. The result can be a bad image that is attributed to you. Some photographers have all models sign a release that stipulates that the images cannot be edited and are licensed to the model only for specific uses, such as self-promotion. We will discuss more on releases shortly.

Consider these figures: in New York, there are a number of portfolio photographers who charge about $250 to $500 for a portfolio session. You review the images and pick your favorites. The photographers will in turn do "basic retouching" on a limited number of images, usually four to eight. They charge extra for more involved retouching and for additional finished images. Advanced retouching varies widely in price, but can often go for something

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in the range of $50 per image. Some, but not all, portfolio photographers will also release a CD of all the frames from the shoot in low-resolution web-size files. Typically, the photographers retain the copyright to the photos and only grant the model the right to use the photos for self-promotion and portfolio usage.

Most models who have a pricing policy have a two-hour minimum, and some give a price break for three or more hours. So the model's fees for a three-hour session might range anywhere from $300 to $450. That's about parity with the fees for a basic portfolio package including about six images with basic retouching.

Some models maintain portfolios on sites like deviantART, where they have the ability to resell prints. Others may want the option to license the images from a session for a magazine, a book, or a pay site. The economics of each of these scenarios can vary widely, but it is worthwhile to research these media and develop your own pricing policy for licensing these ancillary rights.

RELEASES

U.S. law governing model releases has to do with granting the photographer permission to use a photo for purposes of trade. Specifically, you can't use someone's image in a way that implies that they endorse a product or demonstrate its benefits without their permission in the form of a release.

Editorial use of a person's image, which includes fine art, does not require a release and is protected under the first amendment. However, even though the fine art use of an image may place you on solid legal footing, that doesn't prevent you from having to defend yourself in the event that someone brings a lawsuit over the use of their image. *Nussenzweig v. diCorcia* is a celebrated case that concluded that the fine art use of an image,

even including limited edition sales of prints, is not "for purposes of trade." The case lasted from 2005 through most of 2007, when the New York Court of Appeals ruled in favor of diCorcia. The cost of Philip-Lorca diCorcia's defense had to be enormous. As an established A-list artist, he had the resources of the Pace/MacGill gallery at his disposal, something that most of us do not.

Thus, it's a good idea to have your model sign a release anyway, as a way of having the model acknowledge how the photos might be used. You can get language for your model release from a number of places, including the ASMP (American Society of Media Photographers) web site. The language doesn't vary much between the different sources.

You may also encounter models (usually early in their careers) who want you to sign a release form that they have prepared, in addition to your own. It is likely that the document contains stipulations about how you can use the photos. It is probably not a good idea to sign such documents. Maybe you can amend your own release to address any concerns the model may have; otherwise, it's best to walk away from such arrangements.

COPYRIGHT

Standard model releases only contain language about the photographer's use of the image. It is a good idea to add language to the release or have the model sign a second document that makes it clear that you are the copyright holder and stipulates the usage rights granted to the model. Many photographers state that the model has the right to use the photos for self-promotion only, and even stipulate that the images cannot be edited.

Some models believe that they are the author or co-author of a photo, based either on the fact that their likeness appears in the image, or on the degree of collaboration in creating the idea.

It is important to recognize that copyright law is designed to protect the unique expression of the idea and not the idea itself, and that it automatically recognizes the copyright as belonging to the photographer from the moment the exposure is made.

If you feel generous and want to declare that you and the model jointly own the copyright, you can, but joint ownership means that either party can do whatever they like with the image, without securing the permission of the other, and without sharing in any benefits of that usage. Instead of joint copyright, you might consider retaining the copyright and granting broad but specific usage rights to the model instead.

What if your copyright is infringed? Even though copyright is automatically granted, you can't recover much in the way of damages unless you register your images. The easiest and most economical way to register is in bulk, before the images are published. Your pictures should always run with a copyright notice that reads

© + year of first publication + your name. This format is recognized internationally. Be sure to use the copyright symbol—circle c—not parentheses (c).

2257 REGULATIONS

If the work you undertake is of a sexual nature, there is one other legal matter that warrants attention. Imagery that depicts "sexually explicit conduct," whether it's real or simulated, including masturbation and "lascivious exhibition of the genitals or pubic area" falls under the regulation of the United States Code, Title 18, Section 2257. You will need to maintain records documenting the age and names of the performers at the time the imagery was made.

The vast majority of nude art, and even erotic art photography, is not affected by this code, but these regulations are in a constant state of flux, and it is a good idea for the erotic artist to keep an eye on the latest developments.

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The Shoot

I n a shoot, all of the equipment is in service of getting the image, and an effective image requires the right connection with the model. If you get lost in dealing with the camera, the lights, or any of the logistics of shooting, your chances of getting a strong image are greatly reduced. We looked at various qualities of light in Chapter 5, and much of this chapter will discuss some of the equipment that can be used to produce those qualities. The equipment described here ranges from items that you might use in a small, intimate setting to equipment for a major production shoot with multiple models.

Some photographers always work with a minimalist camera and lighting arrangement as a way of keeping the equipment from dampening the interaction. Richard Avedon would set his camera on a tripod and never look through the viewfinder (or at the ground glass of his view camera) while he was shooting, because he felt it imposed too great a separation. He used a remote shutter release, moved around the room, and often used psychology to provoke responses in his sitters.

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The more you can make the equipment and process disappear, the stronger your connection to the subject.

If you're working with more elaborate set-ups, it's helpful to minimize the downtime of futzing with equipment by planning and preparing ahead of time. If your camera is new, learn as much as you can about how to perform the operations you'll need before the shoot. Or, if you've got the finances, hire a skilled assistant who'll take care of it all for you!

You will probably need to break the ice before you do any actual shooting. This may be as much for you as for the model. Lots of photographers who are beginning to shoot nudes are actually nervous being around naked models. You want to be relaxed and confident. Conversation can be almost anything, but it helps if you're genuinely interested in your sitter. It can be just small talk, but if you say too little, that almost guarantees that your model will be stiff and ill at ease, or just plain bored. Talking about current events can be tricky, because it can stray into hot-button topics like religion and politics. If your model volunteers information about a girlfriend or boyfriend, it's probably okay to talk cordially about the subject, but you don't want to give the impression that you're prying or coming on to them.

For nudes there is the practical issue of skin. Tight-fitting clothing leaves marks. Experienced nude models often arrive at the shoot wearing loose-fitting clothing and no underwear. If your model arrives wearing tight clothes, offer her or him a robe and plan to wait around half an hour for the marks to go away. Otherwise, you'll probably have some work to do in Photoshop with the healing brush after the fact.

Preparation and giving good direction can make a big difference in your shoot. No one directorial style works for all situations. Irving

Penn's book *A Notebook at Random* shows preparatory sketches he used for some of his fashion shoots next to the finely crafted finished product. These are examples of pre-visualization and shooting with a clear end in mind, where the model almost functions as a prop. On the other hand, various accounts of his "Earthly Bodies" sessions describe his interactions with his models as being highly collaborative and almost nonverbal, where Penn communicated with them in a primal way using "coos, murmurs, and supportive breathing to convey that everything was wonderful, just right in this perfect situation."

Sometimes, it helps to show a few photos of poses and concepts that are interesting before you start shooting, but photos can have too much specific information. Sketching or tracing shots and poses you're interested in can simplify the image so that your sitter will relate only to the form of it. Don't show too many, and remember that you can always refer back to your collection of posing ideas and introduce new ones during the shoot if you have extra time or start to lose momentum.

Once you start shooting, it's important to keep the communication open. Directing the model during the shoot can work in a number of ways. The approach depends somewhat on the model's style of working. Many experienced models know what sides to show, and are also aware of how light falls on their bodies. On the other hand, many models can fall into rote poses. Look for ways to coach them to strengthen the poses, or suggest alternatives that build on their strong points. If your sitter is new to modeling, it's especially important to keep your input to small chunks, interspersed with banter. You want to use simple directives like "Turn your head a little more" or "Can you bring your chin down a bit?" For more elaborate poses, be ready to act out your idea, even badly.

Your sitter wants confident, competent direction, a sense of where your shoot is going, and an opportunity to collaborate. Paraphrasing a post from a model in an online forum, a great photographer does the following:

- Comes to the shoot with creative and innovative ideas
- Listens to a model who is creative
- Does not make the model come up with all the ideas
- Tells a model "chin down," "soften your eyes," "pop your hip, push out your pelvis, and twist to elongate"
- Tells a model "you have a hair out of place," then comes and fixes it

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Music can help to create atmosphere during the shoot and take some of the pressure off you for creating banter. Some models routinely bring music, and others will bring it if asked. You can play your own music, but always be sensitive to how it affects the space of the shoot. If it's too loud, is too distracting, or doesn't seem to suit the sitter's tastes, turn it down, change it, or turn it off.

There can be a lot to think about, prepare, and manage before, during, and after a shoot. But a shoot shouldn't be overly stressful, and even if it's not giddy fun, it should be enjoyable, and the results should be satisfying.

STUDIO OR NOT

Both the benefit and the challenge of the studio is that it starts as a blank canvas. Many photographers simply put up some muslin or seamless paper and a light or two and shoot in a minimalist style, but it can be useful to think of a studio as something more akin to a movie sound stage. Some photographers even construct sets inside the studio. A bit of wainscoting and

some vintage-looking wallpaper on a piece of sheetrock with a support can transform a bare white-painted cinder block space into the wall of a country cottage. The studio is a place where you can build illusions.

In the early part of David LaChapelle's career, he converted a very small apartment into a studio, and had to find creative ways of working within the small space. After he had gained a degree of success and moved into a much more expansive space, he felt compelled to build a small set that approximated the tiny space he was used to working inside. He fed creatively off the constraint.

Spencer Tunick creates spectacles with hundreds of naked bodies sprawled across expanses of terrain, populating famous locales, or filling the voids of striking pieces of architecture. The studio setting is far too restricted for the kinds of images he is interested in creating. His is location shooting in the extreme.

NATURAL LIGHT VS. CONTINUOUS LIGHT VS. STROBES

Some photographers swear by natural light, and it is the only light they use. Paolo Roversi is known for his elegant nudes, shot mostly with window light. Photographers who work with natural light become keenly aware of how it changes and moves throughout the day. Many shoot mainly in the "golden hours" near the break of day and sunset, and many more have a strong appreciation for how much the sun can change within just 15 or 20 minutes.

Helmut Newton did a series of diptychs involving the opposition of "naked" and "clothed." He shot part of the series at a villa in northern Italy in 1981. In one of his first diptychs, he shot the same woman clothed and undressed (except for high heels) in similar poses and in the same location. He didn't try to make

a strict duplication of the pose, in part because he realized that the light would change, and he didn't want the light to be the only difference in the images. In essence, he was acknowledging and embracing the constantly changing character of natural light and emphasizing that the two moments were unique.

Some photographers prefer to have more controlled lighting. Continuous lights offer visual confirmation of what you're going to get before you trip the shutter, while strobes offer intensity and the power of stopping motion. Strobes also offer a range of light-shaping tools that are not available with continuous lights. We'll cover a number of lighting instruments and light-shaping tools later in this chapter.

PROGRAM AND PREFERRED MODES

One way to take creative control of your shots is to override program mode on your camera. This doesn't necessarily mean switching completely to manual, and it really works by degrees.

The first degree of override might be called P* mode, because many cameras put an asterisk next to the program mode indicator when you override the default setting. In the old days, when you put your camera in program mode, you simply had to accept the determination of shutter speed and aperture made by the camera. Many current models have a thumb wheel that allows you to bias the choice that the camera makes: press the shutter button halfway down to get a meter reading, then spin the wheel one way to get equivalent exposures with faster shutter speeds, or the other way to get equivalent exposures with wider apertures. When you get to the aperture or shutter speed you like, press the shutter button the rest of the way.

Shutter preferred mode is best for situations where you are most concerned with the duration of the exposure and you are willing to let the camera determine the aperture. Very often,

we're talking about dragging the shutter to emphasize motion blur and camera shake, or speeding up the shutter to freeze motion. Drag shutter effects only work with a certain amount of ambient or continuous light present.

Aperture preferred mode is best for situations where the primary concern is depth of field. The camera will set the shutter speed for you. When shooting in this way, you can anticipate what will be in focus. With sufficient depth of field, you can pre-focus the camera and just shoot without having to wait for auto-focus. This can be particularly useful in low-light situations where auto-focus systems sometimes struggle to get a lock. The downside is that your shutter speed can drop to the point where motion blur and camera shake are a problem.

EXPOSURE, THE HISTOGRAM, AND MANUAL MODE

Your camera's metering system generally makes a "correct" exposure by calculating the shutter and aperture setting so that the resulting tones in the image average out to 18% gray. To properly register a low-key image, we need to tell the camera to underexpose the image. Similarly, we need to tell the camera to overexpose in order to register a high-key image properly. That's where exposure compensation comes in.

Exposure compensation tells the camera to over- or underexpose the image in program, shutter, or aperture mode. There is no exposure compensation in manual mode, but if you want to over- or underexpose in manual, you can use the built-in metering system to determine exposure or use a handheld meter, then simply adjust either the aperture or shutter speed.

As you increase or decrease the exposure, the peaks in the histogram will move accordingly. While a "normal" histogram should not show spikes, or clipping, on either end, it may be appropriate to have such spikes in low-key and high-key images.

When shooting in RAW, the histogram shows the distribution of tones as they would occur in a JPEG file shot with that exposure. While that might sound like a problem, it's not. The distribution of tones in an unprocessed raw file doesn't make sense to our eyes; they are recorded in the language of machinery. A RAW file captures light impressions in a linear fashion, but a JPEG file, and any photographic image, is the product of a nonlinear response curve. The only way that a histogram makes sense is by applying a response curve to the data first.

MIXING AMBIENT LIGHT WITH FLASH

The short duration of a strobe's light makes it operate as if it has its own shutter. This is very useful when you want to mix flash with ambient light, because it means that you can put your camera in manual mode and let the aperture control your flash exposure while the shutter speed controls the mix of ambient light. Decreasing the shutter speed captures more ambient light, and increasing the shutter speed captures less of it.

Using studio flash, the process starts with taking a reading of the ambient light. Let's say that your light meter tells you that a proper exposure would be 1/30 (second) at f/4. Since you want the flash to be at least one stop more powerful than the ambient light, you can set up the flash so that its intensity reads f/5.6, one stop over the ambient light reading. That means that if we set the camera to f/5.6 and shoot at 1/30, the image would register the ambient light one stop underexposed, and at 1/60 it would be two stops underexposed. You can experiment with different shutter speeds until you find the one that gives you the most pleasant mix.

If you were to slow the shutter down to 1/15, an interesting thing would happen. At that point, the ambient light would be recorded at 1/15 at f/5.6, which is an equivalent exposure to 1/30 at f/4. The intensities of the ambient light and the flash would combine, and you would end up with an image that is overexposed by one stop. That only happens when the intensities of the ambient light and the flash are at parity.

Assuming that your indoor lights are tungsten and you set your white balance to the color temperature of your flash, the color of the ambient light would take on a yellow-orange hue. If you had a tungsten white balance instead, the light of the flash would have a pronounced bluish cast. If you want less of an apparent difference in color temperature, you could put an orange filter over the flash to bring its color temperature closer to that of the tungsten light. Then you could use either a high color temperature setting to emphasize the golden color of the light or a tungsten color temperature to make all of the light neutral.

Outdoors, you have a lot more power from the sunlight, but the same principles apply. You're likely to want to use a lower ISO to keep your shutter speeds and aperture in a manageable range. In this case, your camera's maximum flash sync speed is a concern. For many DSLR cameras, the maximum sync speed is 1/125, but for some it's 1/250. You'll need to check your camera's manual, though, because some cameras only sync up to 1/60.

With that in mind, one interesting look is where the ambient light is underexposed by about two stops. Let's say you are able to get a reading of 1/125 at f/8. If you set your flash to register f/16 and shoot at 1/125, you'll get the two stops underexposed look you're going for. If that doesn't render your background dark enough, and your maximum sync speed is 1/250, you can increase your shutter speed a little more. If you can't, you'll want to try to get more light from your strobe, increasing it to f/19 or f/22, for example, and then setting

your camera's aperture accordingly. If two stops under (1/125 at f/16) renders the ambient light too dark, you can slow the shutter down by degrees until you achieve a pleasing balance.

A different look is fill flash, where the ambient light dominates. In that case, you would simply set your aperture and shutter based on the ambient light reading, then set your strobe's output to read one or more stops under. So, if the ambient light reads 1/125 at f/8, a flash reading of f/5.6 or lower will provide fill.

These calculations can be done automatically using a TTL flash such as Nikon's SB-800 and Canon's 580EX. For details on using fill flash mode, check the manual. To make the ambient light underexpose and the flash overexpose, there are two possible routes. The first is to set your camera in manual mode, set your flash in TTL mode, then experiment with aperture and shutter speed. Because the flash is in TTL mode, it will increase output as much as it can as you increase the aperture number.

The other route to take with TTL is to set your camera in either program mode or aperture mode. From there, you can use exposure compensation to decrease the exposure of the ambient light and increase flash compensation to increase the output of the flash. Start with an exposure compensation of –2 and a flash compensation of 0, and see how that looks.

GRAY CARD FOR WHITE BALANCE

Using a Camera RAW workflow, it's extremely easy to get consistent, accurate white balance for all of your shots by taking one reference frame with a special neutral gray target. Since color temperature can change as you vary the mix of lights or the power setting on your strobes, it is best to take a reference shot each time your lighting setup changes significantly. If you plan to shoot with colored gels, though, be sure to take your reference shot with the gels removed.

As we saw in Chapter 5, color temperature can vary over a wide range for any particular type of light source, so the preset color temperatures in your camera may not do such a great job of neutralizing the whites. Auto white balance can work better, but it generally doesn't work so well in low-light situations, and in mixed light situations, the white balance can shift a lot between frames.

Before shooting, you can choose a particular preset white balance in your camera, or use a gray card to set a custom white balance, just so that all of your captures have a consistent color when you start reviewing them. This is not critical, but it is often useful, even if you plan to correct the color in post-production.

Another significant difference between shooting with a particular white balance in your camera versus neutralizing in Camera RAW is that most cameras do not have separate adjustments for color temperature and tint, while Photoshop does. It's not uncommon for the camera to get the color temperature right, but skew either green or magenta. Greenish skin always looks sickly.

LIGHTS AND LIGHT MODIFIERS

Having looked briefly at the overall shoot and some of the techniques, we now turn to some of the lighting equipment involved. Of course, the treatment here cannot do justice to the entire subject of lighting equipment. Hopefully, the following will provide some with new ideas about lighting that are worth exploring further.

CONTINUOUS, OR "HOT," LIGHTS

The phrase "hot lights" is slowly being phased out and these lights are increasingly referred to as continuous lights because color-balanced fluorescent systems are becoming increasingly popular, meaning that not all "hot" lights get hot. These lights are the most straightforward

to work with, because you have a fairly clear idea of what the camera will record as soon as you set them up and turn them on. This makes them great tools to learn lighting techniques with, because you don't even have to make an exposure to see the result.

The simplest and least expensive lighting setups use a metal parabolic reflector, possibly an umbrella, and household bulbs for illumination. The tungsten filament in a household bulb slowly evaporates as it ages, and the color temperature of the bulb will change over time as tungsten deposits develop on the glass. Halogen bulbs are filled with a gas that interacts with the tungsten vapor. A chemical reaction causes the tungsten to be deposited back onto the filament instead of adhering to the glass. These bulbs do not shift color as much when they age, and they also burn brighter and at a higher color temperature.

Fixtures employing halogen bulbs can be simple affairs with just a reflector or a more elaborate design that has a focusing mechanism. Halogen bulbs emit a high amount of UV light, and they should always have protective glass or a diffuser in front of the bulb.

Lighting systems that use special fluorescent bulbs have come on the market in recent years. These are different from household fluorescent fixtures in several important ways. First, the lights are available in daylight or tungsten color temperatures. Second, they don't exhibit the greenish cast of household fluorescents. Last, they cycle much faster than household fluorescents, so that they don't appear to flicker. This is more of an issue for the film industry than for shooting stills.

HMI lights are a descendent of the carbon-arc lights used in filmmaking from the early days. They are expensive and hot, and are less likely to show up in the studio of a starving artist, but they have advantages for some applications. They use a lot less energy than the equivalent halogen light, and they produce light with a color temperature of daylight. Even small HMI fixtures can produce very intense light, so they are typically bounced onto the scene from a wall or bead board.

SOME MANUFACTURERS OF CONTINUOUS LIGHTS

Smith-Victor's lighting tools have been around for many years. They make a wide range of inexpensive reflectors, fixtures, and stands that typically use household bulbs. These instruments generally produce low-intensity light that is relatively hard. You will probably want to put your camera on a tripod for best results.

Lowel produces a range of lights that are particularly popular in film production. These lights typically use halogen bulbs and are designed for varying applications. The Tota light is designed to fold up and be extremely portable. It features a pair of reflectors arranged in a V and is made to throw a wide, even pool of light, which can be useful for lighting backgrounds. The Rifa light folds up like an umbrella, making it quick to set up and take down, and it is extremely portable. It has a panel of diffusion material across the front and produces a soft light that is great for portraits.

Arri and Mole Richardson make the lights that are probably most associated with filmmaking. When you see shots of movie lights or scenes of the inside of a television studio, you're likely to see lights by one or both of these manufacturers. The Arri 650 is a relatively small unit that throws a good amount of light. It can be used for lighting a person or throwing light onto a background. It features a Fresnel lens (pronounced fruh-nell), which allows you to focus the light. The quality of Fresnel light is very distinctive, and many of the classic Hollywood portraits were shot with this kind of light. The beam can be set to a tight, bright spot or opened up to produce a softer flood. Thus, the spot/flood knob can also be used as an intensity

control. You can also replace the 650-watt bulb with a lower-intensity bulb.

Kinoflo and Rololight specialize in fluorescent lighting systems. These units feature arrays of fluorescent tubes that produce a broad, soft light. The Rololight system allows you to separate the individual tubes and arrange them in different ways. The fixture also rolls up and stows in a bag for easy portability. The light from these units is good for portraits and figurative work, and they are popular because of their low-temperature operation and low power consumption. They can also be used in places where tungsten-based lighting would blow the fuses.

STUDIO STROBES

Studio strobes work by storing substantial amounts of energy from the wall in capacitors, then dumping it on command into a gas-filled tube. (A capacitor is different from a rechargeable battery in that batteries trickle out the energy they have stored up, while capacitors release their energy all at once like a lightning bolt.) The resulting flash of light is very bright, and typically lasts 1/1000 of a second or less. As mentioned earlier, that's faster than most camera shutters, and so the strobe functions as if it has a shutter of its own.

Because the flash of a strobe is so brief and intense, it freezes action. The impressionistic blurring of continuous lights is not available with strobes. If your room is dark, and your subject's pupils are dilated, the flash will switch on and off faster than they can constrict, causing red-eye. A number of photographers have used this fact to their advantage, intentionally inducing red-eye, especially for fashion photography. Moving the light off-axis and keeping the camera is close can create a very different effect, and the appearance can be striking.

Strobes generally have output switches or dials that allow you to control the intensity of the light in increments over a range of three to five stops, often in increments of 1/3 stop.

Most studio strobes have a modeling light that can be turned on or off. The light is usually 150 to 250 watts. With some light-shaping tools, that's barely enough intensity to be visible. It is usually enough to tell you if you're aiming the head in the right direction, though. To see what the light is really doing, you need to take a test shot.

There are two main designs for studio strobes: pack and head systems and monolights. With pack and head systems, a power pack (sometimes referred to as a generator) houses the capacitors and controls, and you attach a separate head to the pack by means of a power cable. Most packs can control two or three heads, and are designed so that the power can be divided evenly or asymmetrically between the heads. One advantage of this design is that the heads are light and the controls stay on the floor. With only one head connected to the pack, a substantial amount of power can be delivered to the head.

Monolights are self-powered heads. They contain a set of capacitors and controls, which makes them a bit less convenient for applications like placing a light on a boom, both because of the added weight and because you have to climb a ladder to adjust them. On the other hand, they tend to be more affordably priced than pack and head systems. Their integrated design also makes them convenient to travel with.

The power output of studio strobes is generally rated in watt seconds, abbreviated ws. A 600-ws or 750-ws monolight is a very versatile unit. Packs rated at 1200 ws are good for most digital applications and are smaller and lighter than 2400-ws packs. The extra headroom of a 2400-ws pack can be useful, especially with power-hungry light-shaping tools or in

outdoor applications, but there are times where it is a challenge to reduce the power enough, especially when working in a small space. High-power packs mean that you can keep the ISO setting low on your digital camera. Some cameras begin to show noise problems at ISO 800. Since you generally won't be using these packs at full power, it's also likely that your pack or monolight will recycle faster.

Raw power output, whether in watt seconds or any other measure, is not really what we are concerned with, since much of that power can be soaked up by the light-shaping tools we use. What we really care about is the intensity of the light that results and the corresponding f-stop that will produce a correct exposure. If the full power of a 1200-ws pack in a particular setup gives a reading of f/5.6, substituting a 2400-ws pack at full power will give f/8. If you need f/11, it's time to move the light in about 1/4.

When you are working with two or more lights, you can use a light meter to get your lighting design working the way you want it to much more quickly than with test shots. Bearing in mind that you need at least a one-stop difference in intensity to register noticeable lighting contrast, you can hold the meter close to the subject and take readings of each light source, adjusting one light at a time as needed.

The usual way of triggering a strobe is with a sync cable, which is notorious for breaking and failing at the worst possible moment. The tiny connection is fragile, and so are the wires inside the cable itself. If you use sync cables, be sure to have a spare handy. There is an alternative, and it is called the Pocket Wizard. It is a small radio transmitter that attaches to your camera via the hot shoe and a receiver that attaches to your power pack or monolight. This radio connection replaces the physical cable.

There are times where one pack is not sufficient to do the job. How do you get both packs

to fire? Trigger one with the camera, and let the light of the first one firing trigger the second. You do that by switching on the slave (unfortunate term) feature of the second unit. Virtually all flash systems have this feature, but if you ever encounter a system that does not, you can buy a small photocell that plugs into the sync socket and triggers the unit.

The Sekonic L-358 is a workhorse light meter that has an optional Pocket Wizard module to run your metering process wirelessly. It has a flat disc mode that allows you to shield the light dome so that it reads one light at a time in multi-light setups.

One performance characteristic that separates different strobes is recycle time. Better systems can recycle extremely fast, even at full power, while other systems can take several seconds to do so. That may not seem like a lot of time, but if you are trying to photograph intricate movement on the fly, the lag between flashes can seem interminable. Some systems will flash before they are fully charged, but the output is dimmed, and generally the color temperature decreases.

Most strobes temporarily turn off the modeling light when the flash fires and turn it back on when the unit is fully charged. In cheap systems, this is the only indication that the system is ready to fire. Better systems have the option to switch off the modeling light and beep when the system is ready. This can be important in applications where you are mixing the strobe with ambient light and you don't want the modeling light to affect the scene.

SOME MAKERS OF STUDIO STROBES

Swedish manufacturer Profoto is one of the top brands. Their units are solidly constructed, and the systems are designed for performance, ease of use, and safety. Profoto also manufactures an extremely wide range of specialized light-shaping tools. They make several systems, including Acute, Compact, and the Pro-7.

The Acute systems are in wide use in photography schools. The Compact systems are Profoto's line of monolights. Pro-7s are nearly ubiquitous among high-end rental studios in the United States and are very popular among fashion photographers. Profoto offers many models with Pocket Wizard receivers built in.

Broncolor is also a Swedish manufacturer that competes with Profoto at the high end of the market. It is the other brand that fashion photographers most often use. While their units are available in the United States, they are much more widely available in Europe.

Dynalite is an American maker known for its small, rugged, and extremely portable systems. The emphasis on portability makes Dynalites particularly good for location shooting. The company offers many models with Pocket Wizard receivers built in.

Travelites are a line of monolights made exclusively for Calumet by Bowens. They are economical, solidly built, and well priced. Calumet also offers the Traveler series of pack and head systems built by Bowens. The Calumet designs have some features that are distinct from the Bowens offerings. It is worth comparing the two.

HOT SHOE FLASH

Advanced hot shoe flashes such as Nikon's SB-800 and Canon's 580EX are often referred to as speed lights. It is well known that these are sophisticated flash systems that can communicate with the camera to automatically set their own power output in situations like event photography. It is not as well known that they can be placed on light stands and used as manual studio strobes. In manual mode, the power on the SB-800 can be adjusted over a range of six stops in 1/3 stop increments.

You can even trigger the SB-800 with a Pocket Wizard. The sync cord plugs into a terminal on the side of the SB-800, and you

put the unit into SU-4 mode. In this mode, the SB-800 can be triggered by the Pocket Wizard or by the light of another strobe. That's fine if you're the only shooter, but if other people are setting off their flashes, it can be a bit of a problem. Covering the electric eye and the red lens on the front of the unit with gaffer tape will blind it to other flashes.

The power output of speed lights is rated differently from studio flashes. Instead of a ws rating, the flashes' output is measured with a guide number, which relates to the brightness of the light at full output at a certain distance. This doesn't translate directly into watt seconds, but the SB-800 and 580EX compare favorably to a monolight in the range of 80 to 160 watt seconds.

RING LIGHTS

The ring light, or ringflash, is an interesting device. You can see an example of the light it produces in Chapter 5. It's part flash head and part modifier. The light was a staple of Helmut Newton's lighting style for several years. The basic ring light is a circular light source that surrounds the lens and attaches to the camera by way of a bracket that screws into the tripod mount. Because the light comes from equal distances all around the lens, most shadows are canceled, and the illumination has a distinctive look. When your subject is close to a wall, it will create a shadow that looks like you outlined him or her with a thin, dark marker. The outline expands to some degree as you move away from the wall.

The original ring light design was a special flash head with a large circular flash tube that attached to a power pack. Profoto, Broncolor, and Elinchrom all make versions of this design. The basic design is essentially a bare doughnut, but different manufacturers offer a range of diffusers and soft light reflectors that further soften the look.

Expo Imaging is marketing the Ray Flash, an interesting converter that clips onto the front of your hot shoe flash and turns it into a ring flash. Canon, Nikon, and Sunpak also have ring light attachments that work with your camera's hot shoe, but these are primarily designed for macro shooting.

LIGHT MODIFIERS

A number of photographers have successfully exploited the aesthetic potential of a raw light source, but light modifiers dramatically expand the creative potential of working with light. Through light modifiers, you can harden, soften, focus, constrain, color, and shape light.

Umbrellas are extremely simple to use and among the least expensive of the light-shaping tools. Their function is to soften and spread light. Bouncing the light from a silver-lined umbrella gives a light that has brighter highlights and more saturated color. It's a slightly harder look than the light from a white-lined umbrella, which generally has a slightly warmer look, as well. There are also translucent "shoot-through" umbrellas. These produce a flatter, lower-contrast look than what you get with the bounce-style umbrellas.

Size matters. As you increase the size of the umbrella, relative to the subject, the light becomes softer. So a 45-inch umbrella gives a softer light than a 30-inch umbrella at the same distance. The shorter the distance to the subject, the larger the relative size of the umbrella, too, so closer and bigger means softer. However, you want to consider the application. It is possible to have too big an umbrella, and it is possible to move the instrument too close.

Photoflex and Westcott are two manufacturers that make convertible umbrellas with a translucent interior and a detachable black cover. These easily switch between bounce style and shoot-through use. Some manufacturers make heat-resistant umbrellas designed to work with high-temperature lights.

Umbrellas spread light over a wide area, producing a lot of spill, which can be hard to control, but that also makes them excellent for illuminating backgrounds, floors, and large areas. You may recall from the end of Chapter 5 that the feathered edge or penumbra of a bounce-style umbrella's light has a softer quality than the light reflected from the middle. You will generally get better, more controllable results with an umbrella if you don't tilt it down toward the subject. Draw an imaginary line between the tips and across the opening of the umbrella, and keep that line parallel to the vertical pole of your light stand. To adjust the light, just move it from side to side or vertically until you get the look that you want.

To use an umbrella with a hot shoe flash, you need an umbrella swivel adapter with a cold shoe. The foot of the flash slips into the shoe and locks in place. The shoe fits into the swivel in turn, and the umbrella fits into an angled hole in the swivel and is held in place with a thumbscrew.

Softboxes, sometimes called light banks, are effectively an extension of umbrellas, and some even retain the parabolic shape of an umbrella. However, they improve on the idea in several key ways. With a softbox, the softening of the light is achieved by bouncing the light around the inside of the box and then passing the light through translucent diffusing material that is stretched across the front of the tool. Many softboxes have the option to install a second layer of diffusion, known as a baffle, inside. The shape of the softbox and the diffusion material causes most softboxes to create a pool of light that falls off more quickly than the light from an umbrella, meaning that you'll have inherently less spill to contend with when using a softbox. The soft, diffused light of a softbox has one effect that can sometimes be an issue: colors are less saturated in this kind of light.

Size matters with softboxes, just as with umbrellas. They are typically described as small,

medium, and large, though the dome-type softboxes are often specified by size. Larger is softer, and softboxes have a "sweet spot," or optimum distance. A good rule of thumb is to place the surface of the softbox at a distance from the subject equal to the longest dimension of the softbox. In other words, if you're using a medium rectangular softbox (roughly 36 inches × 48 inches), you'll get optimum results with the light about 48 inches from the subject.

The basic shape of a softbox is rectangular, with a more boxy shape than an umbrella; however, there are several useful variations on that form. Strip lights are tall and thin, and create a narrow plane of soft illumination with very limited spill. They are very useful for creating rim lighting effects with the figure. Octas have the shape of large umbrellas, and typically have eight sides. They can be very large, and are sometimes used without the diffusion material across the front. The shape of the light source shows up in the catch lights of the sitter's eyes, so fashion and beauty photographers who do not like the look of rectangular catch lights tend to quickly embrace the octas. Some octas even have a bezel with a circular cutout that attaches to the front of the diffusion panel to make the catch light perfectly round, instead of octagonal.

Several manufacturers make softboxes out of Nomex, a heat-resistant material that can be used with high-temperature continuous lights.

The softbox attaches to a lighting fixture by way of an adapter called a speed ring. In this way, you can use the same softbox with an array of fixtures; you just need the appropriate speed ring for each type of fixture. The speed rings are not really brand-specific. For example, you can use a Chimera speed ring with a Photoflex softbox.

Chimera makes a lightweight, high-quality range of softboxes called Pro II. These are integrated units that allow you to add the interior

baffle for extra diffusion, but they do not come completely apart the way more expensive softboxes do. Chimera also makes speed rings that adapt the SB-800 and the 580EX to a softbox. Photoflex makes moderately priced 5 foot and 3 foot octa softboxes.

The beauty dish, sometimes called a soft light reflector, attaches to a strobe. It is a hard metal parabola, usually painted white inside, with a reflector suspended over the center. Light from the head bounces off the reflector in the center and back into the dish before it is radiated out to the sitter. The light has a very soft, luminous quality, especially when used close to the subject. It creates distinctive catch lights in the eyes.

Grids focus and harden the light, instead of spreading it. They fit on the front of studio strobes by way of an adapter or a reflector designed specifically for grids, although in a pinch, you can also attach a grid to a plain umbrella reflector with gaffer tape. The grid works by soaking up the light beams that are not heading in a more or less straight path from the light source to the subject. Some grid reflectors can additionally accept a snoot or a set of barn doors.

Grids are usually sold in sets, and are graded in degrees for the amount of spread they allow, typically 10, 20, 30, and 40 degrees. The more spread, the brighter the light that passes through the grid, and the more feathered the edge of any shadows will be. Because the grids restrict the spread of light, they are useful for controlling spill.

Egg crates and louvers are essentially grids designed for softboxes. They further reduce the spill of light, and have the additional effect of making colors more saturated, while maintaining much of the soft quality of the light.

Several manufacturers, including Bowens and Profoto, make Fresnel attachments for

their strobe heads. These are focusing lenses for the strobe that give the distinctive light quality of the hot lights.

Snoots are funnel-shaped devices that fit onto the front of a lighting head. The small aperture allows just a small circle of light to pass through. This can be used to create a bright highlight, isolating or emphasizing one part of the body. The edge of the circle of light produced by the snoot can be made harder by putting a snoot over a grid. There are also snoots designed to fit over Fresnel hot lights like the Arris.

Expo Imaging distributes the Honl Photo Speed system, an assortment of light modifiers for hot shoe flashes including two different grids and a snoot.

Barn doors are more commonly seen on lights like the Arris and movie lights, but they are often available for many other types of lighting equipment, including strobes. They generally have either two or four wings that swivel to allow you to block the spill of light in one direction or another. With the light source above the camera and pointed down toward the subject, you can position the barn door so that much of the background is in shadow. This will make the subject's face pop out from the background, especially if the background is dark. This technique generally works with head and shoulders and even 3/4 portraits.

Gels are thin sheets of translucent material that are used to color a light source. Many are heat-resistant and work with either strobes or constant lights; just be sure that you don't put the type that is not heat-resistant on a high-temperature light. There are holders for gels, but many photographers simply use clothespins, box clips, or gaffer tape to hold the gels in place.

CTO (color temperature orange) and CTB (color temperature blue) gels are designed to convert color temperature. Placing a CTO gel over a strobe makes the light more consistent with tungsten light, and placing CTB over an Arri tungsten light, for example, will make its light more consistent with strobe or daylight. You can get 1/4, 1/2, or full CTO or CTB gels, and you can double up the gels to control the degree of color shift.

There is a wide range of other colored gels, including the Storaro gels by Rosco, mentioned in Chapter 5. These gels color the light for various aesthetic purposes. One caveat about colored light is that color becomes desaturated and blows out as you increase exposure. Underexposure works better for colored lights. If you want your colored light to look colored, use it as a fill on the shadow side or shoot your image low-key.

Using neutral density (ND) gels is a way to decrease light output without moving your lighting instrument. They are neutral in color and soak up light. Depending on how much you need to cut the light, you can build up multiple layers of ND gels.

Scrims are often made of metal screen and are generally used to cut the light output from hot lights. Full scrims cut one stop, and half scrims cut half a stop. There are also scrims that physically cover only half the light implement. These are good for taming the light in one part of the scene when everything else is lit just right. Because they are made out of mesh, they do not produce a hard shadow line.

Cookies create the effect of dappled light in the studio. The term is a nickname for the actual name of the device: a cuculoris. You can make or buy these. They're essentially a piece of plywood, foam core, or other opaque material with shapes cut out to let some light pass through and produce a pattern of shadows. Or you can attach shapes to a piece of window screen. These can simulate the way light spills through trees, or can be cut to more specific geometric shapes.

The harder the light source, the more defined the projected shapes will be. If the cookie is used close to a high-temperature light source, it's important that it be fire resistant, but if not, it can be placed on a stand a bit farther from the source.

Reflectors, used to fill shadows, are commonly made of fabric stretched over a flexible circular frame that twists and collapses into a smaller shape for easy transportation. The reflective surface can be used to bounce light into the shadow areas of a shot, to open a face, for example. They are especially useful in natural light settings where fill flash is not available or not wanted, but they work great in a studio setting with flash, too. Reflectors are typically white, silver, gold, or zebra colored. Some companies make a frame with interchangeable coverings. The gold and zebra colors add more warmth to the reflected light. A number of companies, including Photoflex, make reflectors.

Bead board is a foam material with a pebbled surface that is also used for bouncing light, especially from a light fixture. It is widely used in movie production.

Silks and butterflies are pieces of translucent material that can be fastened to a frame or taped over a window to provide diffusion. They are particularly useful in settings where bright outdoor sun is too hard and high-contrast. California Sunbounce makes a number of products for both diffusion and bounce.

V-flats are made from two large pieces of foamcore taped together to form a hinge. The flats will then stand on their own when unfolded and stood on their end. They fold flat for storage. Foamcore is available in white, black, and black on one side. The black-and-white version can be taped together so that when folded to show the white side, it serves as a bounce for light sources, and when folded to the black side, it becomes a black bounce. Black bounces are also sometimes known as B-flats.

Flags are particularly useful in situations where you are working with back lighting and have issues of spill. A flag can be a notebook held in your hand to block the light from the lens, or it can be a cloth or plastic piece made for that purpose, attached to a stand.

You can also make your own flags out of Cinefoil, a heavy aluminum foil painted flat black. It is easy to cut and shape, and stiff enough to hold its shape. It is also lightweight, so it can easily be taped to things. For example, it could be used to create a skirt along one edge of a softbox or umbrella to kill a troublesome bit of spill.

LIGHT STANDS

Beyond understanding the various types, the biggest thing to know about light stands is how to use them safely and properly. There is a temptation to use stands that are not rigid enough, because they are lighter to carry and easier on the wallet, but puny stands can cause accidents.

With tripod-style stands, the stand is most stable when the stays that attach the legs to the vertical bar form a right angle with the vertical. They can angle downward from the legs, but they should never angle upward.

When working outside, even a light wind can turn softboxes and umbrellas into sails. The higher you hoist the lights, the bigger the problem. It's a good idea to use sandbags to weight the bases of light stands outdoors and to have a spotter or two to keep an eye on the equipment in case the wind kicks up.

Convertible stands like the Bogen/Manfrotto 420B have an articulated joint that allows the top portion of the stand to swivel and become a boom arm or function as a conventional stand when you don't need the boom. The extended boom on this model can only hold 11 pounds. The stand comes with an empty counterweight sandbag. You just add sand.

Full booms have longer arms and can support a little more weight, but they also have controls that allow you to rotate and tilt the instrument at the tip of the boom. Often, the boom arm and stand can be purchased separately. An example is the Bogen/Manfrotto 025BS Super Boom with 008BU Stand, which supports 15 pounds when extended. The stand has one leg that can be extended for leveling and has casters.

Booms are very useful, because they allow you to place light above your sitter without the stand being in the shot. It's important to properly counterweight your light and sandbag the base when you use such setups. Also, make sure that the head is securely attached to the boom arm. Pay attention to the maximum loads— the extended boom on the 420B can hold just 11 pounds.

An interesting variation on the standard boom arm is the Red Wing, which is an articulated arm that can be used with any appropriate base, including the 008BU mentioned above. The arm is cantilevered so that it can easily be repositioned during a shoot. As it tilts, the head rotates so that the lighting instrument at the end continues to point in the same direction. This comes at a price, but for some applications, it makes switching setups almost trivial.

C-stands, also called Century stands, are sturdier and more stable than tripod stands. They come with a mini boom called a Hollywood arm, which attaches to the vertical support with a swiveling clamp called a knuckle. The arm has a bare end and a knuckle on the other end. The knuckle on the arm can be used to hold flags or cookies, and the head of a flash easily attaches to the bare end. They are most stable when the you load them so that the weight leans over the long leg.

Standard backdrops can be seamless paper or simple muslin, but you can get creative and use anything from newspaper to shower curtains to bubble wrap. Sometimes, it makes a tremendous difference to add just a touch of illumination for the background itself.

Many vendors will cut your seamless paper to size. One standard width for seamless is nine feet, but if 6.5 feet works better, stores such as the Set Shop will cut it down at your request. It's relatively easy to put seamless paper on a wooden bar and hold it in place with an A clamp, but often the paper spins around and gets torn. Manfrotto's 046MC Expan Drive paper holders fit inside the core of the seamless roll and allow you to easily raise and lower the paper by pulling a metal chain. The paper is held in place by adjustable friction, and the holders can easily be attached to light stands, autopoles, or a wall with the appropriate adapter and hooks.

Muslin can be plain or dyed in different ways. The danger of dyed muslin backdrops is that they have been used for so long that they can easily impart that department store portrait studio look to your images. Pattern-dyed muslin works best if you keep the depth of field shallow so that the background is rendered slightly out of focus. This is hard to do with some lenses and lighting, because you can easily find yourself shooting at f/8 or f/11, which is likely to make the background sharp. Plain muslin can be especially interesting if you crumple it so that it has lots of wrinkles and texture. Lighting it from the side will then drive up the texture.

RENTING VS. OWNING

If you are so inspired, you might research the cost of purchasing some of the more interesting items mentioned here, and it is likely that you will quickly discover that it adds up to a not-so-small fortune. Many of the items are available for rent, especially if you live near a major city, and companies like Profoto have leasing programs. You can lose a lot of time picking up and returning rental equipment, so it does make sense to own a minimal lighting setup of your

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own. Don't forget that you can do a lot with speed lights and that good used equipment can be found online. If you do decide to buy used, caveat emptor—research what you're buying carefully, so that you know what you're getting.

PARTING TIPS

We close with some last reminders about safety. Hoisting lighting equipment above the ground can be risky stuff, for both people and equipment. The higher you hoist things, the more unstable they become, and the more important it is to properly sandbag the base. Be sure to take precautions.

Tungsten hot lights, and even the quartz modeling lights on most strobes, can put out a lot of heat. Snoots and grids get hot, even on strobes. Handle carefully. It's a good idea to have work gloves, oven mitts, or some kind of heat protection when you're adjusting such lights.

Strobe heads often have plastic protection cones for transportation. Be sure to remove those cones before plugging in the head, or you could have a meltdown or a fire on your hands.

Wires are a tripping hazard. Route them carefully. If you run the power cable for a strobe under the leg of your light stand, kicking the cable is more likely to make the stand slide than tip over. Avoid tangling your cables, and it's a good idea to tape them down in areas that will receive a lot of foot traffic. If you have something like a boom with an end that juts out, mark it with something brightly colored, so that no one accidentally walks into it. As the old saying goes, it's all fun until somebody loses an eye.

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Digital Technique

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Whether you shoot digital or scan film to create a digital file, once you open that file in a digital post-production tool, there are two very different routes you can travel. The first route is to produce work that emulates the look and feel of imagery that is done completely with film. The other route is to take advantage of the digital environment to create work that is difficult or impossible to do in the darkroom. A major challenge of making digital art echoes the challenge that art photography itself faced at its inception, namely, avoiding the perception that the machine, and not the artist, is creating the work. We begin with a few examples of different approaches.

Matthew Barnes shot the chapter-opening image. He put a paper ray gun in model April's hand and they improvised from there. Matt decided later that she should be holding a chainsaw instead. Her hand was in the perfect position for it. Matt describes himself as a spontaneous person, so he doesn't carefully pre-plan his images.

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The scene was lit from the left with a magnum deep-dish reflector fitted with a grid, and a backlight was added to make the smoke stand out. It was shot against a gray background with a Hasselblad 503 CW and a Phase One P45 digital back. The initial processing was done through Capture One, and then post-production was done in Photoshop CS3.

The post-production began with general cleanup and contrast. The chainsaw was shot separately and pieced in. Finally, the original background was replaced with a clean one.

Gaspar Marquez creates polyptychs, which he calls bodyscapes, in-camera using film and shooting intuitively (see the photo below). He scans the resulting contact sheet and works in digital from there. In Photoshop, he cleans up dust spots and blemishes and tweaks the light. He often makes digital prints as big as 46 inches in the longest dimension.

The triptych in the top figure on page 155 is reminiscent of the more elaborate "photo-cubist" images of David Hockney. Cokeliss primarily uses digital to show his work online.

Reproduced by permission of Gaspar Marquez.

The triptych was scanned from three separate prints and was made the largest possible size that would fit on the flatbed scanner at his service bureau. His exhibition prints are typically 16 × 20, making this triptych a bit more than five feet wide when presented in a gallery setting. The gallery piece would be mounted by hand and assembled from three separate prints.

For complex projects Cheirodon pre-plans everything down to where individual strands of hair should be. Sketches and rough animated plots are made in advance of the shoot. He also often has many hours of discussions with the model prior to shooting.

For Cello Player (the bottom photo), the model literally bent over backwards across a stool that held her several inches above the ground to create the illusion of being suspended in mid-air. The photographer was on a ten-foot ladder, using a Canon 1D fitted with an 85mm lens at f/5.6. The background was white, and illumination came from two softboxes approximately ten feet from the model.

TOP: *Reproduced by permission of Barney Cokeliss.*

BOTTOM: *Cello Player.*
Image by Cheirodon.

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In post-production, the model was carefully cut out—the hair being the difficult part—and then the gradient background and other elements were added. The wire coil was created with Bryce 5 and the editing was done in Corel 14.
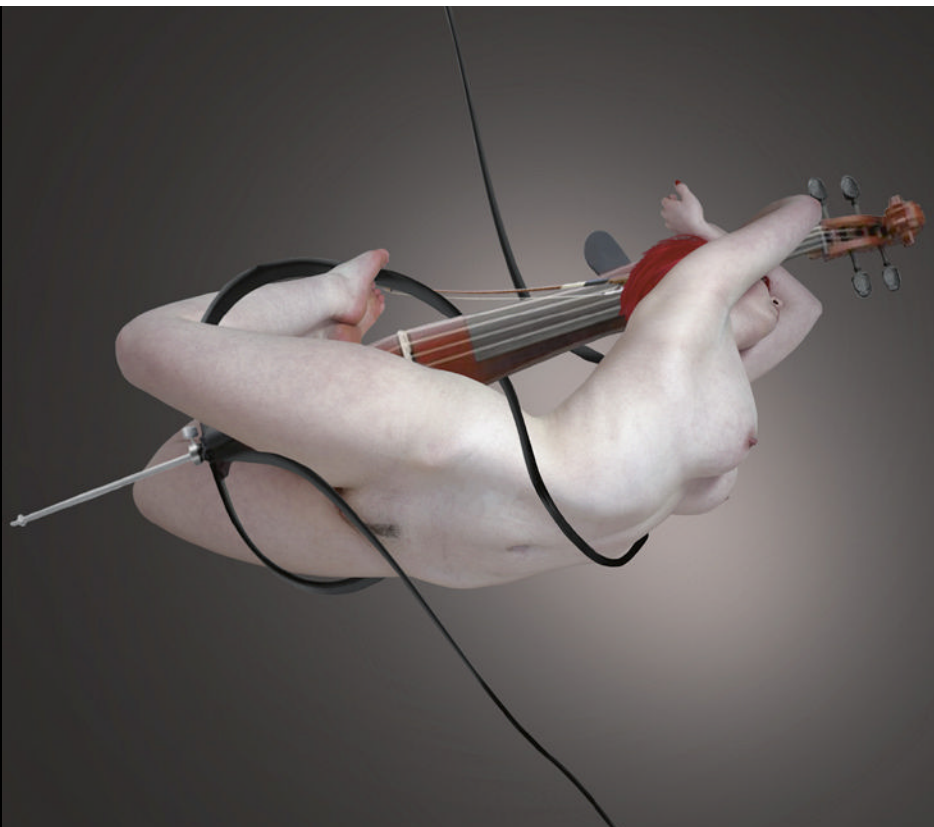
Nina Pak routinely photographs textures that she incorporates into her composites (top photo). In an e-mail exchange about her work, she said, "For the Nude in New Mexico and the Sky Above Her, I made a textural layer in my painting studio using molding paste and brown stain, (the kind you use to paint a wooden deck), I layered molding paste from Golden with a pallet knife, onto heavy water-color rag stock and waited for it to dry. Then I covered it with the stain using a rag. I rubbed off the excess but let the stain fill the cracks to give it the antique feeling, and tore the edges of the paper around where the molding paste had dried, leaving a thicker layer. I went over the edges again with the stain. Later I photographed those various pieces of textured paper and put them into my textures file, which I use with the photographs in the layering process."

The digital compositing process can be very exploratory. Terry Donovan described the creation of the light bulb image (in the photo to the right) in an e-mail exchange: "The body shot had intrigued me to start out with, but seemed like it needed something other than the busy kitchen background I originally had. So I erased everything but the body, and made the background white. The shape instantly reminded me of a light bulb…" He remembered an old shot of a colored light bulb that he had shot many years earlier….

"I threw it in as a layer [probably in overlay mode], but it didn't fully work until I inverted
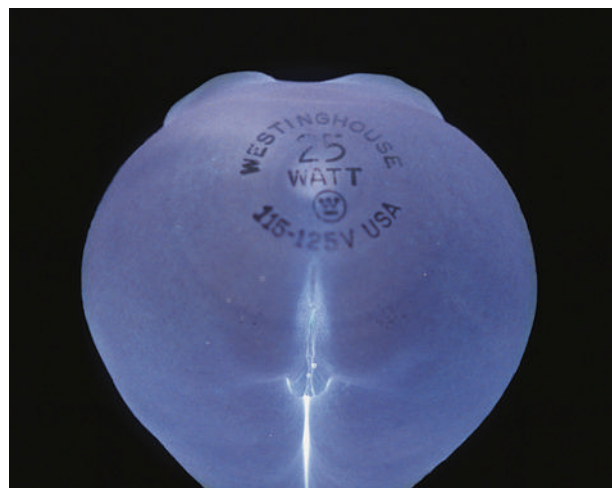
the body and white background and got the black. Having the 'light' between the legs [which resulted from inverting the shadow] reminded me of a filament and seemed like it just completed the picture."

THE TWO PATHS

One way to approach digital processing is to make it completely transparent, with the resulting image as indistinguishable from analog photography as possible. The look of digital output has now achieved a high degree of parity with images produced through the wet darkroom process. There are even specialized tools to make images look like they were shot on specific film stocks, and your prints can even feel like they came out of the darkroom. You can make ink-jet prints on fiber-based paper or stock that resembles resin-coated papers. You can also have C-prints made from your digital files—these are photographic prints that use silver-based paper and wet chemistry.

Shooting "straight" nude portraits digitally would typically entail some adjustments to color and contrast and possibly exposure, and little else. In this application, digital is essentially a streamlining tool used for retouching, color correction, and printing. From there, digital images can be made to look more like they were shot on film by reducing the saturation and adding grain. Scanned transparencies, negatives, or prints are the basis of a hybrid workflow that is common today. Printing from a digital file makes large-scale prints much more accessible than when working with enlargers.

If you are interested in work that goes beyond "straight" imagery, two groups of photographic artists that might provide inspiration for a digital art-making process are the members of the Photo Secession, who advanced the philosophy of Pictorialism, and the Surrealists.

Photographers in both movements had a vision of the photograph as something more than a direct transcription of whatever tableau was laid out in front of the lens. The Pictorialists felt that the act of altering the photograph is what made it art, and the Surrealists completely deconstructed photography to create works that sometimes defied the category.

By combining technique and technology, both groups produced images that used the photographic process, but were intended to look like something other than plain photographs. Their techniques included cropping, toning, burning, dodging, and combining images, either by collage or by multiple exposure. A mainstay of Surrealist technique is solarization—perhaps the artistic effect most specific to photography.

If you have ever seen the dreamlike Surrealistic work of Jerry Uelsmann, it's easy to think that it is a masterful application of Photoshop, but it was all produced in the darkroom through an elaborate process involving multiple negatives and as many as seven enlargers. It is a technique that he refined in 1960, predating the first personal computers by nearly 20 years, about 30 years before Photoshop 1.0, and it is the process that he continues to use today. It is likely that his work was a point of reference for the developers of Photoshop, setting the standard for the blending effects it had to be capable of producing.

Uelsmann's first big break came from John Szarkowski, who gave him a solo show at MoMA in 1967. He describes the experience as akin to being blessed by the Pope. It's interesting to note that when he first began showing his work, many people felt that it wasn't photography, a point of view that is echoed today in people's attitudes toward digital work. Even Uelsmann's earliest work does not look dated and can be a source of inspiration and a point of departure for digital artists.

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EXPLORING A DIGITAL WORKFLOW

Whether you shoot film and scan to digital files or shoot digital directly, the digital workflow is largely the same. The stages are as follows:

- Archive and catalog source files
- Pre-edit with Camera RAW
- Photoshop editing and post-production
- Printing and export to web

There are various approaches and tools to manage the workflow. Regardless of which tools and methods you use, a common thread is color management. Most workflows also favor nondestructive editing techniques such as using adjustment layers rather than applying adjustments to pixels, and using layer masks instead of erasing. Much of the remainder of this chapter will move through a digital workflow in sequence.

INTO THE COMPUTER

After the camera or the scan, the first stop in a digital workflow is storage and cataloging. This can be accomplished with a number of tools, but we'll focus mainly on Adobe Bridge, which comes with Photoshop and allows you to organize, assign metadata to, search, and preview your images. You can also use Bridge to generate web galleries, slide shows, and image collections in PDF format.

Adobe Photoshop Lightroom is an alternative to Bridge. It stores thumbnails and metadata in its own database, making some operations faster, and it also has the capabilities of Camera RAW built in. If your photographic practice emphasizes creating work in-camera, it is possible to use just Lightroom, bypassing Photoshop altogether, but if you need to do localized adjustments or build up an image using layers, then you will ultimately need to work in a tool with the capabilities of Photoshop.

Adobe Bridge helps you preview, organize, and find images.
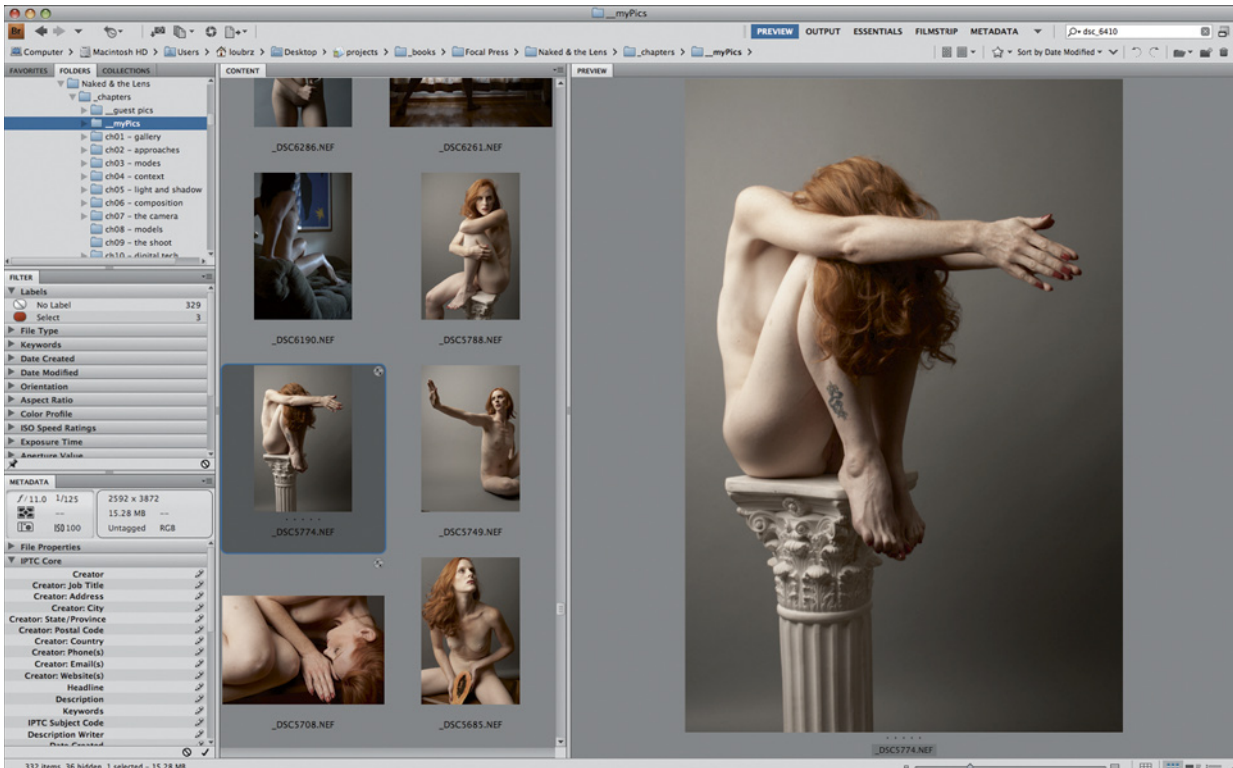
TECHNIQUES IN CAMERA RAW

Camera RAW was originally designed specifically for editing RAW files, but it has evolved so that you can use the same pre-processing interface for JPEG and TIFF files, if you like. Opening these files in Camera RAW doesn't make them equivalent to RAW files, though. There are a number of Camera RAW features that are not available when you are working on a JPEG or TIFF file, but the ability to edit these files is equivalent to that feature in Lightroom.

WHITE BALANCE

In a "straight" digital process, it's useful to start with an accurate white balance. You can shoot a reference frame with a gray target such as the Whi-Bal gray card shown in Chapter 5 and the opening of Chapter 9. To use the reference image in Camera RAW, simply select the White Balance dropper tool and click on the gray card in the image. Once you have established the white balance for that image, you can synchronize other files to that white balance. Using Adobe Bridge, the process works as follows:

1. In Adobe Bridge, select a group of images, including the one containing the gray card.
2. Use Command [Ctrl] + R to open the images in Camera RAW. The images will appear in a strip down the left of the Camera RAW interface.
3. Scroll through the list of thumbnails to locate the frame containing the gray card and click on it to display it in the preview.
4. Click the White Balance dropper tool to activate it.
5. Click the gray card in the image to set the white balance.
6. Click the Select All button.
7. Click the Synchronize ... button. The synchronize dialog will appear.
8. Choose White Balance from the synchronize menu at the top of the dialog.
9. Click OK.

Using the White Balance dropper.
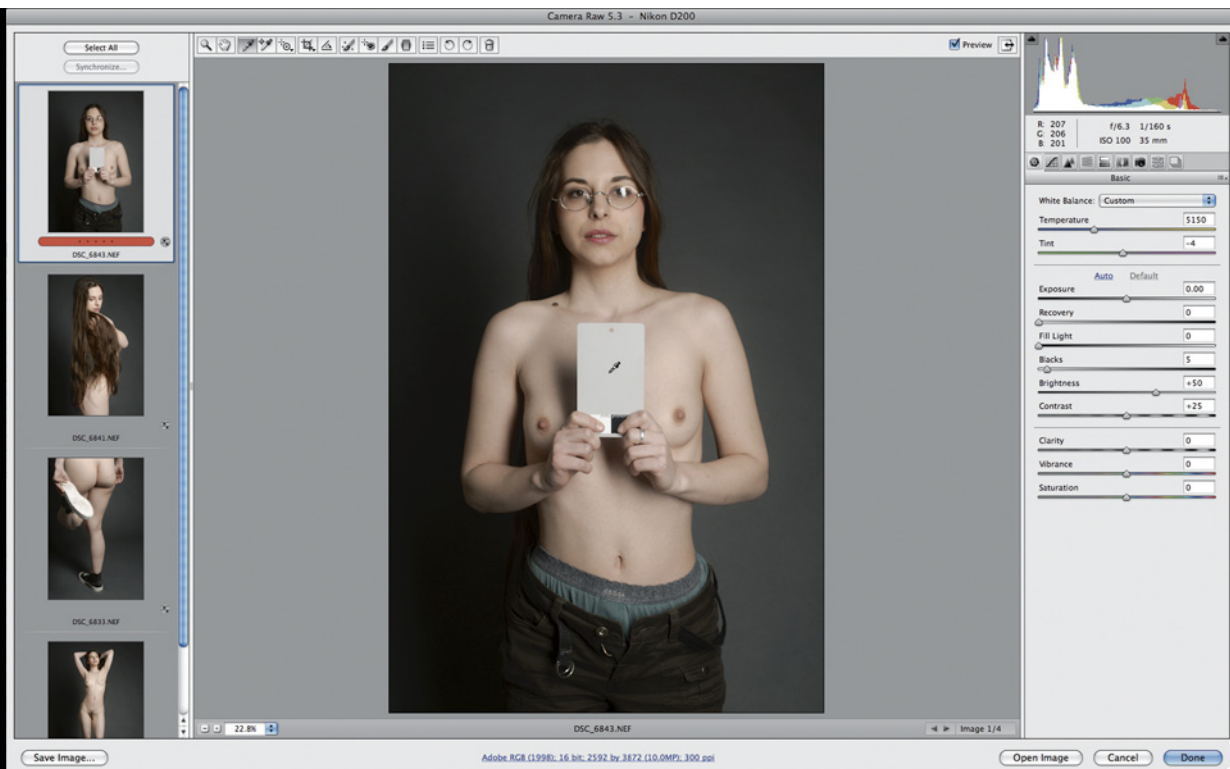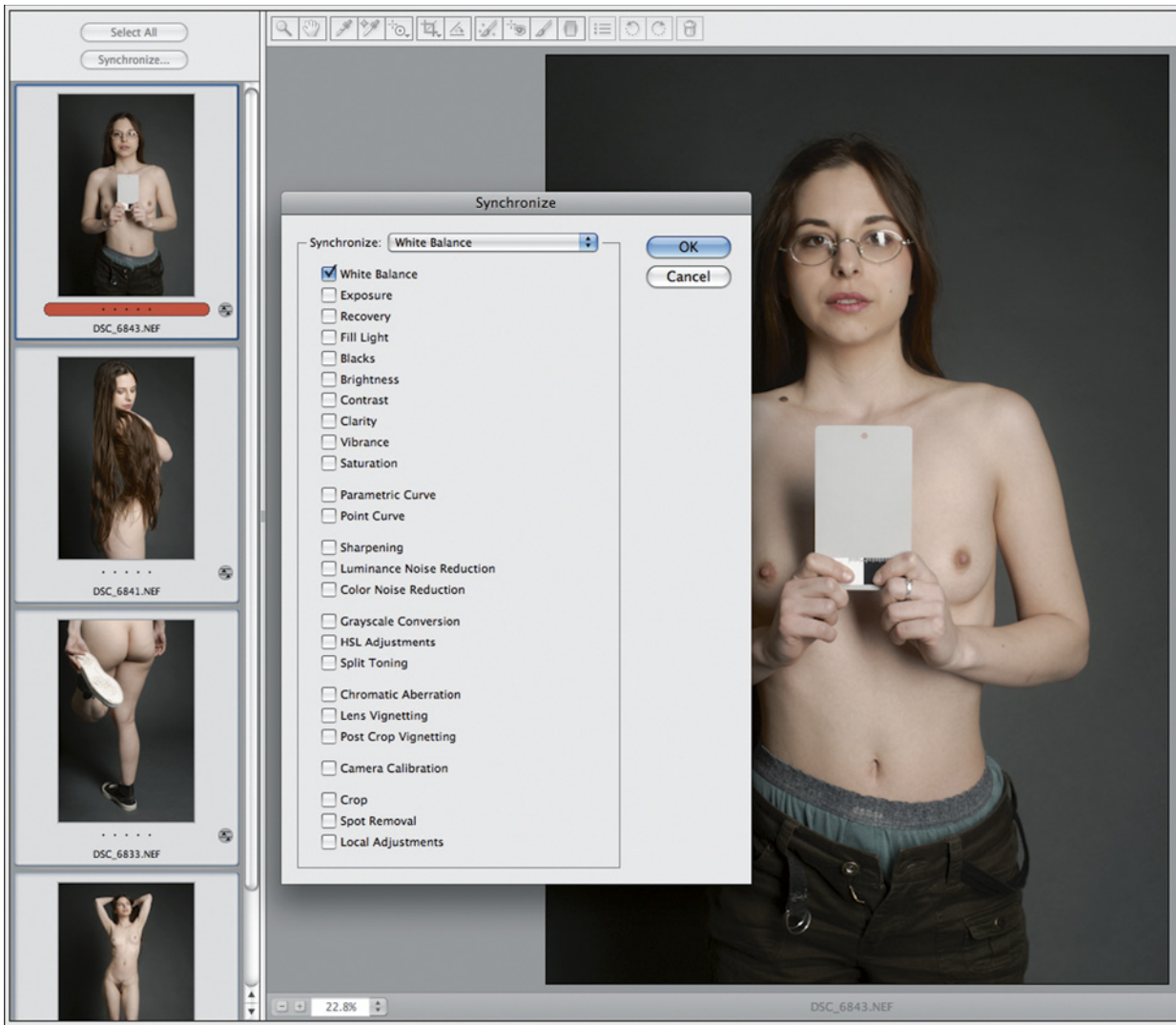
Synchronizing White Balance with multiple images.

CAMERA PROFILES

One of the criticisms of Photoshop for processing RAW files prior to Camera RAW 4.5 was that the color rendition and contrast was dull. The proprietary routines that Canon and Nikon, for example, used to interpret color from their RAW file formats had a characteristic way of tweaking the colors. As a result, files that were processed through converters such as Nikon's Capture NX looked better than the same file processed with the default settings in Camera RAW.

Adobe has substantially addressed this issue with camera profiles. To use them, you click on the Camera Calibration tab in Camera RAW

and choose a profile from the Name menu. If you like, you can further tweak the tint in the shadows and the hue and saturation of the red, green, and blue primaries.

COLOR MANIPULATION

Camera profiles, used in creative ways, open the door to manipulating the color of your image beyond a neutral or "straight" interpretation. That is just the beginning. It has been mentioned earlier that you can intentionally push the color temperature. You can use the White Balance dropper to sample a gray card, then slightly warm or cool the result for a subtle effect. A more dramatic effect can be accomplished by simply dragging
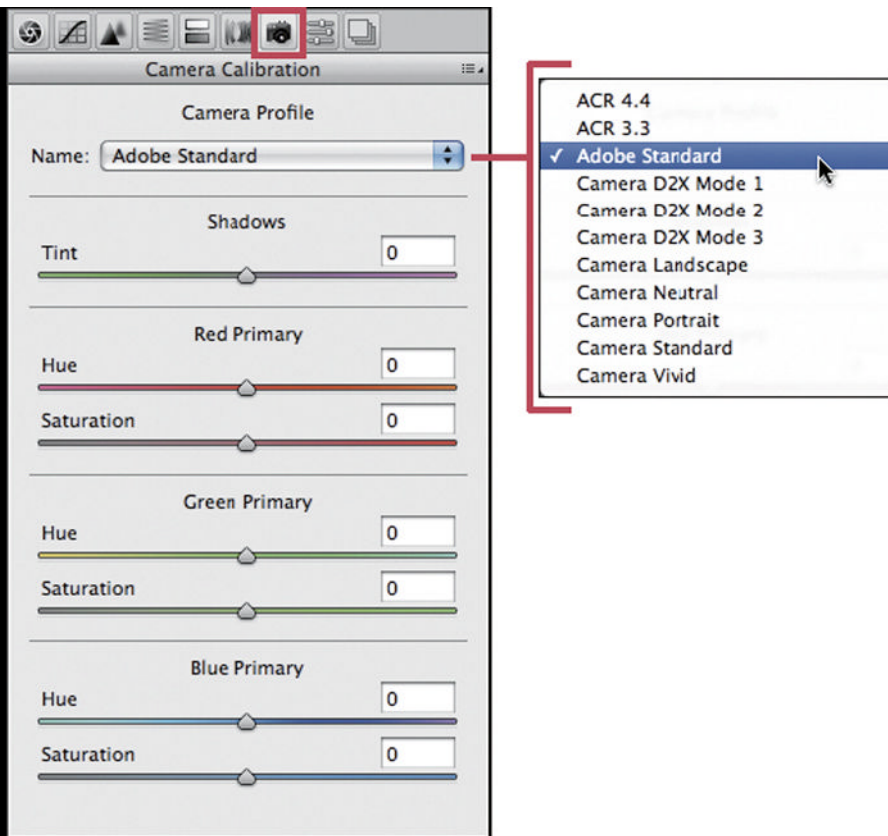
Camera profiles allow for different preset looks when rendering RAW files.

the color temperature slider strongly to the right or left. A third approach is to click on something in the image that is not neutral, such as the skin.

If you sample the skin with the White Balance dropper, the tones will be adjusted to make the skin neutral, and the image will take on an overall cool tone. If you sample something that has a cool tone, the image will become warm. The overall color cast that results will be the opposing color of the area that you clicked on.

The HSL/Grayscale tab allows you to separately adjust the hue, saturation, and luminance of key bands of color in your image: reds, oranges, yellows, greens, aquas, blues, purples, and magentas. These sliders can be worked individually to either enhance or diminish the significance of various fields of color in the image.

The HSL/Grayscale tab is just one place in the Photoshop workflow that gives you the ability to make black-and-white images. Many photos look best as either black and white or color, so it makes sense to make that decision in Camera RAW, but you can also use a Black & White layer in Photoshop to produce the effect. The interfaces in each are the same. The Grayscale Mix sliders allow you to specify how light or dark each of the spectral colors are represented in the image. The result can be a conventional-looking black-and-white image, an emulation of infrared film, or something unique.

There is one significant difference between using the Grayscale option in Camera RAW and using a Black & White layer on a color image in Photoshop: when you check Convert to Grayscale in Camera RAW, the image will open in Photoshop in Grayscale mode. If you want to do colorizing effects later on, you'll need to switch to RGB Color mode in Photoshop. If you use a Black & White layer, the image will still be in its original color mode.

USE SPLIT TONING

Camera RAW's Split Toning tab does not have a direct equivalent in Photoshop. In Chapter 6, it was introduced as a tool for color composition. You can apply split toning to any image, but it generally works better over an image that has been converted to black and white with the Grayscale option in the HSL/Grayscale tab first.

The effect tends to look strongest with opposing colors, e.g., red vs. cyan or yellow vs. violet, but it is conceivable that two adjacent colors could be used effectively. The easiest way to establish the effect is as follows:

1. Push the saturation higher than needed for both the highlights and shadows.
2. Pick the hues for highlights and shadows.
3. Use the balance slider to set the crossover point.
4. Adjust the saturation levels for highlights and shadows until you have a pleasing mix.

USE PRESETS AND SNAPSHOTS

If you are experimenting with several settings together to determine which is the best combination for your image, you can quickly save a snapshot for each potential group of settings. To create a snapshot, do the following:

1. Click on the Snapshots tab.
2. Click on the new Snapshot icon at the bottom of the tab.
3. Enter a name.
4. Click OK.

To use a snapshot, click on it in the snapshot list. The snapshot's settings will immediately be applied. To delete the selected preset, click the trashcan icon at the bottom of the tab.
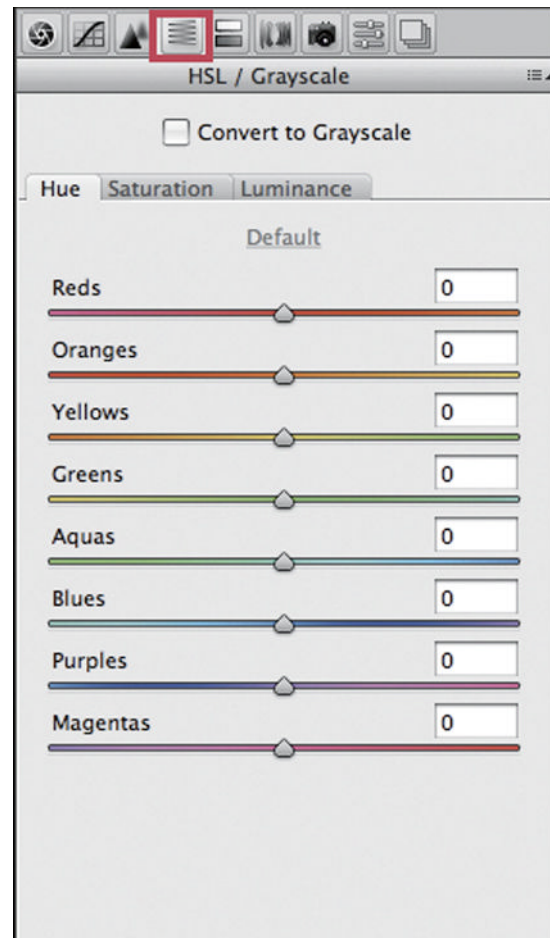
Snapshots record all of the settings in all tabs, while presets allow you to select which settings will be recorded. Presets are available any time, while snapshots are attached to each individual RAW file. To record a preset, do the following:

1. Click on the Presets tab.
2. Click on the New Preset icon at the bottom of the tab.
3. Enter a name and select check the settings you wish to record.
4. Click OK.
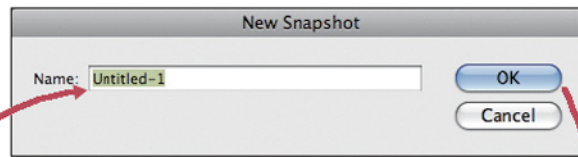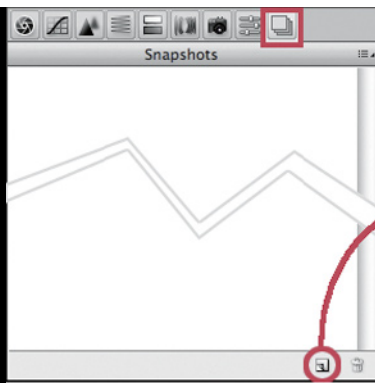
TOP: *Creating a snapshot. Snapshots are attached to individual images.*

BOTTOM: *Creating a preset.*

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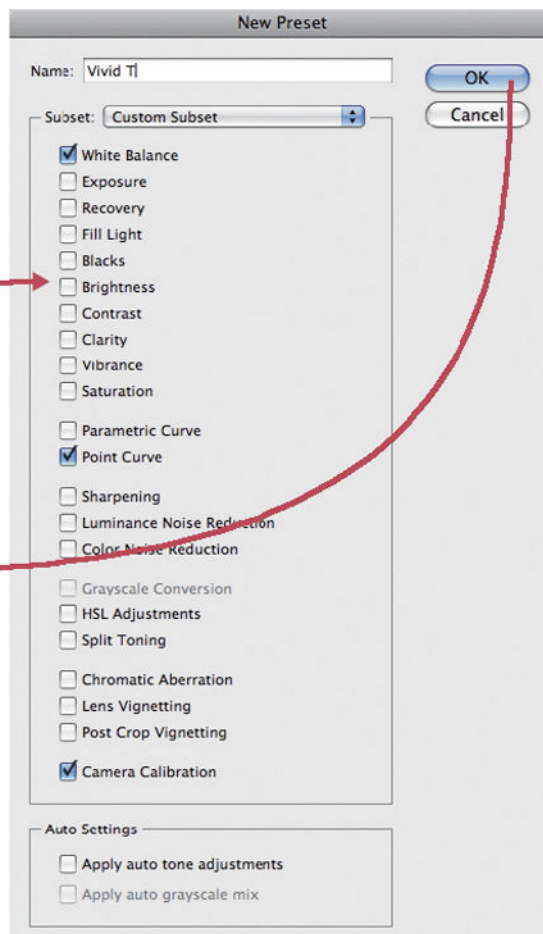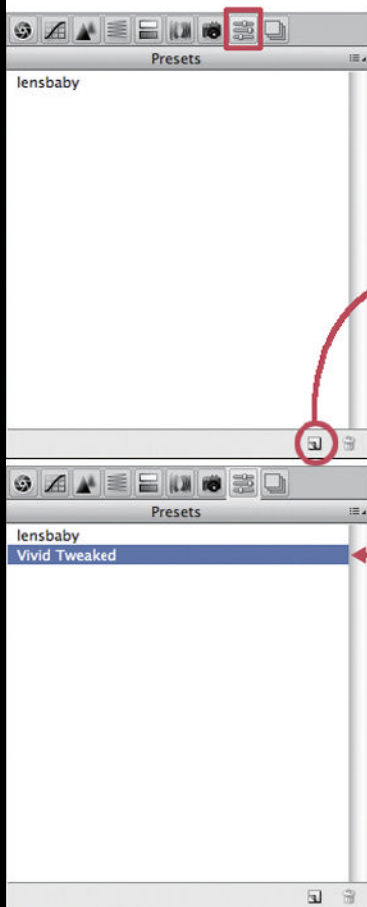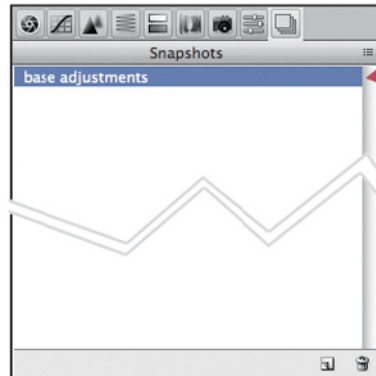
USE WORKFLOW OPTIONS

Before Camera RAW hands off the converted image to Photoshop, there are a few important decisions for you to make. These choices are established in the workflow options. The most critical choices to make are color space and bit depth. You can also resample your image and specify the print resolution ahead of time through the workflow options. To enter the workflow options, click the underlined text at the bottom of the Camera RAW dialog.

In terms of color space and bit depth, Adobe RGB in 16-bit mode is the best general-purpose color space in which to work. If your machine has limited computing power, you might consider Adobe RGB in 8-bit mode. The space you choose is dependent on what you plan to do with the image after it leaves Photoshop. If you know you only plan to make web files out of the image, sRGB in 8-bit mode is probably a better choice. ProPhoto can hold some saturated hues—blues, greens, and maybe magentas—that your monitor can't display but that your printer can print. If your work involves those strongly saturated colors—such as lush green landscapes and saturated skies—you may find it beneficial to work in ProPhoto in 16-bit mode.

If you choose ProPhoto RGB, be sure to use 16-bit mode all the way to printing, and do not switch to 8-bit. Switching to 8-bit in ProPhoto

The workflow options in Camera RAW allow you to select color space, bit depth, and resolution before opening in Photoshop.
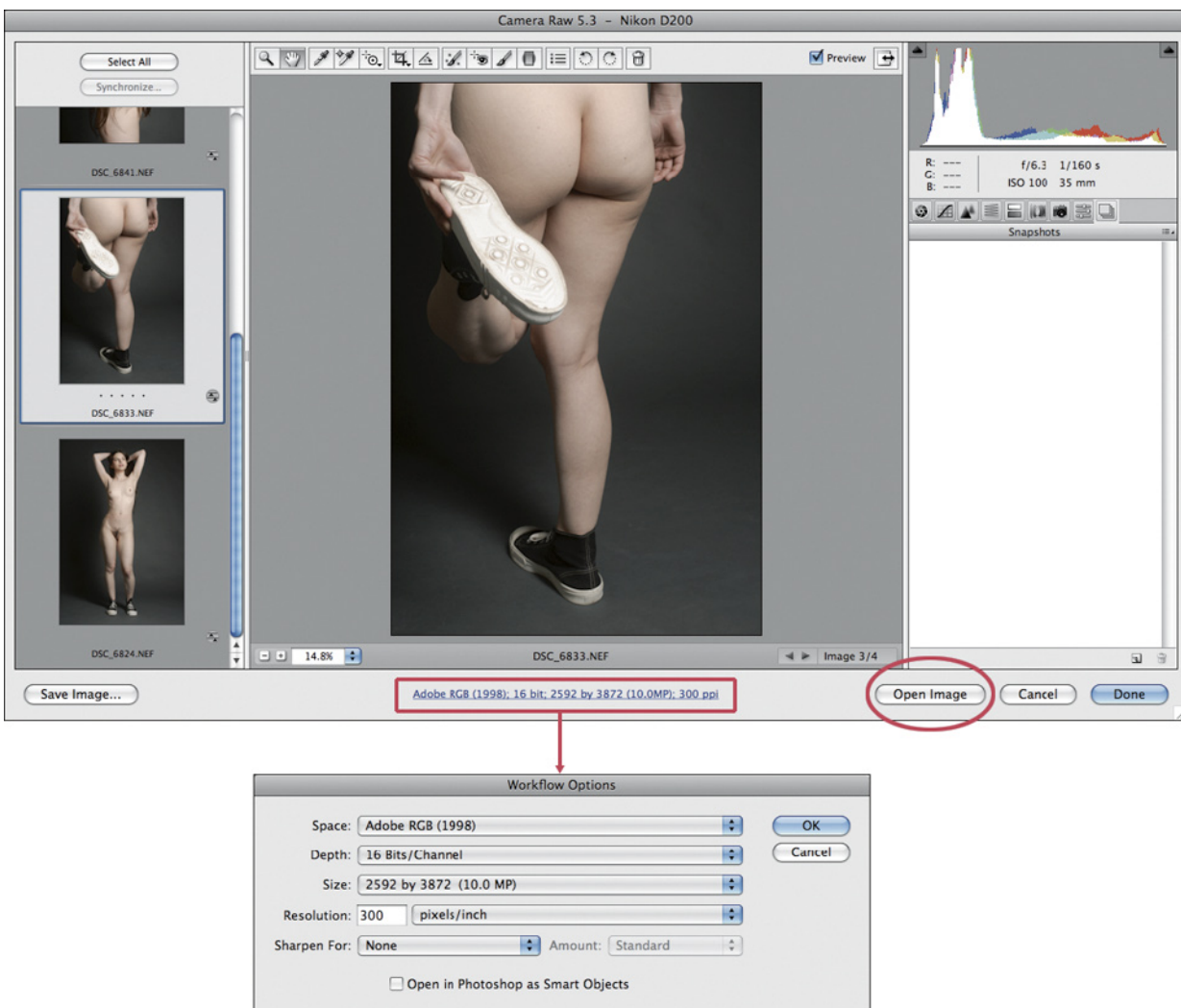
RGB is especially likely to cause posterization. Epson's current print drivers have a 16-bit option, and it should be used whenever you are working in 16-bit.

The size options are a convenience feature. Camera RAW can re-sample your image to make it larger or smaller. The re-sampled size options are all marked with either a plus sign or a minus sign. It's generally better to re-sample in Photoshop when you need to, so if you don't have a special purpose for doing so, be sure that the size setting you choose does not show a plus or minus.

The PPI setting in the Workflow Options is another convenience feature, and is not critical. The only places that the PPI setting has any effect are in the option to view at print size and when you send your image to the printer. Chances are that you will change the setting before you print the image.

TECHNIQUES IN PHOTOSHOP

Once you have set your workflow options in Camera RAW, you can click the Open button to render the file and transfer it to Photoshop's editing environment. In the next part of this chapter, we will primarily focus on techniques for creative expression with Photoshop.

REFINE THE COLOR PALETTE OF AN IMAGE

One of the reasons many photographers prefer black and white is that color in the real world can quickly muddy things up. When you look at a color image, sometimes there is a dominant set of colors. The image will become much stronger if you can diminish the effect of competing colors.

In the example in the photo below, the color in the composition was altered to emphasize

Before and after selective color adjustments.

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the red/green color contrast. There was also a slight yellowish cast on the skin that complicated the composition. Reducing the yellow and changing the green of the artichoke to a slightly unnatural color strengthened the image. Here's how to do this:

1. In the Layers panel, choose Selective Color … from the Add a New Fill or Adjustment Layer menu at the bottom of the panel.
2. With the colors menu set to Reds, set the following adjustments: Cyan +6, Magenta –2, Yellow –11.

3. With the colors menu set to Yellows, set the Black slider to –24.
4. In the Layers panel, choose Hue/Saturation … from the Add a New Fill or Adjustment Layer menu.
5. Select Greens from the menu at the top of the Adjustments panel.
6. Click the finger icon to activate the click and drag feature.

The Layers panel featuring a Hue/Saturation and Selective Color adjustment layer. The adjustments panel displays the controls for the selected layer. Adjustment layers can be added through the menue icon at the bottom of the panel.
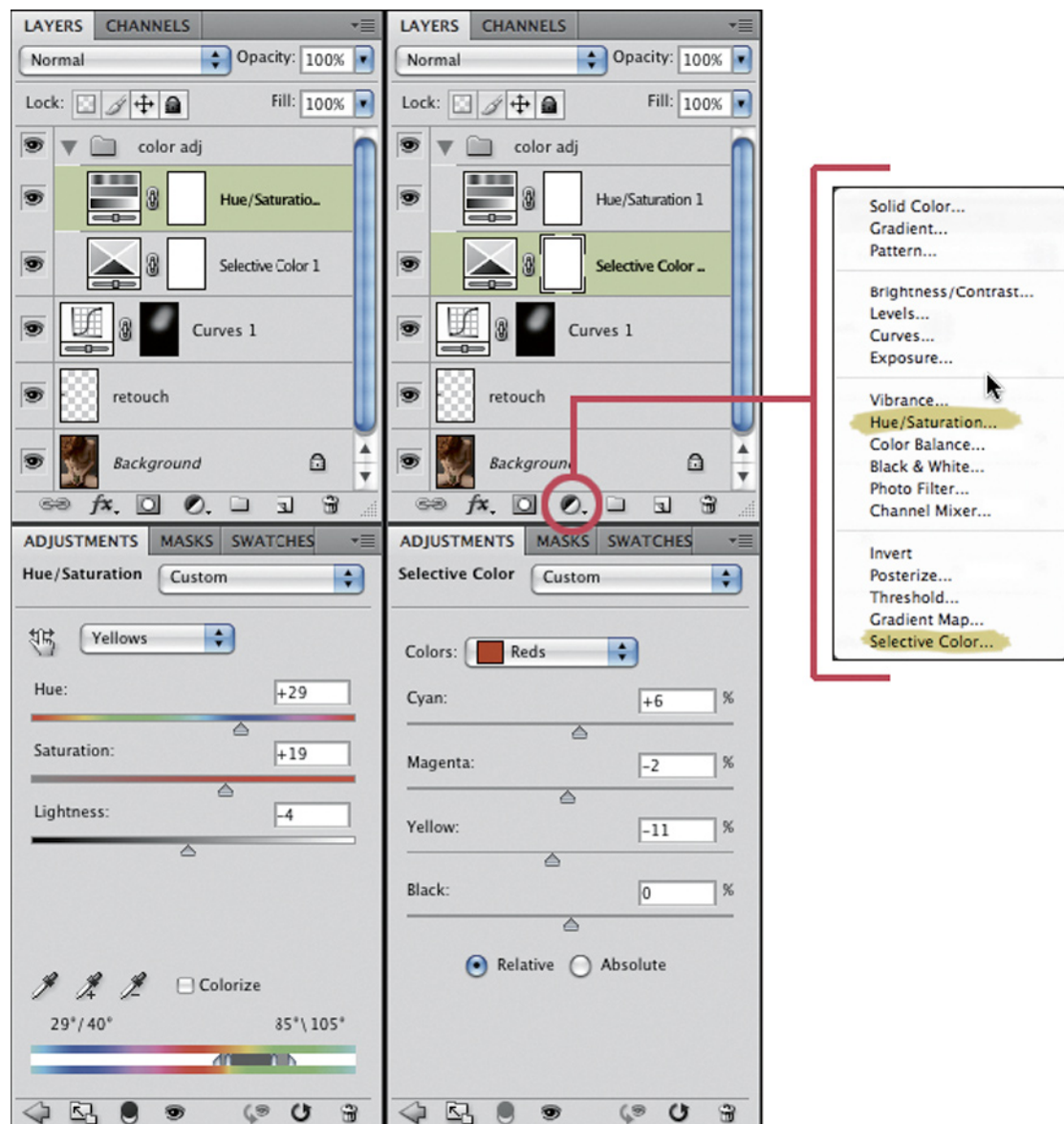
7. Click on the artichoke to target a color. Notice that the dialog adjusts, and the colors menu shifts to Yellows.

8. Adjust the sliders as follows: Hue +29, Saturation +19, Lightness –4.

CONVERT COLOR IMAGES TO BLACK AND WHITE

Photoshop's black-and-white adjustment layers were introduced in CS3, and they completely altered the nature of converting images to black and white in Photoshop. There were techniques such as using the channel mixer or applying a grayscale gradient that worked reasonably well, but the black-and-white adjustment layer eclipses all other techniques for intuitiveness and ease of use.

There are a few ways to add a black-and-white adjustment layer to a color file:

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1. Go to the Adjustments panel and click on the Black & White Layer button.

2. In the Adjustments panel, click on the triangle next to Black & White Presets to show the list, and then click on a preset.

3. In the Layers panel, hold the mouse button down on the Create a New Fill or Adjustment Layer icon to display its menu, and then select Black & White ... from the menu.

Excellent color and black and white images can be obtained from the same file through the Black and White adjustment layer.

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Once you have the adjustment layer in place, you can adjust the sliders manually to get a pleasing tonal distribution, or you can select a preset effect, such as Infrared, from the menu at the top of the Adjustments panel.

TWEAK TONES WITH CURVES

Often, the tones you establish with the black-and-white adjustment might need an additional boost with a curve. That could simply mean lightening the image a bit, or making an adjustment to the overall contrast. You can do the following:

1. Make the Adjustments panel visible.

2. If it is showing a set of controls instead of the adjustment list, click on the arrow in the lower left corner of the panel.

3. Click on the Curves button at the top of the Adjustment panel, or click the triangle next to Curves Presets and select a preset from the list.

Once the curve is added, you can edit its control points to further refine the effect.

There is another way to add contrast to your image with a curve, which is less obvious. Rather than adjusting the control points of the curve, you can leave the graph unadjusted and change the blending mode of the adjustment layer to one of the contrast blending modes. Those modes are as follows:

- Overlay
- Soft Light
- Hard Light
- Vivid Light
- Linear Light
- Pin Light
- Hard Mix

You may find that one of the contrast blending modes is the right general idea, but the effect is too strong. In that case, you can use the opacity slider to reduce the effect.

When the Adjustments panel is showing controls for the current layer, click the arrow at the bottom of the panel to return to the adjustment list.
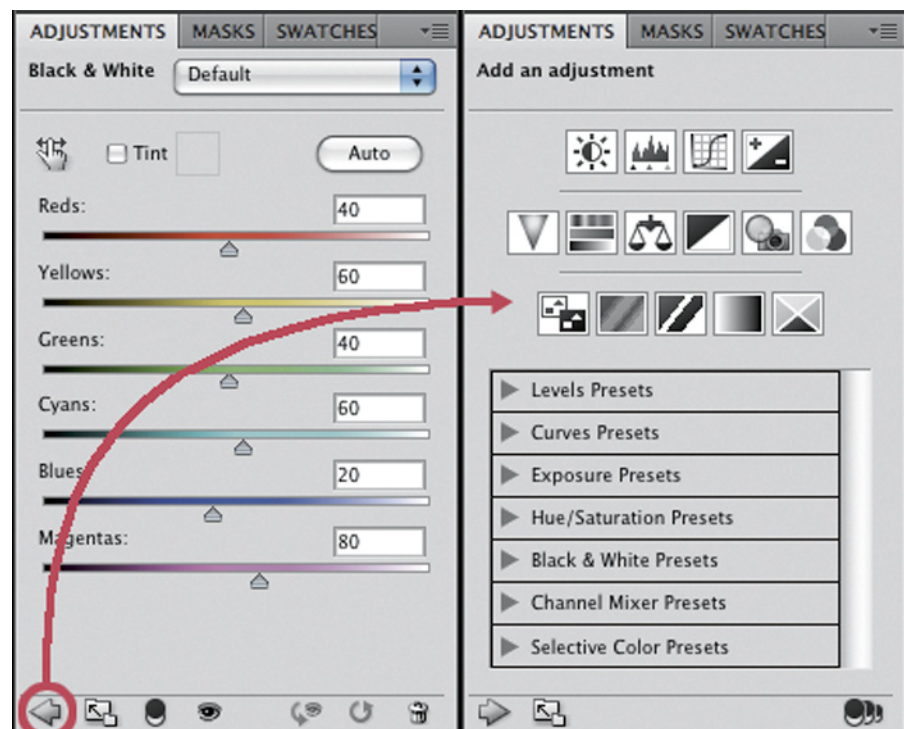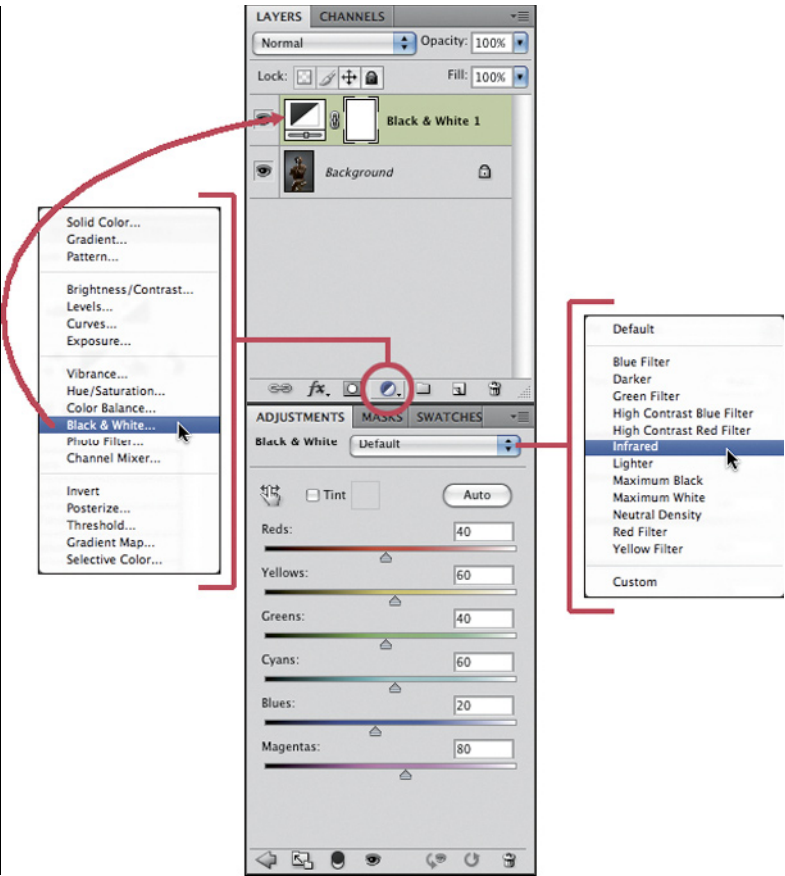
TOP: *The menu at the bottom of the Layers panel allows you to add a Black & White adjustment layer. When the layer is selected, the adjustment panel allows you to apply a preset, such as infrared.*

BOTTOM: *In addition to the curve presets in the Adjustments panel, the tonal effect of a curve can be modified by changing the blending mode and opacity of the layer via the Layers panel.*

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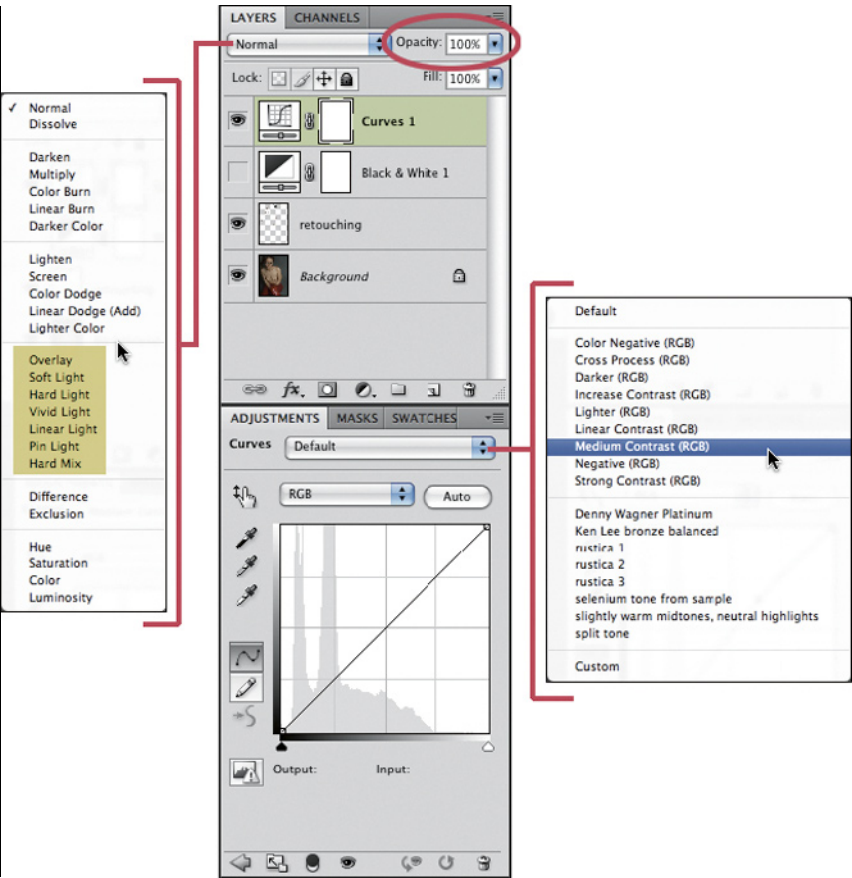
COLORIZING BLACK AND WHITE

The black-and-white layers can be used to create beautiful neutral-tone black-and-white images, or they can be the basis for color effects beyond split toning, which was discussed earlier in the Camera RAW section of this chapter. Any black-and-white conversion can be used to modulate the tonality of the underlying colors in a file. Just change the blending mode of the black-and-white layer to Luminosity. The colors from the underlying layer will take on the tones of the black-and-white layer.

Earlier, we looked at how the curves adjustment allows you to alter the tonality of an image, but curves can also be used for color adjustment. By default, the Adjustments panel for a Curves layer applies changes equally to the red, green, and blue channels, but a menu in the panel allows you to curve each channel separately. If you set the blending mode of a Curves layer to Color, you can curve each channel without changing the luminosity (light/dark values) of the image. In this way, curves can be used for color correction, or they can be used for creative color applications.

Curves presets can be saved and loaded, allowing you to easily reuse curves effects. Figure 10.21 is an example of that application. In the wet darkroom, selenium toning is more common than sepia toning, but in the digital world it is the other way around. That's because sepia toning can be effectively simulated with a simple brown overlay, but selenium toning colors the highlights differently than it does the shadows, and the effect is subtle. That's a job for curves.

The black-and-white conversion used the Red Filter preset. When that layer was set to Luminosity mode, the effect was too strong. Panel 3 shows the layer in Luminosity mode with the opacity reduced to 60%.

Simulated selenium toning. To create the effect, a preset Curves adjustment was placed over a black-and-white adjustment layer.

world of wet photography, cyanotypes are made as a contact print, often using objects laid directly on the photosensitized material, rather than being projected onto the surface via an enlarger. The high-contrast medium tends to show minimal fine detail, and the shadow areas tend to block up to solid blue very easily. You can achieve the coloration of cyanotype with a Hue/Saturation preset, but if you are out to make images that are not simply the color of cyanotype, it makes sense to look for ways to increase contrast, plug up the shadows, and reduce fine details. The best ways to reduce detail in the mid-tones and highlights will vary. A curve layer set to hard light will give a pronounced weight to the shadows.

USE THE THRESHOLD ADJUSTMENT

The Threshold adjustment creates a strong break between light and dark and can be used in conjunction with effects like cyanotype to make dramatic and moody images.

1. In the Layers panel, click on the topmost layer.
2. In the Layers panel, hold the mouse button down on the Create New Fill or Adjustment Layer icon and select Black & White … from the menu. A new adjustment layer will appear in the layer stack.
3. In the Adjustments panel, use the sliders and presets in the dialog as needed to make a satisfying black-and-white conversion.
4. In the Layers panel, hold the mouse button down on the Create New Fill or Adjustment Layer icon and select Threshold … from the menu. A new adjustment layer will appear in the layer stack.
5. In the Adjustments panel, move the slider until you find a visually pleasing break in the tones.

COLOR EFFECTS WITH THE HUE/ SATURATION ADJUSTMENT LAYER

Two colorization effects that are relevant to black-and-white images are emulations of effects that come from the world of wet photography, namely, cyanotype and sepia toning. To use them:

1. Click on the topmost layer in the stack to select it.
2. Hold the mouse button down on the Create New Fill or Adjustment Layer icon to display a menu and select Hue/Saturation….
3. Choose either Cyanotype or Sepia from the menu at the top of the adjustment panel.

Cyanotype is an alternative photographic process that is a relative of blueprints. In the

TOP: *Applying Cyanotype or sepia effects with Hue/Saturation adjustment layer.*

BOTTOM: *Setting a Curves adjustment layer to the Hard Light blending mode adds contrast without shaping the curve.*

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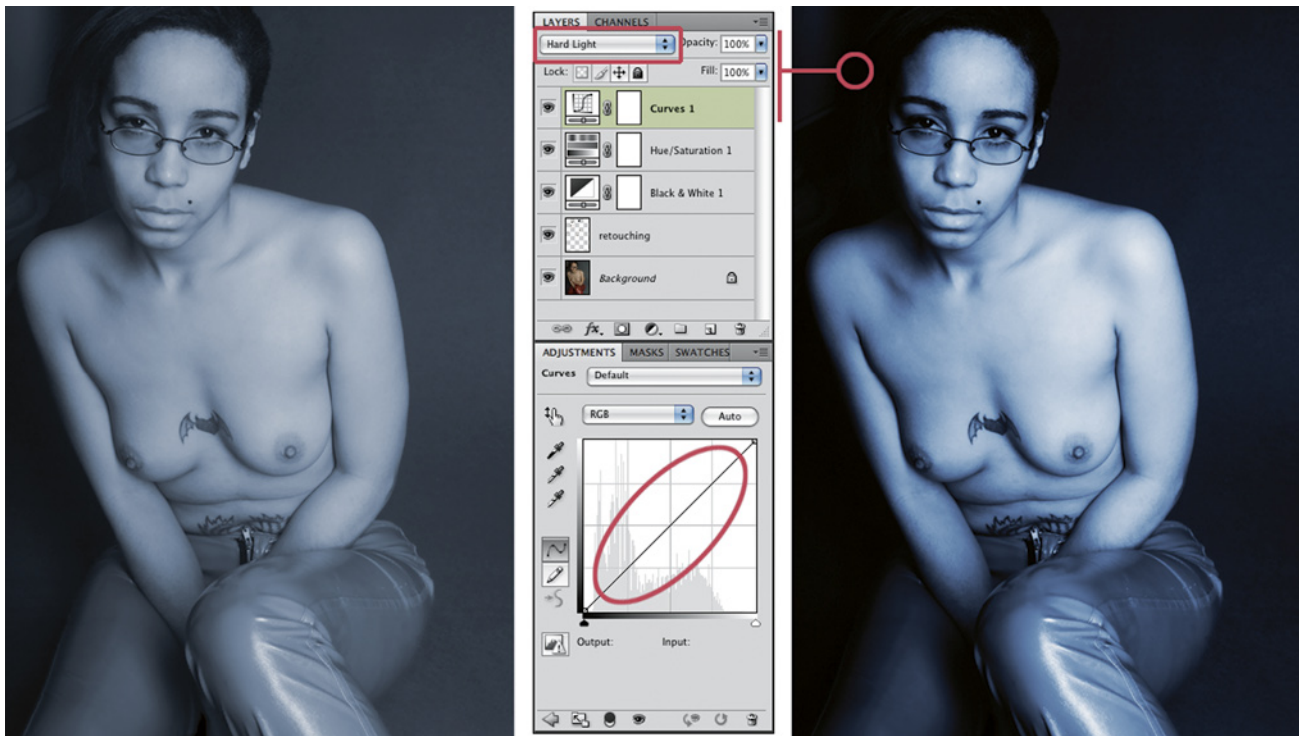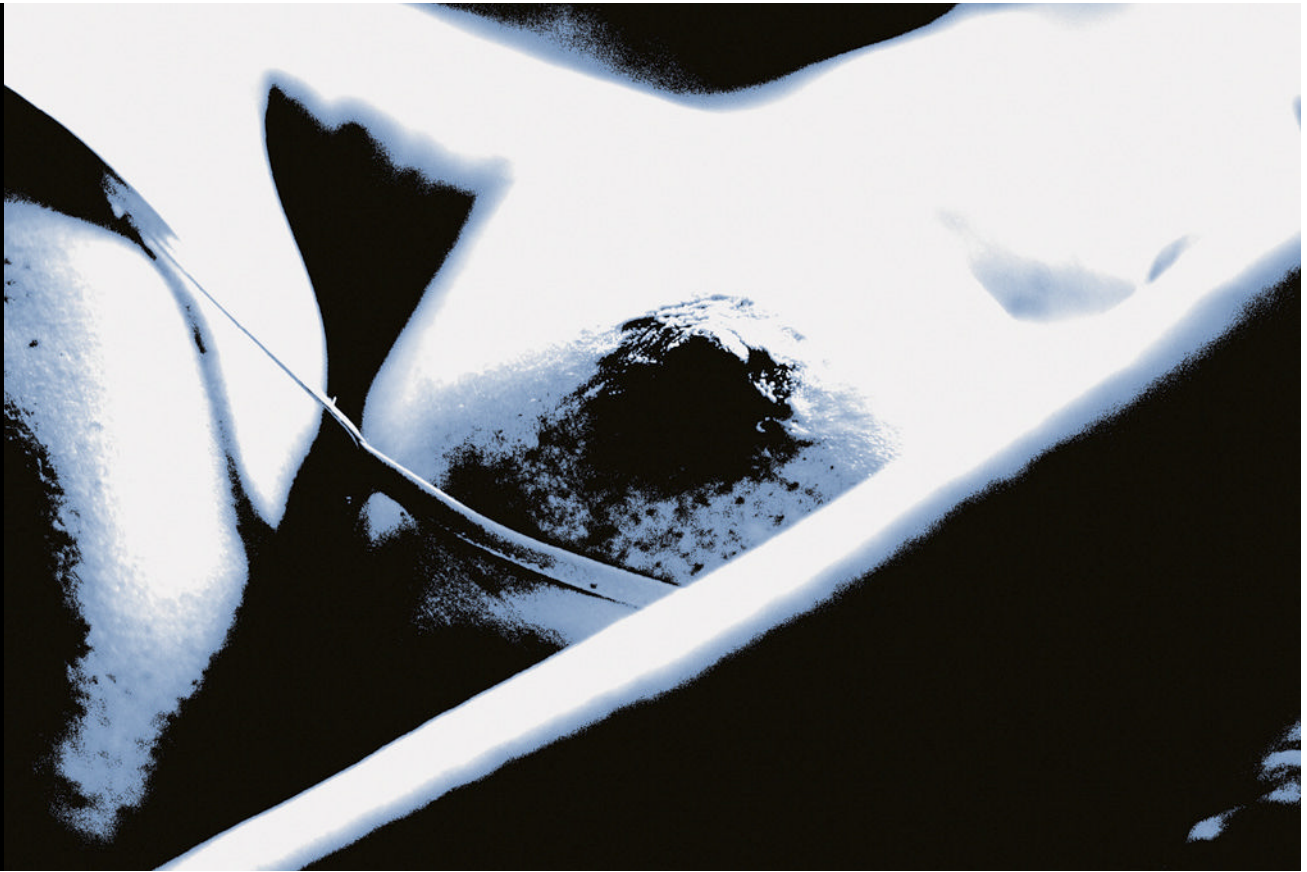
An image that combines Threshold and Cyanotype, using layer blending modes.

6. In the Layers panel, change the blending mode of the threshold layer to Overlay.

7. In the Layers panel, hold the mouse button down on the Create New Fill or Adjustment Layer icon and select Hue/Saturation ... from the menu. A new adjustment layer will appear in the layer stack.

8. In the Adjustments panel, select Cyanotype from the presets menu at the top of the panel.

ADDING TEXTURES

Textures can be an important dimension in constructed images. You can photograph or scan textures to add to your files, or you can generate them. Three main tools for creating textures in Photoshop are the Clouds, Noise, and Fibers filters. Each of these creates random texture effects that can be used as is or modified and combined in different ways.

Each time you choose Filter > Render > Clouds, you get a different arrangement of light and dark. An example of using Clouds to create a texture effect follows, but the key is to experiment and find your own effects.

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1. In the Layers panel, click on the topmost layer.

2. In the Layers panel, click on the Add New Layer icon. A new layer will appear in the stack.

3. Tap the D key to set the default colors.

4. Choose Render > Clouds from the menu bar. A random cloud pattern will fill the layer. If you don't like the pattern, choose

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Render > Clouds repeatedly until you get a pattern that you like.

5. Choose Filter > Other > Maximum ... to alter the transition to the highlights in your image. A dialog will appear.

6. Choose a radius and click OK to apply the effect.

7. Choose Filter > Noise > Median ... to smooth the tonal transitions. A dialog will appear.

8. Choose a radius and click OK to apply the effect.

9. Choose Filter > Stylize > Emboss ... to make the tonal effect look three-dimensional. A dialog will appear.

10. Change the angle, height, and amount as desired, then click OK to apply the effect.

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Noise can be used to add a fine texture to your images. Blurring it slightly makes it look more like film grain.

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1. In the Layers panel, click on the topmost layer to select it.

2. Hold down the Option [Alt] key and click on the Create a New Layer icon to add a layer. A dialog will appear.

3. Change the mode to Overlay.

4. Check the box marked Fill with Overlay-neutral color (50% gray).

5. Optional: name your layer, e.g., Noise Layer.

6. Choose Filter > Noise > Add Noise....

7. Set the distribution and then the amount. Gaussian produces a randomized effect more akin to film grain.

8. Optional: check the box marked Mono-chromatic. Leave it unchecked to create an effect that emulates color film.
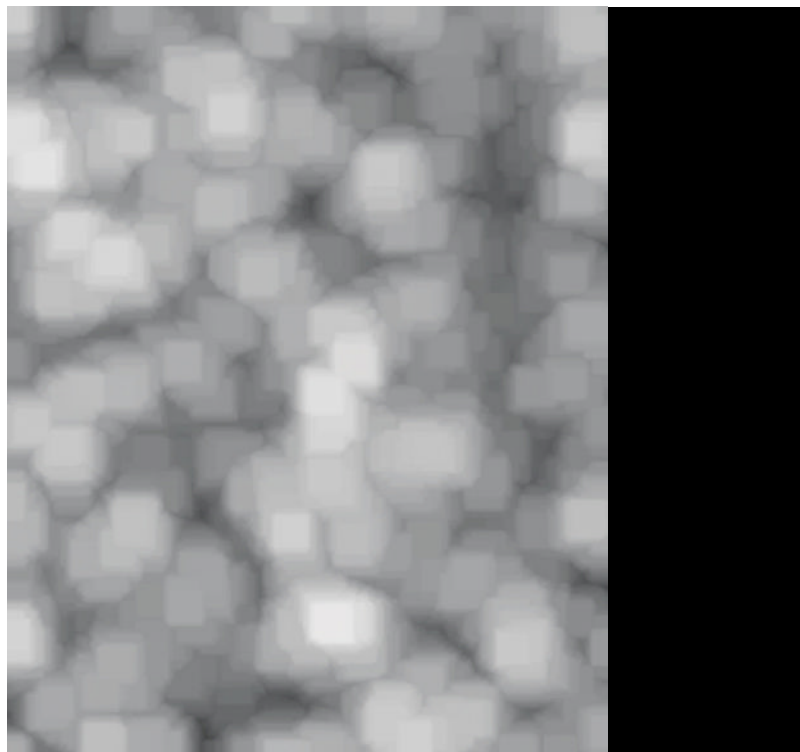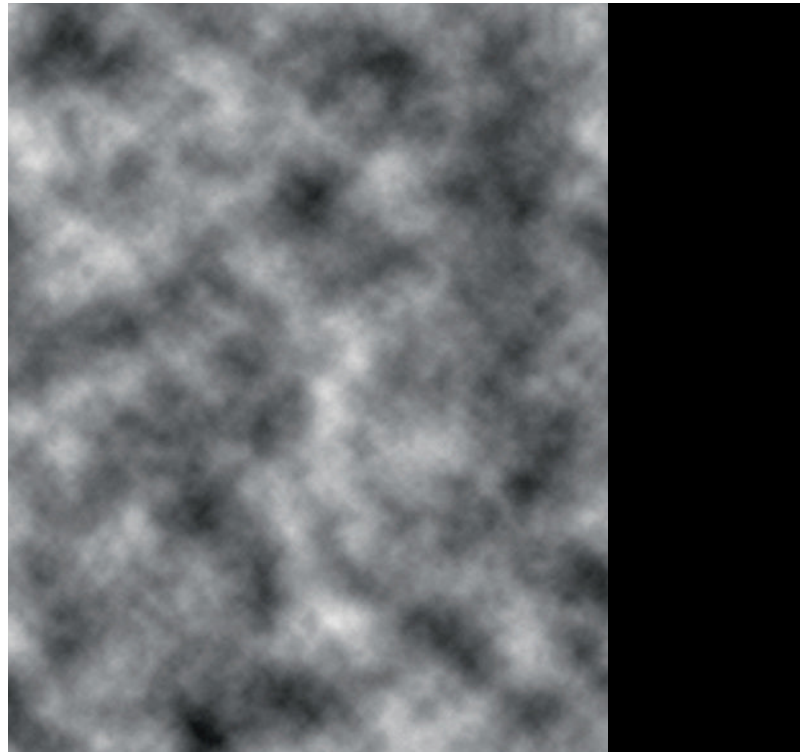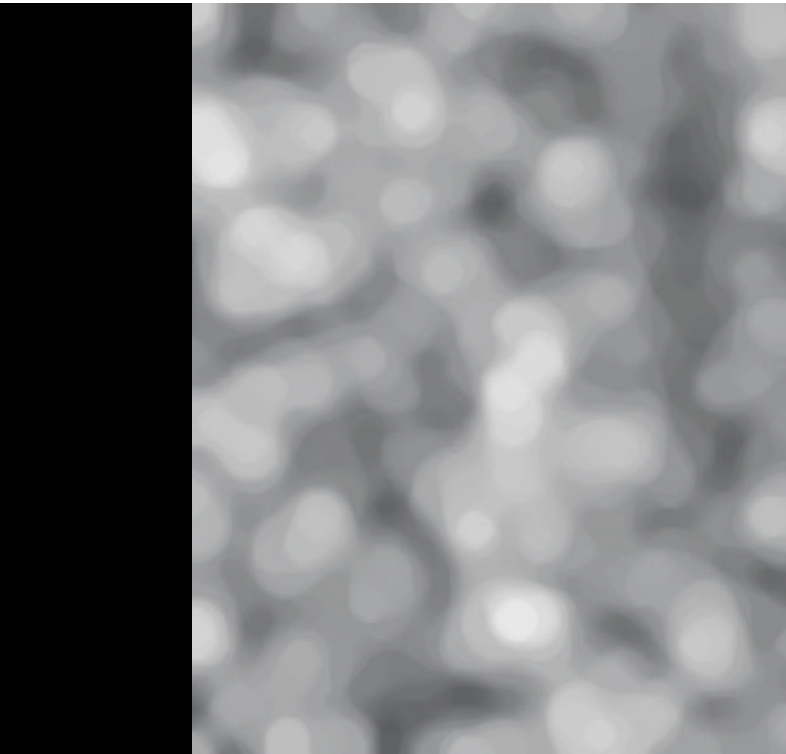
9. Choose Filter > Blur > Gaussian Blur ... to smooth the edges of the noise and make it look more like film grain.

10. Enter a radius. A small radius (e.g., 0.8) works best for a film grain effect.

11. Click OK to apply the effect.

12. Optional: if the effect is too strong, you can either change the layer blending mode to Soft Light or reduce the opacity of the layer.

Noise patterns can be used to create a wide range of pattern and texture effects. Applying motion blur to noise can make it look like rain or brushed metal.

Filter > Render > Fibers ... creates a randomized fiber effect. The colors of the pattern come from the current foreground and background colors in the Tools panel. The effect replaces pixels already present in the layer, so unlike Clouds, it won't work on a blank layer.
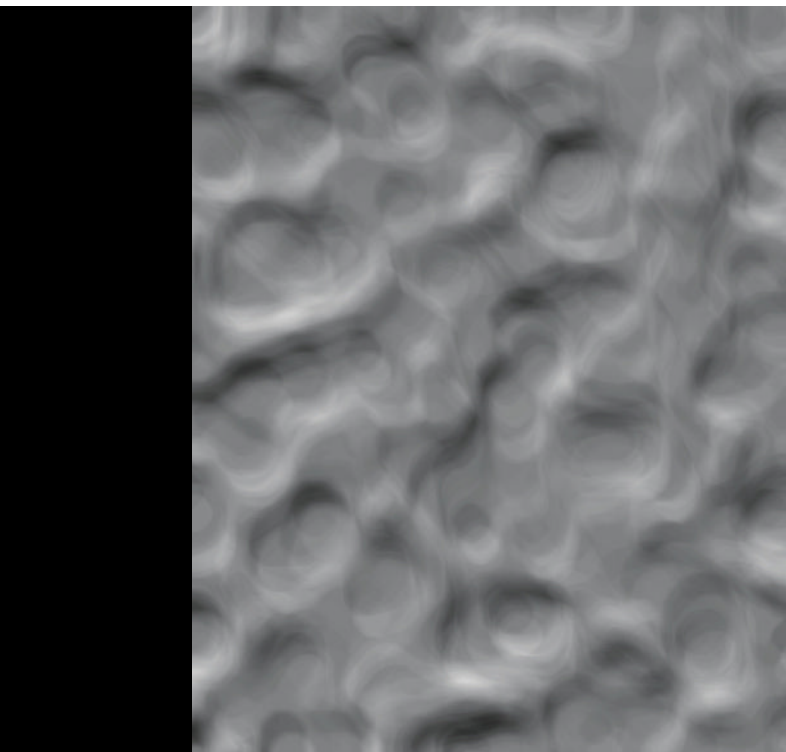
1. In the Layers panel, hold down the Option [Alt] key and click on the Create a New Layer icon. A dialog will appear.

2. Set the layer mode to Overlay or Soft Light.

3. Check the box that says Fill with Layer mode-neutral color (50% gray).

4. Name the layer, if you like, and click OK.

5. Check the foreground and background colors. Hit the D key to select the default colors (black and white), or click on each of the color chips to pick foreground and background colors individually.

6. Select Filter > Render > Fibers ... to generate the effect. A dialog will appear.

7. Adjust the Variance and Strength sliders to define the effect.

8. If you want a different pattern, click the Randomize button as many times as needed.

9. Click OK to apply the effect.

The Fibers filter always generates a vertical pattern. You can change the orientation of the pattern by rotating and scaling the layer:

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1. If the Fiber layer is not selected, click the layer to select it.

2. Zoom out so that some gray space is visible around the outside of the image.

3. Choose Edit > Free Transform. Handles will appear around the corners of the image.

4. Place the cursor near one corner. When the cursor changes to a bent double-ended arrow, it is ready to rotate.

5. Drag the corner in an arc to rotate it to the desired orientation.

The rotated pattern will not cover the entire image. To fix that, we'll scale the effect.

6. Place the cursor near one corner. When the cursor changes to a double-ended diagonal arrow, it is ready to scale.

7. Hold the Shift key down and drag the corner outward to expand the coverage. Repeat with other corners until the scaled effect covers the entire image.

8. Hit the Return key to commit the changes.

Sometimes, you only want the effect you're adding to be applied to part of the image. A valid criticism of a lot of digital art is that it looks as if someone simply poured one or two effects over the entire image like a glaze.
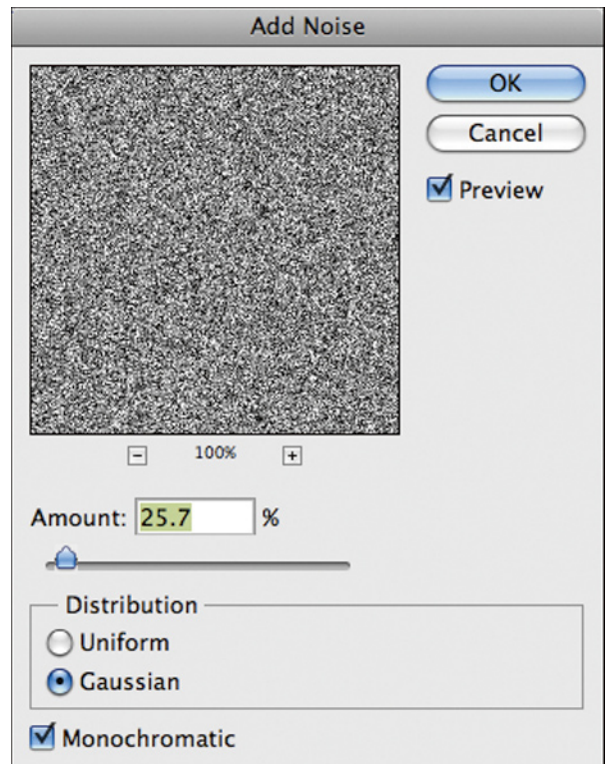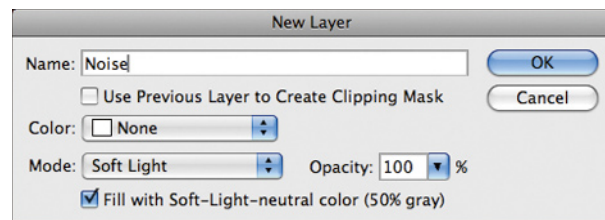
You can add a mask and paint it black to hide the effect and remove it from parts of the image.

---

1. In the Layers panel, click the layer to select it.

2. In the Layers panel, click the Add Layer Mask icon. A white layer mask thumbnail will appear next to the layer's pixel thumbnail.

Notice that there are bracket marks surrounding the corners of the layer mask thumbnail. This means that your painting will affect
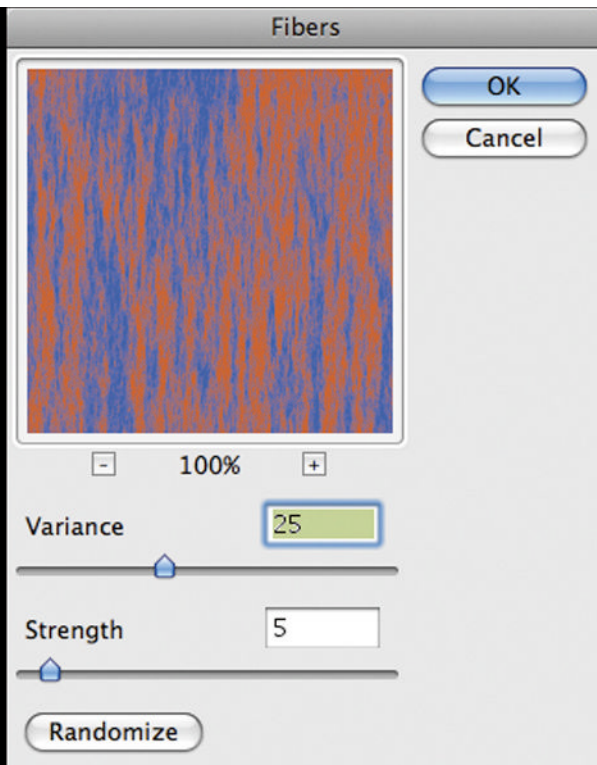
the layer mask, and not the pixels in the layer. If the brackets are around the main thumbnail, you will be painting on the pixels. Click any layer mask thumbnail to make sure you are painting onto the mask and not the pixels.

3. In the Tools panel, select the Brush tool.

4. In the Tool Options panel, click the Brush button to show the Brush Preset picker.

5. Check to see that the hardness is set to 0%. Hit the Return key to close the picker.

6. In the Tool Options panel, set the opacity of the brush lower—somewhere around 30% will do.

7. Make sure the foreground color is black. You can tap the D key to select the default colors and the X key to swap foreground and background colors.
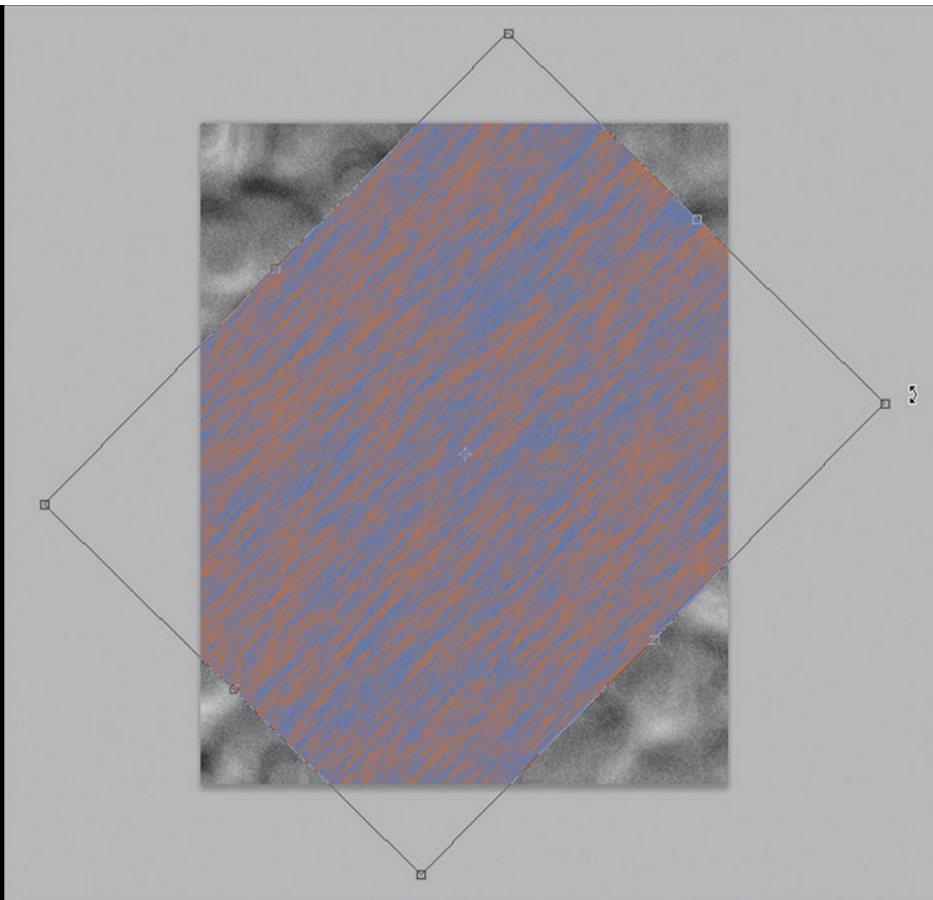
TOP: *Applying the Fibers filter.*

BOTTOM: *Rotating the Fibers layer.*
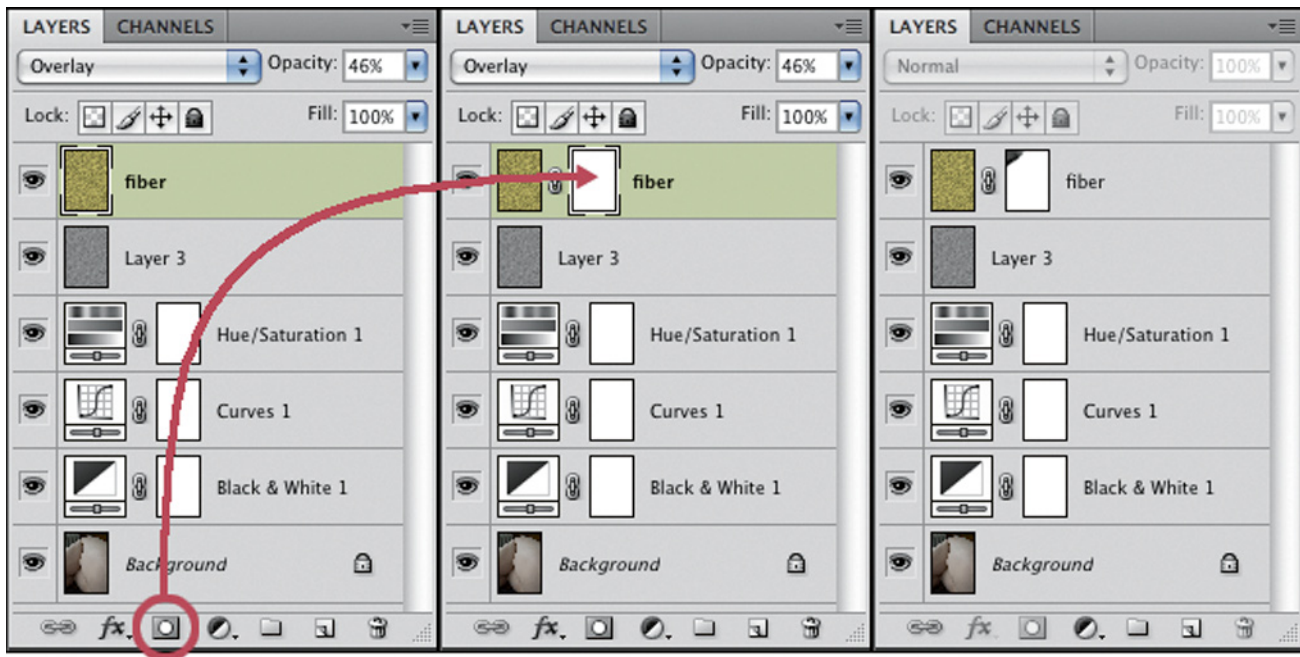
TOP: *Add a Layer Mask with the icon at the bottom of the Layers panel, and paint the mask black to hide pixels instead of erasing.*

BOTTOM: *With the Brush tool selected, the Tool Options bar allows you to use brush presets and specify opacity. The black and white color chips near the bottom of the Tools panel indicate the selected foreground and background colors.*
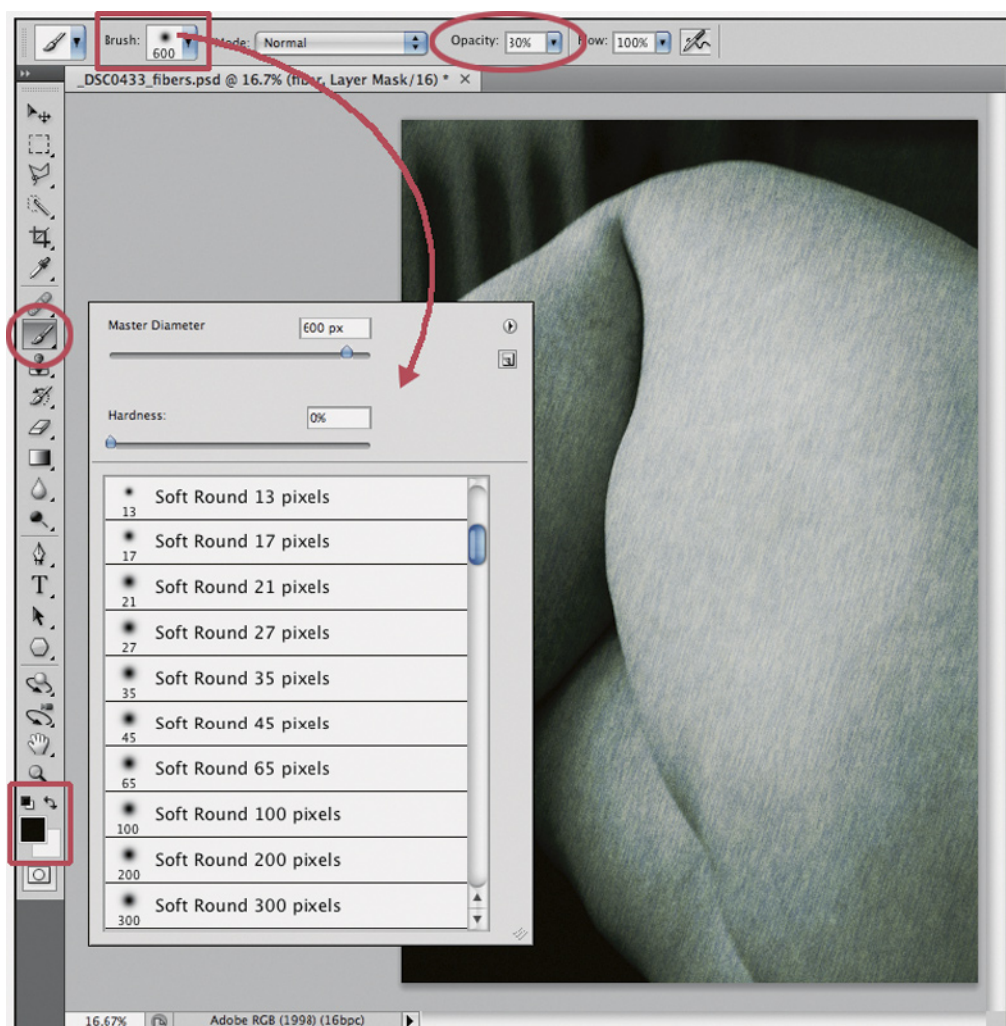
8. Use the square bracket keys to change the size of the brush.] makes the brush larger, and [makes it smaller.

9. Stroke and release the mouse button repeatedly to hide the effect in parts of the image. The effect will build gradually.

If the effect goes too far, you can reverse it by painting over the area in white. If your foreground colors are black and white, just tap the X key to swap to white, and paint over the mask as needed. After that, you can tap the X key to go back to black and continue hiding the effect as needed.

The fiber pattern in the overlay mode vanishes in the shadow areas, but needs to be masked out of the upper left corner of this image.

MORE ON MASKS Simply put, a layer mask is a bitmap that describes what parts of a layer are visible, or what parts of an image will be affected by an adjustment layer. The ability to create and edit masks may be one of the most powerful features of Photoshop and is one of the features that distinguish it from Lightroom.

The rule for masking is "black blocks"; in other words, wherever the mask is completely black, the pixels will be hidden or the adjustment does not apply. Wherever the mask is pure white, the effect is applied 100%. If the mask is any shade of gray in between, the effect is applied partially.

Selections can become masks, and masks can become selections. If you make a selection and then add a new adjustment layer or add a layer mask to a pixel layer, the white parts of the mask will correspond to the selected parts and the rest of the mask will be black. Any areas that are partially selected will be represented by shades of gray. You can Command [Ctrl]-click on a mask to load it as a selection. Channels are actually a special type of mask. You can load a channel as a selection, allowing you to use the image itself to help you create precise masks and refine areas of the image.

Once a mask is attached to a layer, there will be times when you want to see where the mask is affecting the layer, what the mask looks like, and what the image looks like without the mask. Photoshop has features to help you visualize masks in a number of ways.

1. To view and edit a mask directly, hold the Option [Alt] key down and click on the mask thumbnail. Photoshop will display the mask instead of the image, and you can edit the mask the same way you do any pixel layer. Option [Alt]-click on the mask thumbnail again to return to normal viewing.

2. To view a mask as a colored overlay, hit the \ (backslash) key. The default color is bright red at 50% opacity. This rarely needs to be changed, but there is a preference for it. Hit the \ (backslash) key again to return to normal.

3. To temporarily disable a mask, hold the Shift key down and click on the mask thumbnail. A red X will appear through the mask, and the mask will have no effect. Shift-click the mask thumbnail again to restore its functionality.

CREATE A DOUBLE EXPOSURE EFFECT

Double exposure can produce a dramatic and somewhat mysterious effect that moves away from the literal transcription of an object or person and into the realm of dreams. If you have ever tried to emulate double exposure in Photoshop, you have seen that it is more complicated than placing one image over the other and lowering the opacity of the top layer. A double-exposed image is not a simple overlay of the two exposures; instead, the two images in a double exposure actually interact. In essence, the highlights of the first exposure punch through the details of the second exposure, and the second exposure registers most in the shadow areas of the first exposure.

So, to simulate double exposure in Photoshop, the tonality of the bottom layer has to serve as the template for a layer mask that hides

parts of the top layer. The effect works best when the base image has strong contrast and one or more areas that contain dense, dark tones. An example follows.

1. Open the image that will act as your base image.

2. Open the image that will act as the second exposure.

3. Holding the Shift key down, drag the second exposure image onto the base image.

When you release the mouse button, the second image will snap into alignment with the first on the canvas.

4. Click the eyeball icon on the top layer to temporarily hide it.

5. Go to the Channels panel and hold down the Command [Ctrl] key and click the RGB channel. The "marching ants" pattern indicating an active selection will appear.

Command [Ctrl]-clicking the RGB channel is a shortcut for loading a selection based on the tonality of the image. That means that the brightest parts of the image will be most selected, and the darkest parts will be least selected. That's the inverse of what we want. We'll deal with that next.

6. Choose Select > Inverse from the menu bar.

Now, the darkest parts of the image are most selected, and the brightest parts are least selected.

7. Go back to the Layers panel and click on the top layer to select it.

8. Click on the Add Layer Mask icon at the bottom of the Layers panel.

9. Click the eyeball button to reveal the double exposure.

From this point, there are several additional tweaks that can be applied.
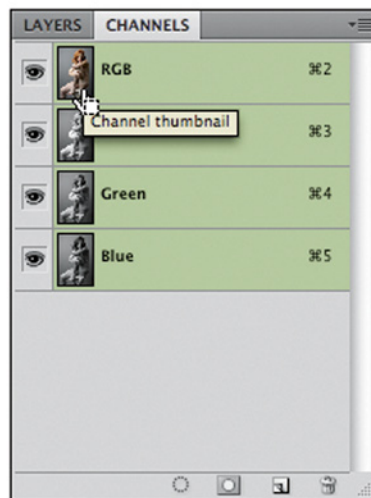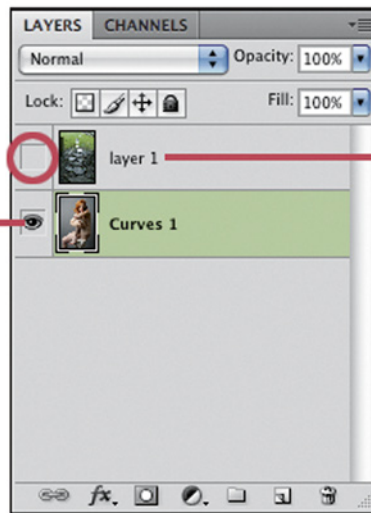
The layers panel shows the top layers with its visibility turned off. Holding down the command key and clicking on the RGB channel selects areas of the image based on their tonality.

- If needed, you can decrease the superimposition of the top layer by decreasing its opacity.
- Generally, the problem will be that your layer mask is not dense enough, but if it is too dense, you can click on the Masks panel and decrease its density.
- You can adjust the contrast of the layer mask, making the blacks denser or driving the highlights brighter.

1. Click on the layer mask thumbnail for the top layer. You will know that it is selected because angle brackets will surround the four corners of the mask thumbnail.
2. Select Image > Adjustments > Curves from the menu bar.
3. Adjust the curve and watch the image change. Try any of these adjustments: slide the black point or white point along the bottom, or push the black point up the left edge of the curve, or pull the white point down the right edge of the curve.

Creating double exposure effect.
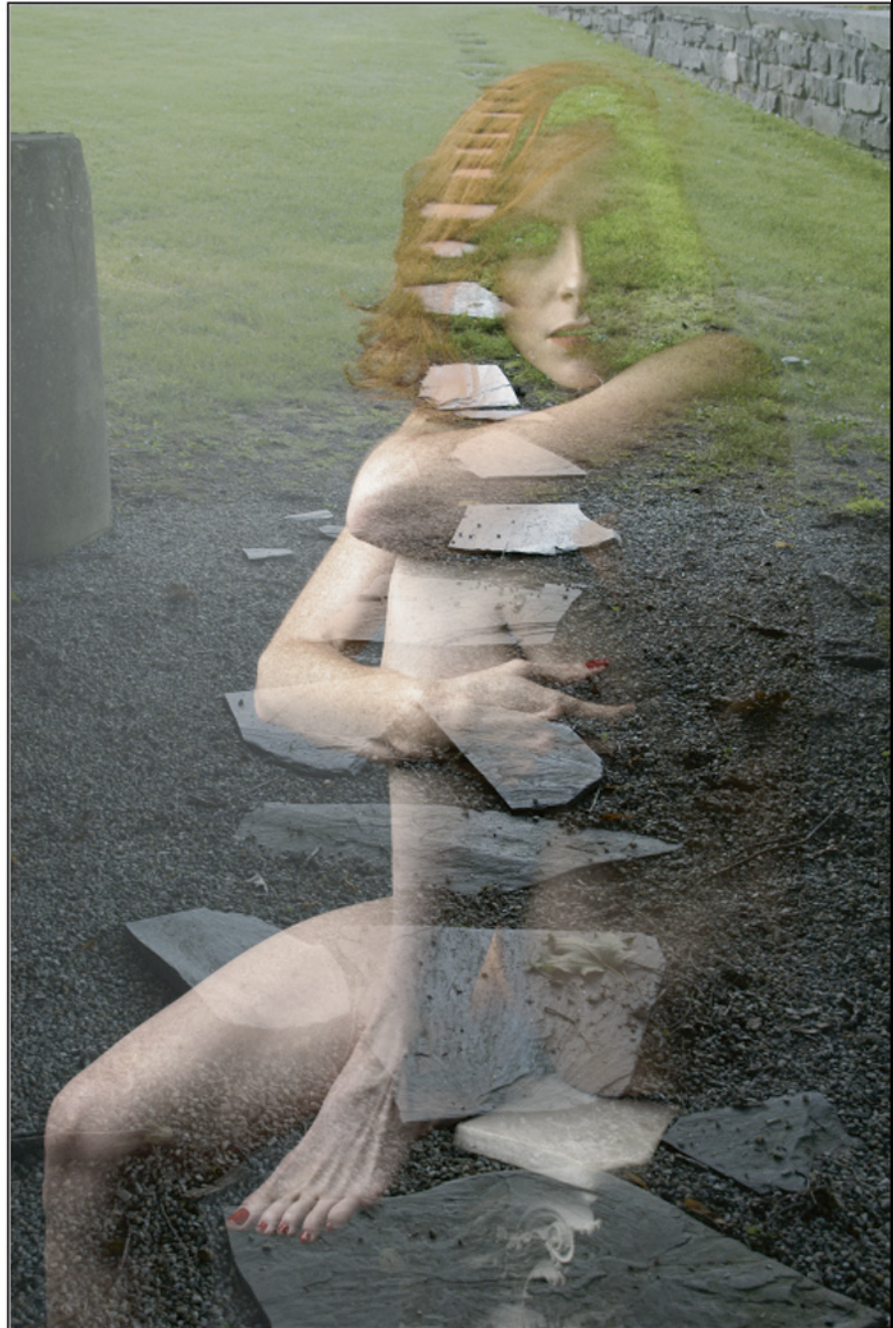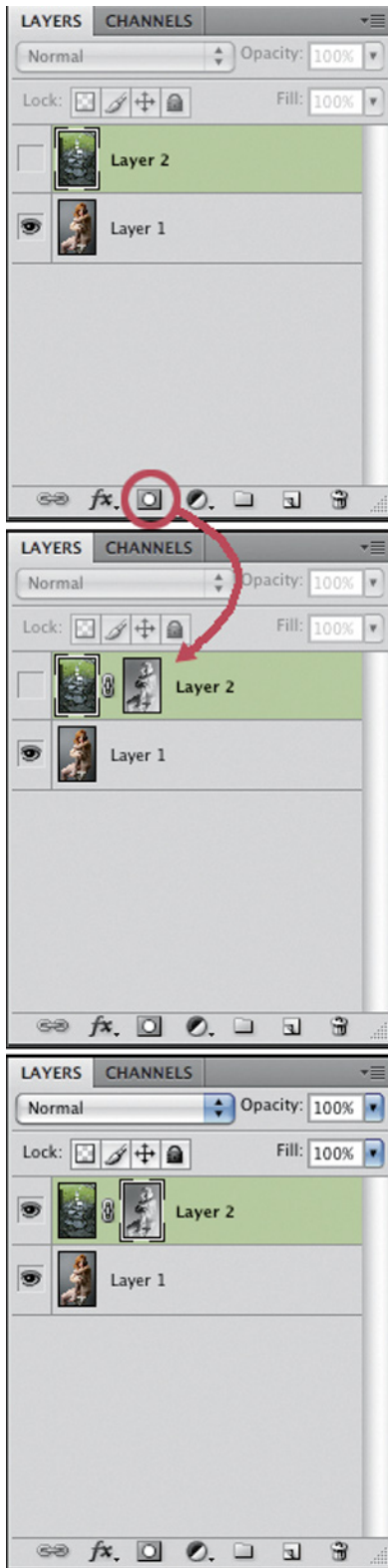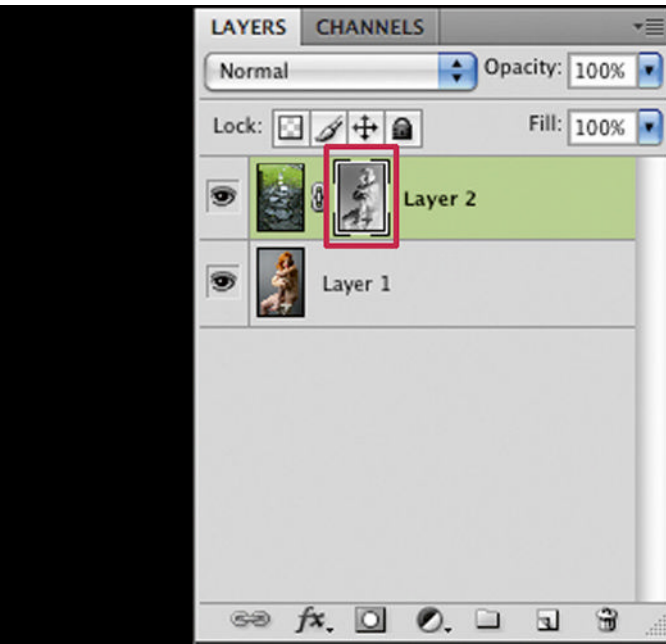
TOP: *Click on the layer mask to select it. Brackets will appear around the mask to indicate that it is active for editing.*

BOTTOM: *The Curves dialog, ready to adjust the tones in the mask.*
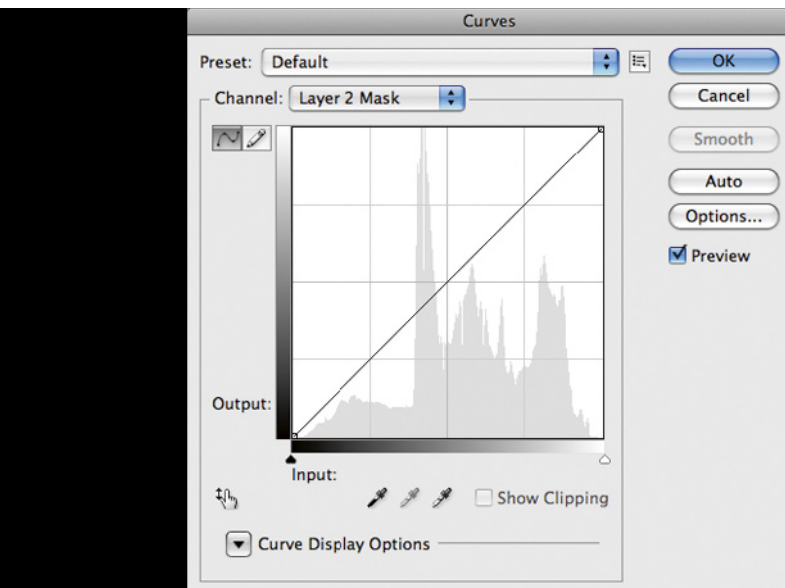
4. When you have a result that is satisfactory, click OK.

5. That last move altered the pixels in your mask. If you don't like the result, use undo or step backward in the history panel to revert.

• You can adjust the contrast of the top layer, separately from the bottom.

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1. Hold the Option key down while you select Curves from the Create New Fill or Adjustment Layer icon at the bottom of the Layers panel.

2. When the New Layer dialog opens, check the box marked Use Previous Layer to Create Clipping Mask. This makes the curves adjustment apply to only the top layer.

3. Click OK.

4. Watch the effect as you adjust the curve in the Curves panel. Use a preset, drag the points, or start with a preset and modify it.

The Layer Blending Options control provides a second, slightly less flexible way to blend layers based on the tonality of either layer.

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1. In the Layers panel, click on a layer to select it.

2. At the bottom of the Layers panel, press the mouse button down on the fx menu and select Blending Options…. A dialog will appear.

3. In the section marked Blend If, leave the menu set to the default (Gray).

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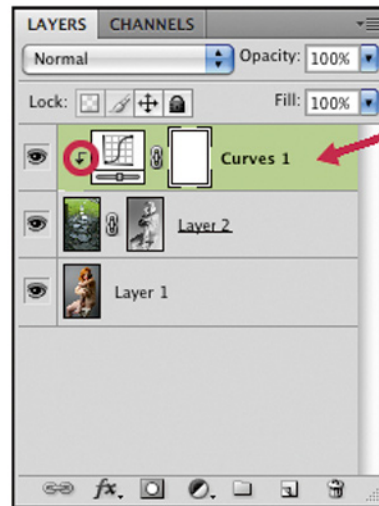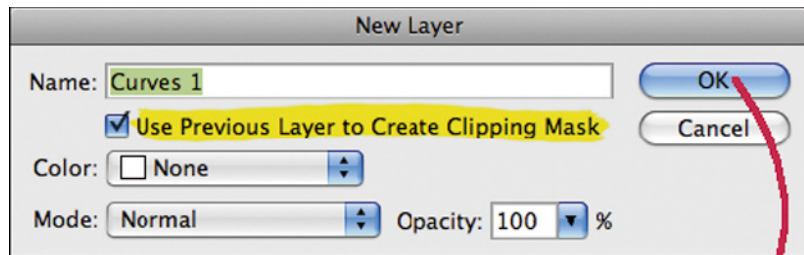
TOP: *Adding a curve with a clipping mask. Note the indicator next to the layer thumbnail.*

BOTTOM: *The fx menue icon allows you to apply layer styles and control blending options for the layer.*

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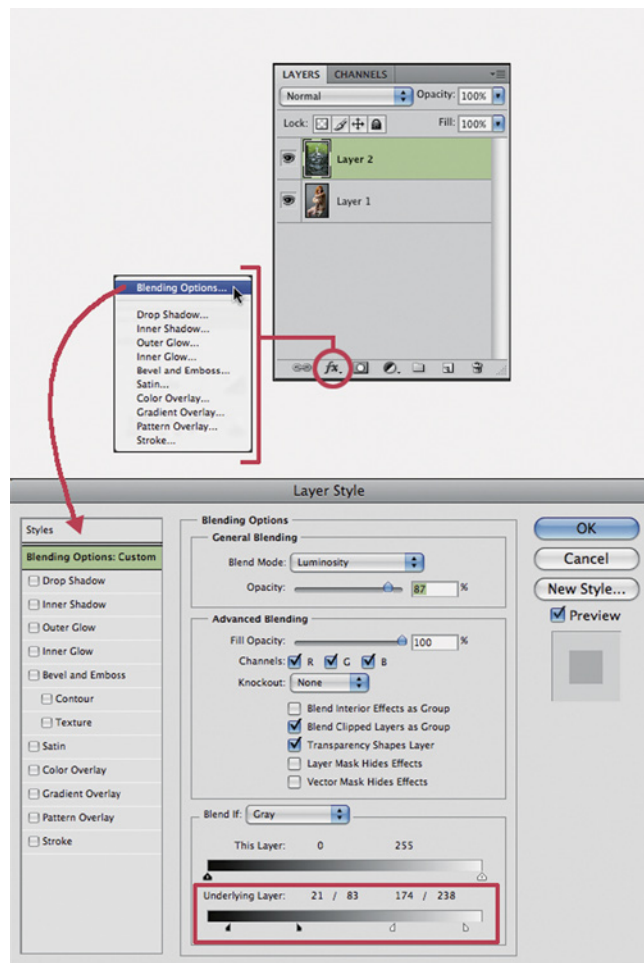
4. Move the black point or white point slider for either layer to determine which parts break through.

The sliders have two parts. To break them apart, hold down the Option [Alt] key and click on one side of a slider, then push it away. Moving the two halves separately creates a more gradual transition for the blend.

5. Click OK when you have a satisfactory result.

A CUBIST-INSPIRED IMAGE

The main idea behind this example is to demonstrate some ways of making a photograph look more "painterly" by evening tones and selectively layering effects. It is more of a starting point for exploring such techniques than a definitive approach.

1. In the Layers panel, duplicate the background layer by dragging it to the Create a New Layer button at the bottom of the panel.
2. Select Filter > Other > Maximum … from the menu bar. A dialog will appear.
3. Choose a radius that creates an interesting effect, and click OK.
4. Select Filter > Noise > Median … from the menu bar. A dialog will appear.
5. Choose a radius that creates an interesting effect, and click OK.

At this point, we have an image that looks somewhat like it was painted. We'll add back a little bit of the original texture to create a cross between painterly and photographic.

The starting image and a finished example.
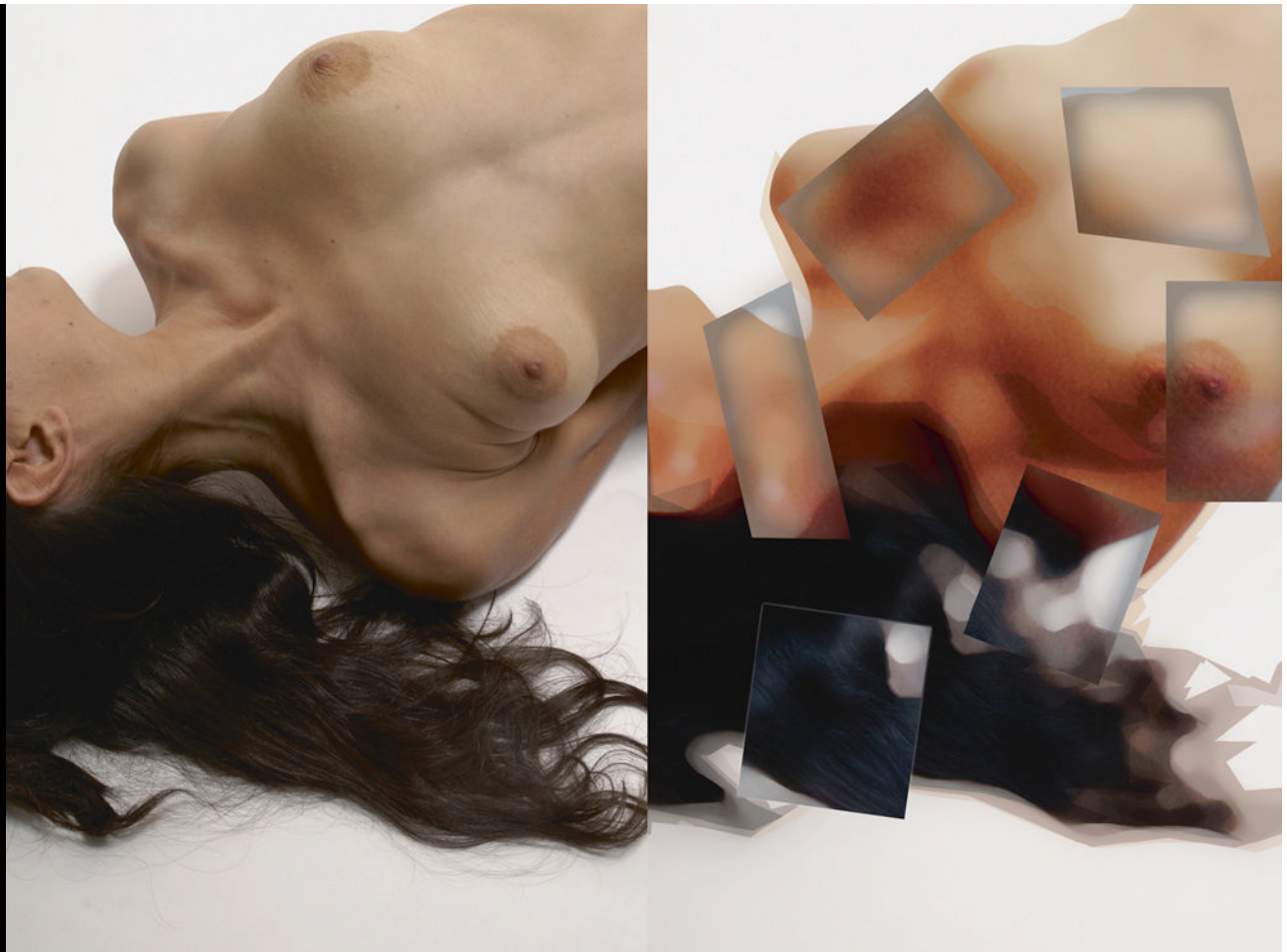
Drag the background layer thumbnail to the create a New Layer icon to make a copy.

6. In the Layers panel, drag the background layer to the Create a New Layer icon to create a second copy of the background layer.

7. In the Layers panel, drag the new background copy layer to the top of the layer stack. Make sure the new background copy layer is selected.

8. Select Filter > Other > High Pass … from the menu bar. A dialog will appear.

9. Choose a radius that shows some edge detail but not enormous haloes, e.g., 12.5 pixels.

10. Click OK to apply the effect.

11. In the Layers panel, change the blending mode for the High Pass layer to Overlay.

12. In the Layers panel, drag the High Pass layer to the Create a New Layer icon to duplicate the layer.

Duplicating the overlaid High Pass layer strengthened the effect. We'll group the High Pass layers so that they're a bit easier to work with.

13. Hold the Shift key down and click on the layer thumbnail of the first High Pass layer so that both are selected.

14. Use Command [Ctrl] + G to create a new group containing the two High Pass layers.

Adding a mask to the group will allow you to apply the overlay effect selectively.

15. In the Layers panel, click on the Add Layer Mask icon at the bottom of the panel. A layer mask thumbnail will appear on the group.

16. Paint in black using a brush with a hardness of 0% and varying opacities to remove part or all of the overlay effect in different parts of your image, leaving texture only in selected areas.
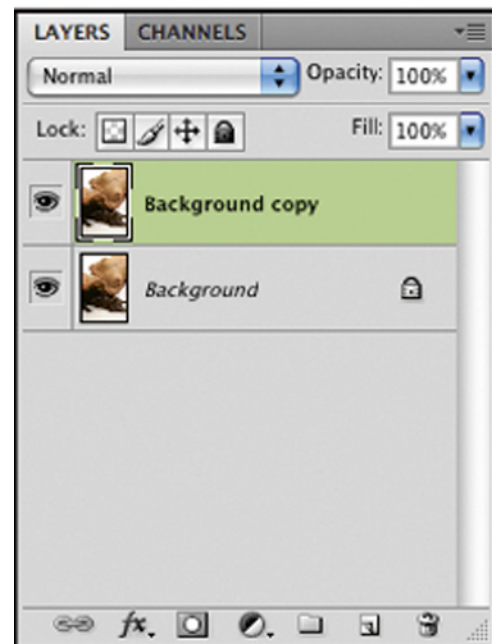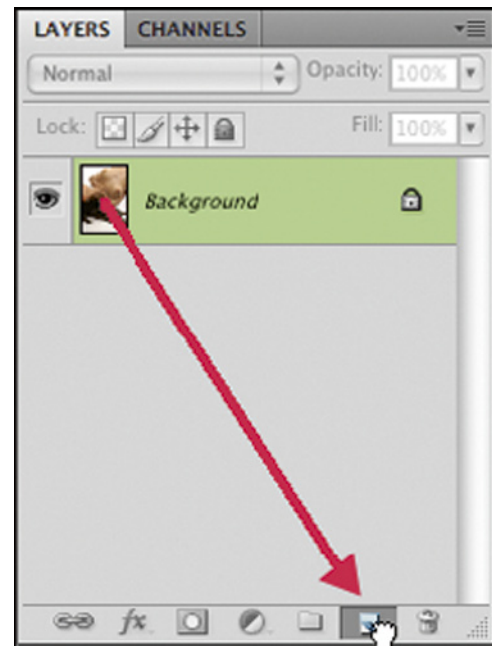
CH10   Digital Technique

Note: If you think the texture is too strong, reduce the opacity of the group.

The image that we have at this point is good in its own right, and you can save a copy, if you like, allowing you to take the image in several directions from here. The next step is to add the elements that are inspired by Cubism.

For the next step, we need to combine all the elements into a single layer. Instead of flattening the image and losing all the layers, we will stamp a composite layer that contains the combined result of all the layers below. We'll work with the stamped layer from then on. To stamp a layer, do the following:

17. In the Layers panel, click on the topmost layer to select it.
18. In the Layers panel, click the Add a New Layer icon. A new blank layer will appear at the top of the layer stack.
19. Hold down the Option [Alt] key and select Merge Visible from the flyout menu in the upper right corner of the Layers panel. Don't release the Option key too early, or your image will flatten instead of stamping.

Now, we're ready to create the Cubist-inspired elements.

20. Select View > Show > Grid from the menu bar.
21. Hold down the View menu, and check to see that Snap is checked. If not, select View > Snap.
22. In the menu bar, pull down the View menu and slide the cursor down to View > Snap To, but don't release the mouse.
23. Check to see that a check mark appears next to Grid; if not, select View > Snap To > Grid from the menu bar.

24. In the Tools panel, select the Rectangular Marquee tool.

25. Drag a selection that isolates an interesting part of the body. The selection will conform to the grid.

26. Use Command [Ctrl] + J to create a new layer with the selected pixels.

27. In the Layers panel, press the mouse button down on the fx menu at the bottom of the panel to reveal the layer styles menu and choose Inner Glow. A dialog will appear.

28. In the dialog, click the colored square in the Structure section of the dialog to select the color for your glow.

29. Set the Blend mode to Multiply, Technique to Softer, and Source to Edge.

30. Experiment with the other sliders to find an effect that works for you.

31. Click OK to commit the changes.

32. Select View > Snap from the menu bar to temporarily turn off snap to grid.

33. Select Edit > Free Transform from the menu bar. Handles will appear around the slice.

34. Rotate, skew, or reposition the slice as you like. As an option, you can Control-click [right-click] inside the handles to show a menu and use one of the other transformation modes.

35. Hit the Return key to commit the transformation.

36. Select View > Snap from the menu bar to switch snap to grid back on.
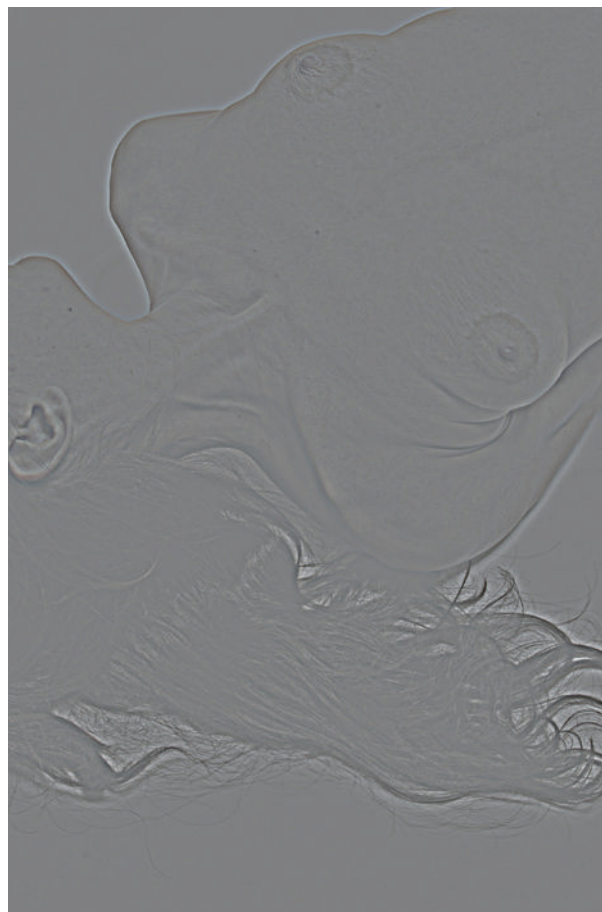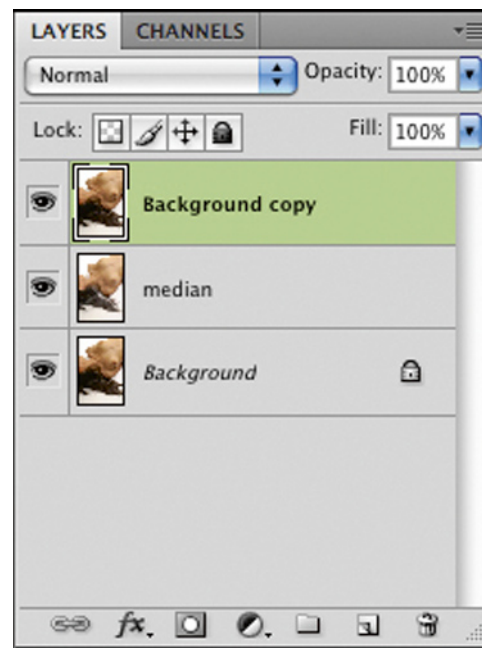
Repeat steps 24–35 above as many times as you like to create more cutouts. You can simply use the Move tool to reposition elements without transforming them. Use Command [Ctrl] + H to hide or show the grid lines.

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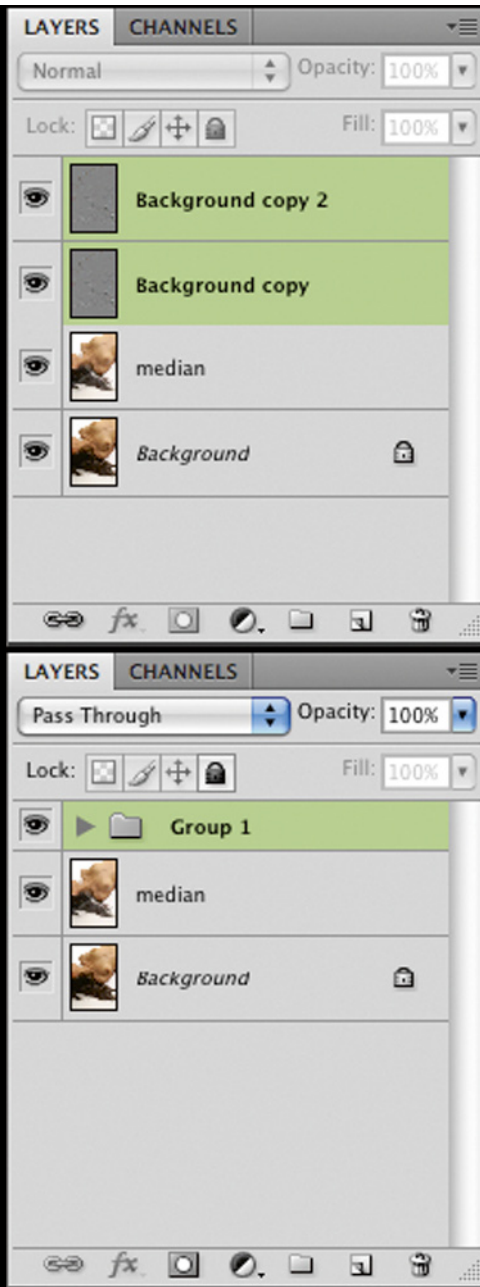
FILTERS AND 16-BIT MODE A number of Photoshop's filters are only available in 8-bit mode, which presents a small problem if you are working in 16-bit and want to use them. The temptation is to convert the file to 8-bit so that the filters are available and then switch back to 16-bit mode afterward, but that doesn't work. When you switch to 8-bit, data are thrown away, degrading the image, and switching back to 16-bit does not restore the data that were thrown away.

The best thing to do is to make a copy of the file and convert that to 8-bit. You can run the filter on the copy and then convert it to 16-bit and combine the layer back into your composition.

COLOR MANAGEMENT

Color accuracy is at least somewhat important to most artists who work in color, and it is extremely important to some. Using a color-managed workflow can give you a high degree of confidence about color fidelity when you display your work or print it.

Digital color is essentially a variation on paint-by-numbers. Every pixel in an image is tagged with RGB numbers that are supposed to represent specific colors, but those numbers are only one part of the equation. The other part of the equation, and the part that's critical for accurate color, is the color profile. When an image is tagged with an accurate color profile, devices that use color management can ensure that we see the correct colors. If the image has no profile, all bets are off, and if it has the wrong profile, the colors are guaranteed to be wrong.

For color management to work, it's also critical that you have accurate profiles for your displays and for your printers. In fact, every printer has a different profile for each type of paper that you can print on. With accurate color profiles for each device in the post-production chain, the color management system ensures that the color you see is the color that was intended.

However, there is a catch. When a device can't print or display a certain color, we say that color is out of gamut, and color management uses a strategy called a rendering intent to deal with those colors. The relative colorimetric rendering intent replaces each out-of-gamut color with the nearest in-gamut color, while the perceptual rendering intent tries to maintain color relationships and gradients by compressing the color space of the image to a set of colors that are all in-gamut. With relative colorimetric, the color of the overall image doesn't shift, but
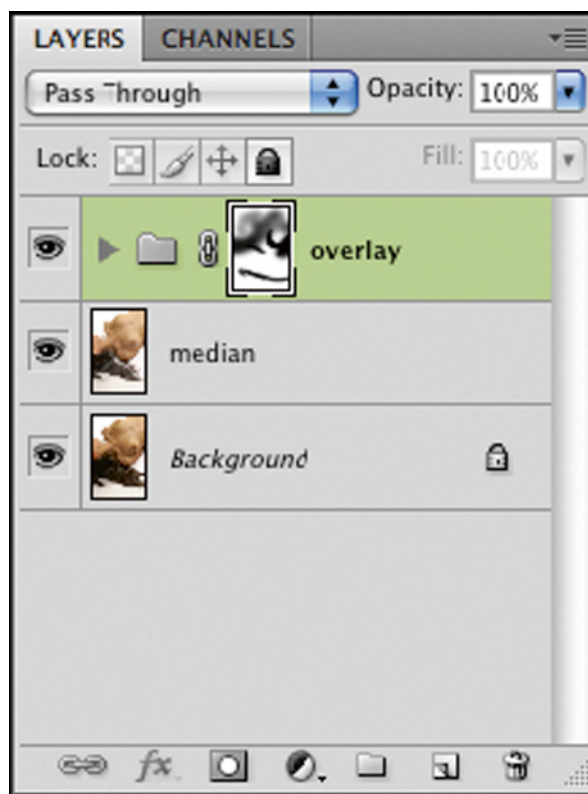
TOP: *Step 16: A layer mask applied to a group. The back areas of the mask hide the effect completely, and the gray areas partially hide the effect.*

BOTTOM: *Hold the Option key down and choose Merge Visible from the menu to stamp a composite of all visible layers. If you don't hold the Option key down, the layers will flatten.*

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Converting from a small space to a larger space (e.g., sRGB to Adobe RGB) is less of a problem than going the other way, but it's best to convert as little as possible.

DISPLAY PROFILES

Profiling your monitor is the most important thing you can do for a color-managed workflow. If your monitor is not representing color accurately, then any adjustments in color you make are arbitrary, and you stand a chance of making things worse, not better. With an accurate profile, the color management system will make sure that you are seeing the color that was intended, as long as it is in-gamut. More on that in a moment.

Profiling tools like the i1 Display from X-Rite sell for less than $200. The i1 is a small puck-shaped sensor that hangs over your LCD display and measures the colors that it sees. Software that comes with the i1 sends a series of color patches to the screen to measure how accurately it displays those colors, and then builds a profile. Devices in this class are based on sensor technology that resembles the sensors in a camera or scanner.

More accurate profiling tools are based on a spectrophotometer. These were much more expensive devices until X-Rite introduced the ColorMunki Photo system, which has a suggested retail price of $500. The unit can create print profiles as well as monitor profiles, and it is simple to use. The software has two modes: easy and advanced. It's best to use the advanced mode, because it has the option to create profiles based on your display's native white point. The easy mode uses the D65 white point, which tends to look a bit bluish. If you work in the pre-press industry, D65 is important, but it's not the best standard for evaluating images that will eventually hang in galleries or on living room walls.

there is a risk that some gradients can become posterized. Perceptual compresses the color space by altering even some in-gamut colors, often resulting in a noticeable color shift.

Neither rendering intent is a one-size-fits-all solution. For critical color output (particularly when printing), it's important to run tests using each rendering intent to see which works best in that specific case. Because the relative colorimetric intent clips colors, it's potentially most problematic when you convert between ProPhoto RGB and sRGB.

WORKING SPACE CONFLICTS

Whenever you open a file that is in a different color space than the working space you selected in your color settings, Photoshop offers to convert the color space for you. It's generally best not to convert. Each time you convert the color space in a file, you run the risk of degradation.

Step 27: Use the fx menu to add an innner glow efffect to the new cubist element.

Advanced mode also has an option to set the optimal brightness and contrast of your monitor, which is a good idea. Many displays have no contrast controls, and you can skip that when it comes up in the software. In advanced mode, the ColorMunki software also has the option to set the luminance of your display based on ambient lighting conditions. That option is best used only in settings where the light is well controlled and relatively subdued.

TOP: *Step 34: Control-click (right-click) inside the transform handles to change the mode of transformation.*

BOTTOM: *The Embedded Profile Mismatch dialog allows you to decide whether to convert to the working space when you open a file that is in a different space.*

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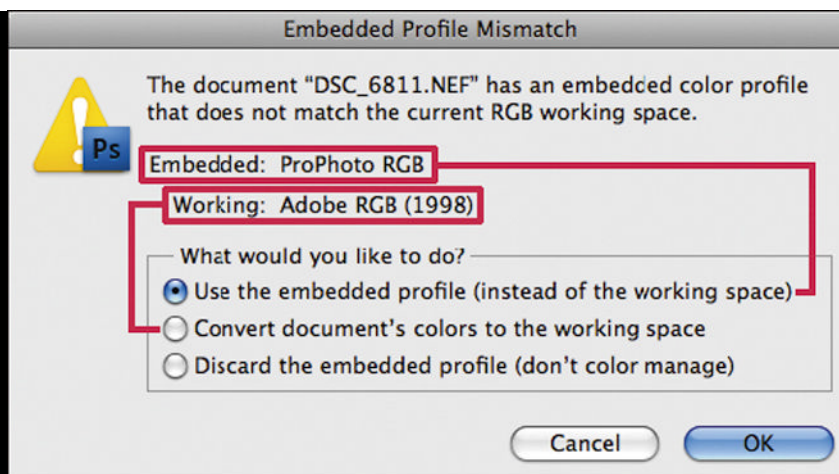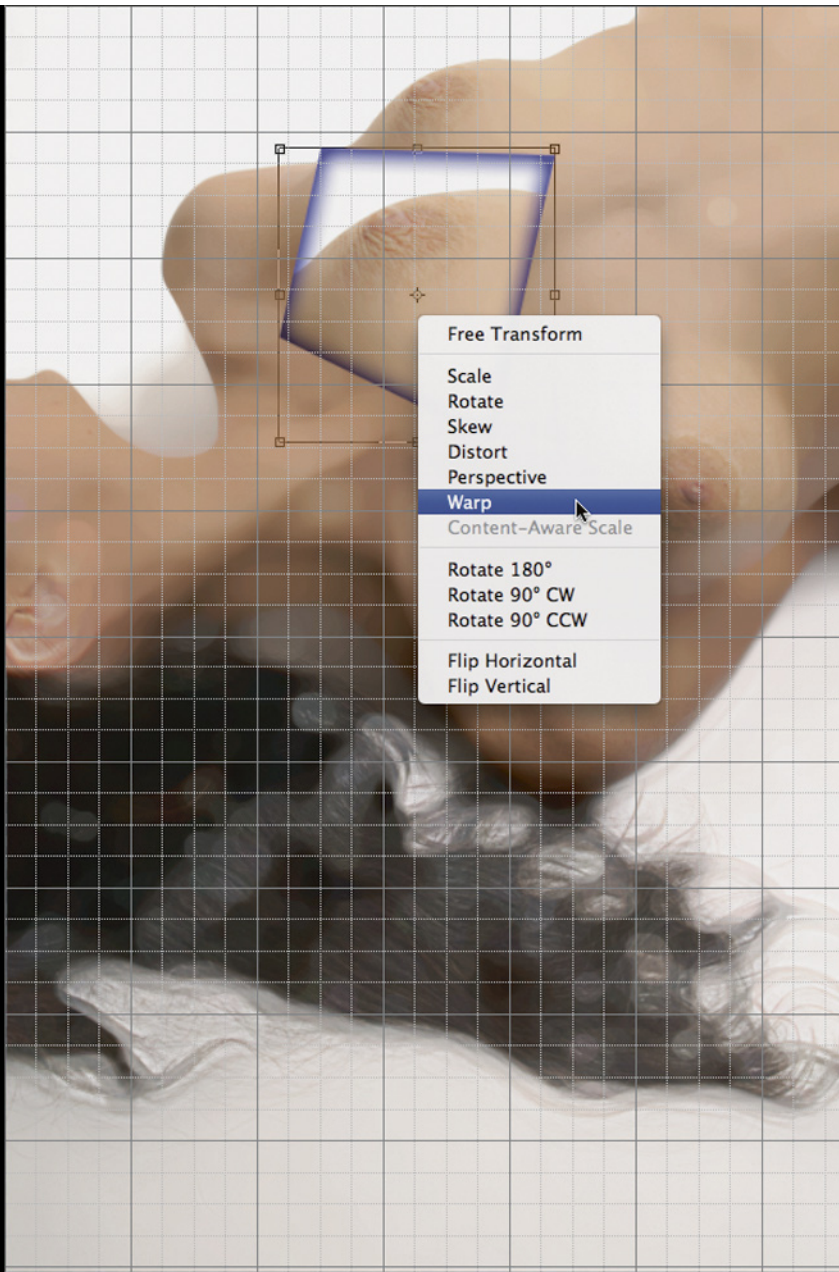
Profiling a display with ColorMunki. The advanced options allow you to optimize brightness and use the native white point of the display.

Mac OS X has a button marked Calibrate … in the Displays system preference. A similar tool for Windows users is Adobe Gamma. These tools can easily produce results that are worse than not profiling your display at all, and they are not recommended.

DISPLAYS

Profiling doesn't make all displays equal, and the quality of your display can make a big difference in the results you get. Simply put, laptops are not great for image editing, mid-range cinema displays are a good value that are excellent for general-purpose image editing, and high-end displays are primarily for color pros.

Laptop monitors are problematic for color-critical work. The first issue is that the color gamuts of laptop screens are significantly smaller than those of desktop displays like the

Apple LED Cinema Display. A second issue is that the appearance of an image on a laptop monitor changes dramatically as your angle of view toward the screen becomes more oblique. Even when viewing the screen slightly off-axis, the colors and tones begin to change. A third problem is the newer glossy screens, which boost contrast to a point where dark tones are exaggerated. Glossy screens are also much more reflective, meaning that reflections and ambient lighting conditions can be a problem. The limitations of working with laptop screens illustrate some of the qualities that differentiate better-quality monitors: edge-to-edge uniformity, viewing angle, and gamut.

Many laptops make it extremely easy to connect a desktop monitor to them, and many can be set so that the two screens work independently. With that configuration, you can
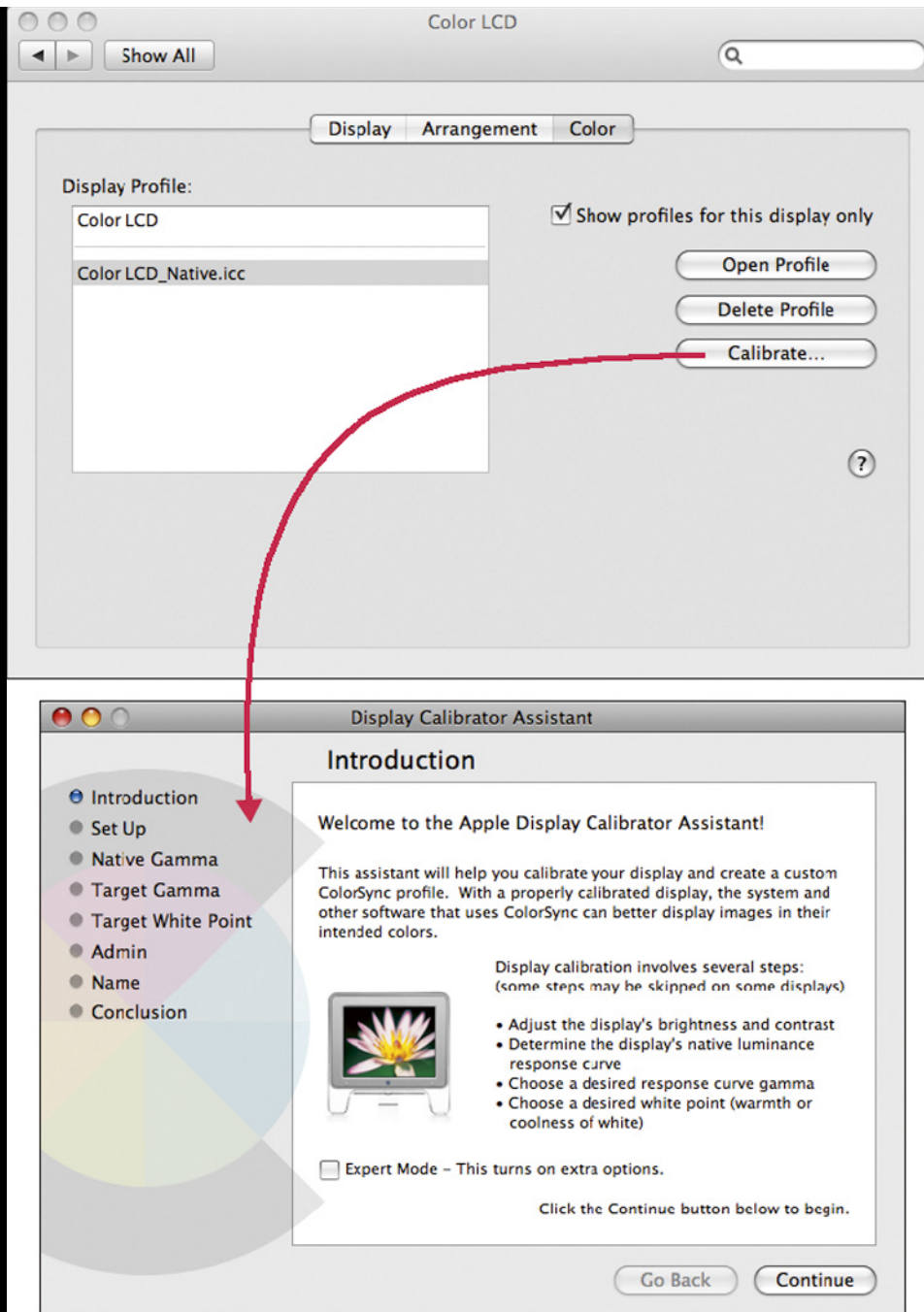
run Photoshop on a wide-gamut screen of its own, and keep everything else on the laptop screen. Working with two monitors is great, regardless of the configuration; adding a second monitor to your desktop tower produces a great working environment as well. The display built into an iMac is essentially a desktop display with a color gamut that is superior to a laptop display. The caveat is that iMacs have glossy screens.

It is worthwhile to invest in a screen that is large enough to give an uncluttered view of a substantial portion of your image at print resolution, and mid-range monitors will display even middle tones more accurately. A 24-inch display such as the Apple LED Cinema display can show virtually the full area of a 13 × 19 image at print resolution. For about $900, you will be able to get much better results in both printing and preparing images for the web.

Color space comparisons. It's not simply a matter of relative size of the spaces; it's a matter of which colors are available. Epson can print a lot of colors that can't be seen on a monitor. Clockwise from upper left: 20" Apple Cinema vs. Adobe RGB, MacBook Pro vs. Adobe RGB, MacBook Pro vs. 20" Apple Cinema, Epson 2880 + Ultra-Premium Luster @ Photo vs. 20" Apple Cinema.
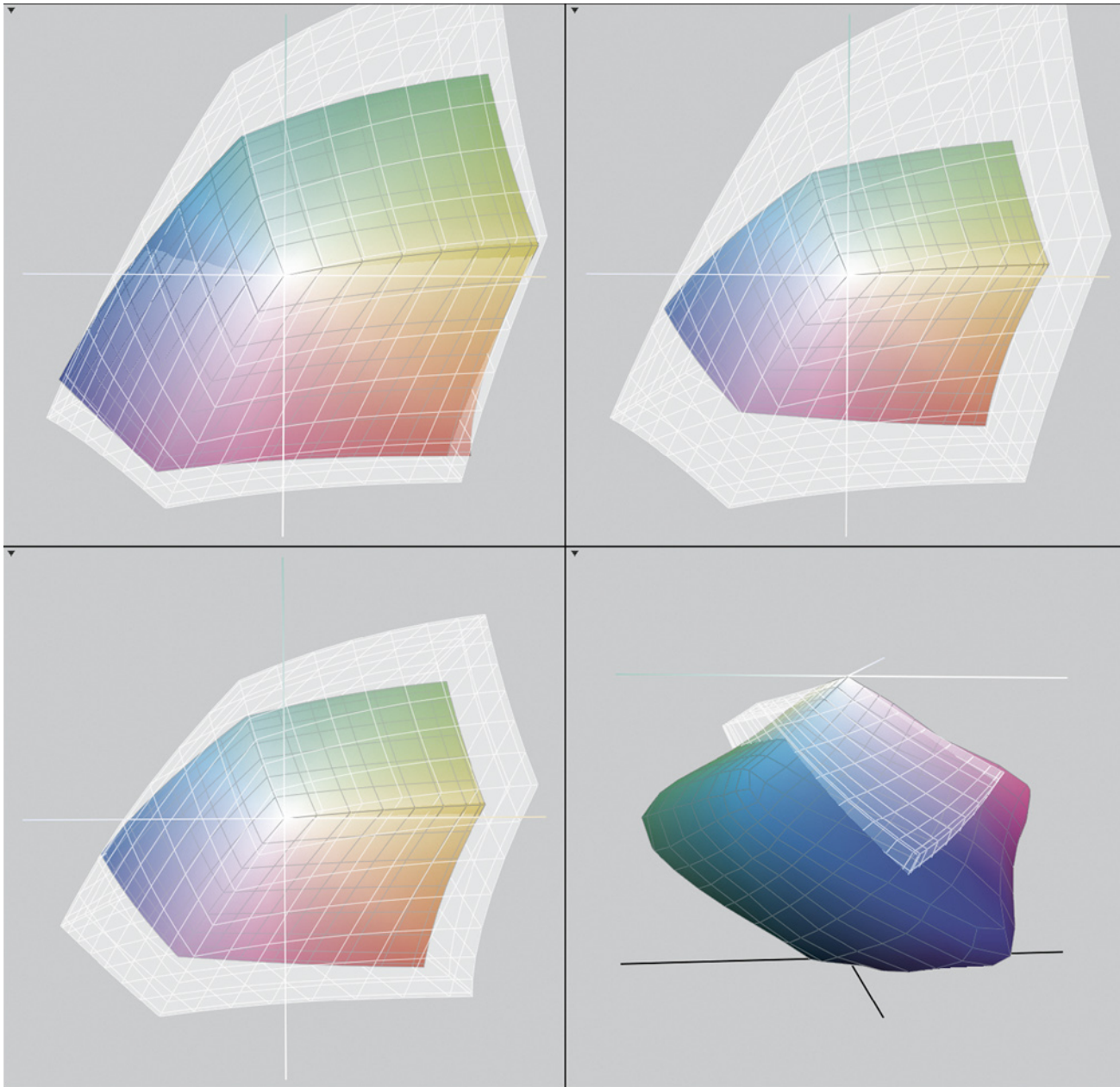
In some circles, monitors that can display 90% or more of the Adobe RGB color space are practically treated as fetish objects. The 22-inch Eizo ColorEdge CG222W is more reasonably priced than larger screens in the line and some of its predecessors, but it still costs more than twice the price of an Apple 20-inch Cinema Display. The strength of the wide-gamut monitors is their ability to display highly saturated colors and show shadow detail. In pre-press situations where the cost of running color proofs can add up quickly, a wide-gamut display will easily pay for itself. In other settings, the benefits of these displays are not as cost-effective.

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Ambient lighting is also an important issue in doing color-accurate editing work. It's best to work in slightly subdued light, and try to keep that lighting as consistent as possible. Avoid working in a place where a light source is aimed at your screen. As we have seen elsewhere in this book, the intensity and color temperature of sunlight change during the course of the day, so it's best to avoid daylight illumination.

PRINTING

Accurate profiles ensure that your printer is printing the right colors. It is worth repeating that for a given printer, each combination of ink and paper has a different color profile. Printer and paper manufacturers generally offer free printer profiles on their web sites, but the quality and accuracy of these vary greatly. If you bought an Epson printer, the profiles that shipped with the unit are okay, but Epson America posts better profiles on their web site. For their new Exhibition Fiber paper, Epson refers customers to high-quality profiles built by Pixel Genius.

To use a printer profile, store them in a particular directory on your computer. If you are working on Mac OS X, you can put them either in /Library/ColorSync/Profiles, or /Users/<username>/Library/ColorSync/Profiles. If you are on Windows XP or Vista, place them in\Windows\system32\spool\drivers\color.

Custom profiles often produce much better results than many canned profiles, especially those from paper manufacturers. The printer profiling feature in ColorMunki photo makes high-quality profiles and is easy to use. It works by printing out a color target that you let dry, then scan with the ColorMunki. That builds your basic profile. From there, you can refine the profile by printing out color targets that are based on the colors in specific images. So if you are shooting outdoor nudes, you can use photos that have a lot of sky, skin, and foliage colors to tweak your profiles.

You can also have custom profiles built for you. Companies such as Cathy's Profiles and Dry Creek Photo will send you a file to print and instructions on how to print it out. You send that print back to them, and they build the profile for you. If you need profiles for only one or two types of paper on one printer, this can be a reasonable option, but most of these services charge anywhere from $50 to $100 per profile, so it is easy to spend hundreds of dollars on custom printer profiles.

With quality printer profiles installed, making an accurate print with Photoshop is a pretty straightforward affair.

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1. Select Image > Image Size ... from the menu bar. A dialog will appear.
2. Make sure Resample Image is unchecked.
3. Enter an appropriate width or height for your image. The other dimension will be constrained. For example, a good height for printing on a U.S. letter-sized page (8-1/2 x 11) would be 10″.
4. Check the pixels per inch that result. If the resolution is well below 240 ppi, then you need to resample your image for high-quality output.

A 10-megapixel image can be printed 16 inches wide at 242 ppi, so you won't generally need to resample for printing.

5. Click OK.
6. Optional: flatten your image before printing. This can speed up the printing time. Make sure not to save this flattened file, though!
7. Select File > Print ... from the menu bar. The first print dialog will appear.
8. Be sure the printer you wish to use is selected in the menu at the top of the dialog.
9. Click the Page Setup button.

10. Select the printer and paper size you wish to use.

11. The rest of the page layout settings are optional.

12. Make sure the menu at the top of the right side of the dialog reads Color Management.

13. The circle next to Document should be filled in.

14. Set the Color Handling menu to Photoshop manages colors.

15. Select the appropriate printer profile.

Note: Most printer profiles are named according to the convention <printer name> <paper> <resolution>.icc. For example, SPR2880 UPrm-Mtte Photo.icc translates to an Epson Stylus Photo 2880 using Ultra-Premium Matte paper with a print quality setting of Photo (1440 dpi). The names of profiles from different sources vary a little, but they typically follow this format.

16. Choose a rendering intent: either relative colorimetric or perceptual.

Note: See the discussion of rendering intent earlier in this chapter.

17. Make sure Black Point Compensation is checked.

18. Click Print.... The second print dialog will appear.

The first print dialog was Photoshop's print dialog. The second dialog belongs to the printer driver and will vary, depending on the make and model of printer you are using and on the operating system you are running. The example here is with an Epson Stylus Photo R2880 on Mac OS X version 10.5.

19. Select Print Settings from the menu in the center of the dialog.

20. Select a media type that corresponds to the type of paper you are using.

If you are using a non-Epson paper, you won't see the name of your paper here. Just choose the one that describes a paper most like the one you are using.

21. Choose color or grayscale.

The Advanced B&W Photo option allows you to colorize your image in the print driver. It's better to apply those effects in Photoshop and use a color-managed workflow.

You can change print size without resampling, which can degrade the image. Increasing the size decreases the resolution, but as long as resolution is approximately 240 ppi or greater, you won't need to resample.
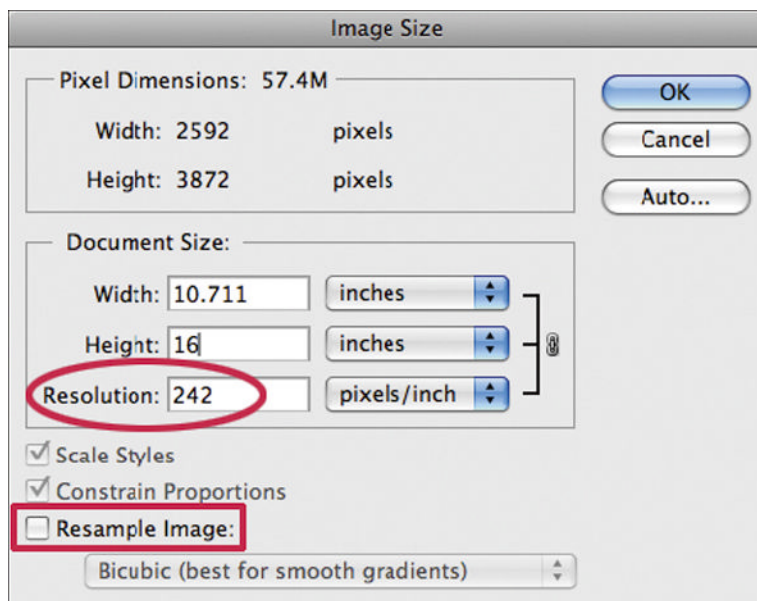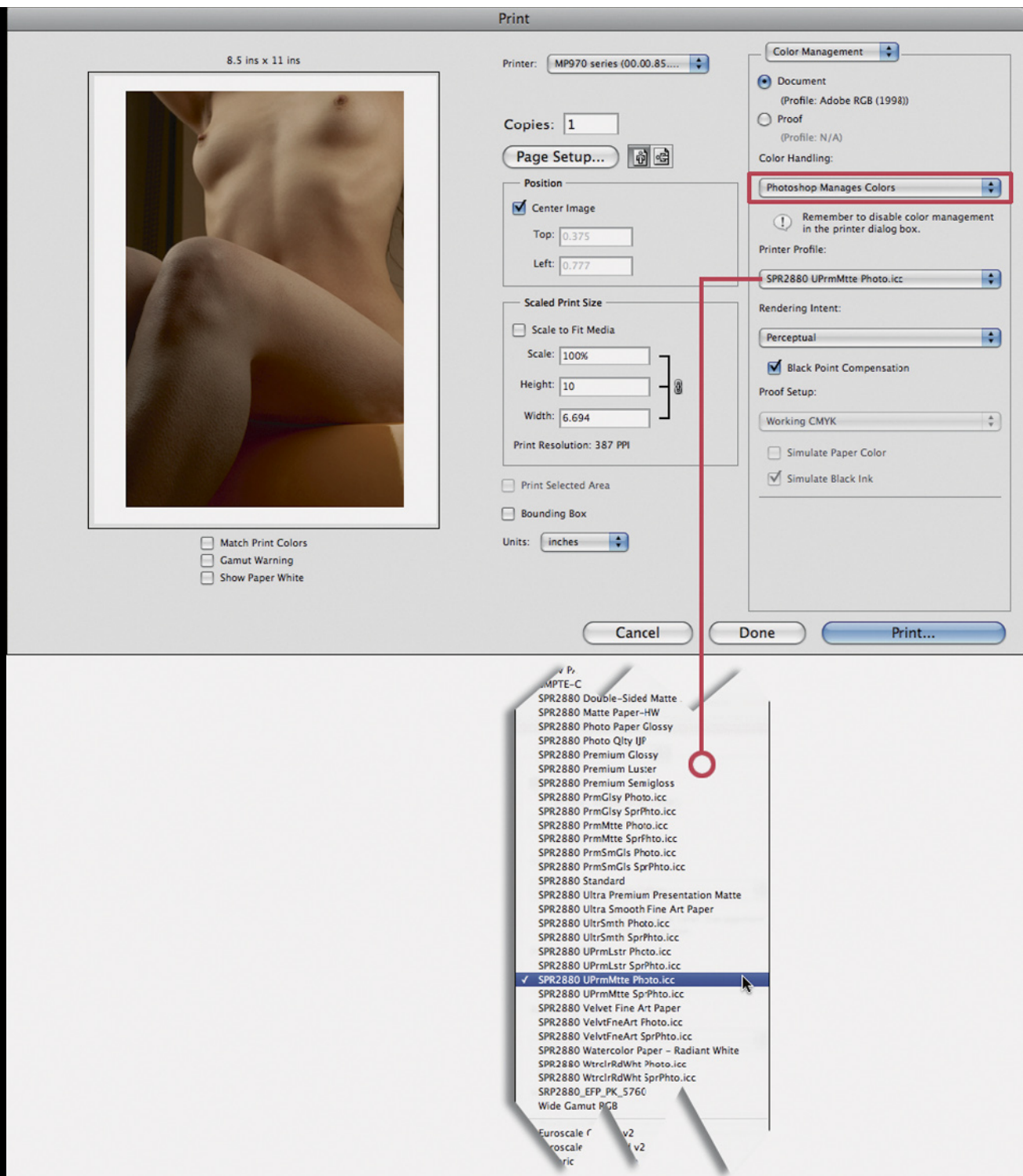
Printing with Photoshop color management depends on selecting the right high-quality color profile. The contents of the profile menu will vary, depending upon which color profiles have been installed on your computer.

22. If you're printing from a 16-bit file, be sure 16 bit/Channel is checked.

23. Make sure the Color Settings menu reads Off (No Color Adjustment).

That setting is crucial. If you leave it on, the print driver will attempt to color-correct the color-corrected information coming from Photoshop. This generally results in prints that have a strong magenta cast.

24. For Print Quality, make sure you select the setting that matches the profile you have selected; e.g., if you selected a Photo (1440 dpi) profile, set the Print Quality to Photo—1440 dpi.

25. With newer printers like the Epson 2880, you should be able to print with High Speed checked.

Fine horizontal lines in your prints can sometimes be caused by high-speed printing. If you notice them, uncheck High Speed, and see if the situation improves.

26. Press Print. Your image will now be sent to the printer.

27. If you flattened your file in step 6, use the History panel to restore your layers.

GRAPHICS TABLETS

A lot of editing techniques in Photoshop involve tools that emulate brushes and pens, which require a stroking motion to apply them. A mouse, or worse, a track pad, does not give the optimum feel or control for these tools. A tablet like the Wacom Intuous has a stylus that rests in your hand the way a real pen or

When Photoshop manages colors, it is important that the printer driver's color settings are switched off.
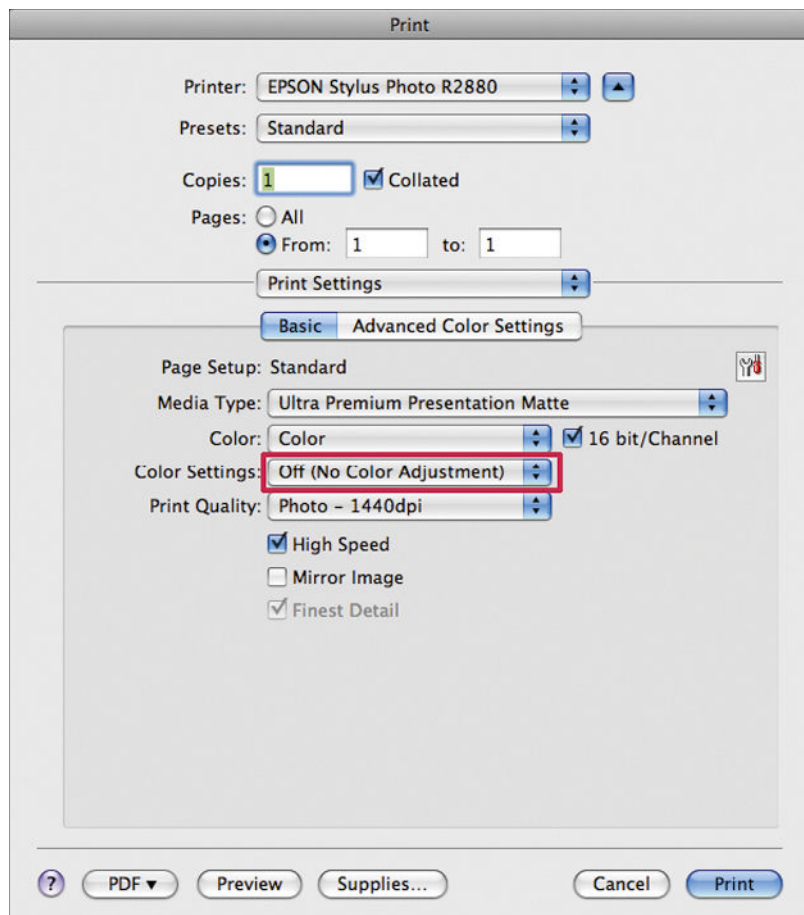
brush does. The tablet takes a little getting used to, but once you get the hang of working with it, many editing gestures become much easier. Wacom tablets also come with a multi-button wireless mouse, allowing you to switch off between pen- and mouse-controlled activities.

PROCESSING POWER

The most important computing capabilities for running Photoshop CS4 are RAM, video RAM (VRAM), and a GPU-equipped video card that supports OpenGL. Photoshop will take advantage of 4 GB or more of RAM and gets an additional performance boost when you give it 512 MB of VRAM. Certain features in Photoshop CS4 are only available when your machine is equipped with a video card from companies such as NVIDIA and AMD/ATI.

It is plausible that a few filters will run faster on an 8-core tower, but for the most part, there is not a lot of difference between running Photoshop on a high-end tower and running it on a laptop with a 2.5-GHz core duo processor.

BACKUP

If you read the stories of enough photographers, you will find that many have lost substantial portions of their life's work to fire, flood, or some other disaster. In the digital realm, fire and flood are still potential hazards, but a far more likely disaster is a hard drive crash. In fact, it's not a question of whether your hard drive will fail; it's a question of when. It has been said that if you don't have two copies of your digital files, they don't really exist, and that underscores how essential backup is.

There are two strategies for backing up files, which offer a broad safety net when combined. The first is mirroring your files, and the second is a regimen of incremental backups. Mirroring your files is simply duplicating them on a second storage medium. You can do this by manually copying them, or you can use a backup utility, but the most foolproof way to mirror is to use a RAID system set to level 1.

If you copy your files to separate media and store them, it is a good idea to create an indexing system so that you can easily retrieve the files when you need them. Some backup utilities make managing the indexing a bit simpler. If you are backing up to CDs or DVDs by hand, you have to cluster your files so that they fit the media. Ideally, you don't want to leave too much free space, and you won't be able to burn the disc if you have too many files. Backup utilities will typically take care of allocating files for you.

RAID stands for redundant array of independent drives, and there are several levels or modes of configuration. Level 1 does mirroring, and other levels are for faster performance. When you save a file to a RAID system configured to level 1, it is automatically saved on two separate drives. If one of the drive mechanisms in a level 1 RAID fails, you simply replace the failed mechanism and the system will rebuild a new mirror image on it. With a mirroring RAID, the second mechanism is invisible to your computer, and it appears as one drive. These systems are generally rated based on the total amount of storage in the drives, so a 1TB RAID system set to level 1 offers 500 GB of storage.

A number of manufacturers now sell reasonably priced plug and play external RAID systems that hold one or more pairs of drive mechanisms in a single housing. The controller inside the enclosure handles the mirroring, meaning that there is no load on your computer's processor. Different models can attach via USB 2.0, Firewire, or eSATA interfaces. There are also network RAIDS that can be shared over Ethernet, meaning that they can even be accessed by WiFi. The G-Technology G-Safe line and the La Cie 2-Big line are examples of external and network RAID systems.

Mirroring provides insurance against drive crashes, but it doesn't protect you from a situation where a file has been inadvertently flattened, re-sampled, or damaged. Some backup utilities, including Apple's Time Machine (built into Mac OS X 1.5, a.k.a. "Leopard"), make incremental backups. This backup strategy copies only the files that have changed or have been added since the last backup, capturing snapshots of your work in process. Incremental backups allow you to recover in the case where you discover that a file that was fine prior to your last backup is no good now. The key to success with such systems is having the discipline to run the backups in a timely and routine manner.

What's the ideal arrangement for storing your working files and backups? Put your working files on a large RAID level 1 drive and do incremental backups to a second RAID level 1 drive. As a final bit of insurance, periodically copy all critical files to a freestanding hard drive that is stored off-site.

Backups are only as reliable as the media they are stored on. Burnable CDs and DVDs can be susceptible to degradation, especially from UV light. Blu-Ray DVDs are reputed to be more archival than the original burnable DVDs. For greatest longevity, regardless of the media you use, your backup discs should be stored in acid-free plastic containers in a cool, dry, dark place. Avoid marking your discs with solvent-based marker pens like the Sharpie. The ink's solvent can attack the surface of the disc and cause deterioration. Delkin is one company that is making solvent-free pens for marking CDs.

There are cases where CDs have degraded in as little as three years, and most burnable DVDs are even more prone to degradation than CDs. This is because the burnable part of the CD is an organic dye that can break down and fade, ultimately making the disc unreadable. CDs and DVDs also have a reflective metal layer, and that reflective layer can oxidize, causing the disc to fail.

Better-quality CDs will tend to last longer, but if you want to be assured that your media is more reliable, Delkin is one manufacturer that makes a line of CDs and DVDs that are rated to last 100–200 years or more. The Delkin Archival Gold CDs and DVDs use gold metal for the reflective layer (gold doesn't oxidize) and use phthalocyanine dye, which is much more stable than the cyanine dye used in cheaper CDs. Mitsui Gold archival CDs are also made with phthalocyanine dyes, and Mitsubishi manufactures CDs that are based on extremely stable azo dyes. The azo-based discs are blue, rather than gold.

Research carefully, though—some manufacturers have added coloring agents to their conventional discs to mimic the appearance of archival discs; color alone doesn't tell the whole story. Archival CDs are now easier to find in stores. It has been clear all along that DVDs were less archival than CDs, but the validity of archival CDs was contested until recently.

Archiving onto CDs or DVDs, especially manually, can be tedious and take a lot of time. As the price of hard drives continues to drop, it makes increasing sense to simply use an extra hard drive for backup. You connect it to your drive chain, copy your files onto it, then disconnect it and put it away for safekeeping.

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Part FOUR

11 Interviews

Interviews

The interviews in this chapter give a brief glimpse into how a few artists make their work. Through the course of this book, we have broken down photographs of the nude into an array of conceptual and technical elements. It's time to look at the different ways that various artists put those elements together to create strong work with a distinctive voice. Questions were selected and tailored for each artist and designed to explore the ideas and process behind their work, enquiring into background, philosophy, aesthetics, and how they shoot. Vision and craft come together in very different ways for every artist—this is not a one-approach-fits-all proposition. Their ways of making their art are as different and unique as their personalities.

Nine exceptional photographers from around the world—Barney Cokeliss, Robert Gregory Griffeth, Nina Pak, Saelon Renkes, Pascal Renoux, Pet Silvia, Tobias Slater-Hunt, Harvey Stein, and Mayumi Yoshimaru—generously participated in e-mail interviews for this book but there was not enough room to print all of them. You can read the remaining interviews and browse additional resource materials on the companion web site, www.TheNakedAndTheLens.com.

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INTERVIEW WITH BARNEY COKELISS (WWW. BARNEYCOKELISS.COM)

Barney Cokeliss grew up in London and was shooting record covers and book jackets as a photographer before he left school. He studied English Literature at Oxford and spent a year at Princeton in the Film and Creative Writing departments before winning a place on the prestigious BBC TV training scheme.

His directing career began with "Tea," a short commissioned by MTV Europe, which went on to be the shortest film selected at Sundance. Barney then wrote and directed "Queen's Park Story" for BBC 2's 10 x 10 strand. The Observer called it "the best British drama on television this year." It was in the official selection at the Venice Film Festival and won Best Director at Toronto.

Barney is represented by Ridley Scott Associates for commercials, and by United Agents for film and television. He has directed commercials for clients such as Volkswagen, Lexus, Typhoo, Toyota, and BMI Airlines. His films for the National Health Service have won advertising awards year after year and his safe-sex film "Spoiled" was voted Scotland's Favourite Ad.

Last year, Taschen America published Barney's photographic nudes alongside Jan Saudek's and Terry Richardson's. His portrait subjects have included Gil Scott-Heron, Ravi Shankar, John le Carré, Ray Liotta, and Jacques Derrida among many others. A monograph of his nudes is in preparation.

Barney is currently finishing a new short film for Hill Holiday in New York, sponsored by Liberty Mutual, and has two feature films in development: one original and one based on a short story by the celebrated British author J.G. Ballard.

Q: You have a lot of commercial work and portraiture in your CV. How does your experience of making that work affect the way

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that you approach shooting nudes, and what impact do your nudes have on your commercial work?

I moved through portraiture to nudes—a lot of my early work was of famous people and making nudes was a way of getting around the focus on the individual that's inherent in portrait photographs of eminent people. At the same time, I like my nudes to feel in some way like portraits—I don't want the model to seem anonymous or just there to provide a body or an abstract form—but portraits of people whose identity isn't known. Portraits and nudes are on the same spectrum for me—essentially the fascination is in taking pictures of people and of human situations. I still love both.

As for my commercial work, that's mostly moving image so it doesn't relate directly to my photographs. I'd love a commercial brief that fit the style of my nudes, but often the commercials have another focus—comedy, storytelling and so on. Maybe the closest I've come in my commercials to the look of my nudes is a safe sex ad I shot for the NHS (National Health Service) in Scotland: there's a contemplativeness in that one that has something in common with my pictures.

Q: Your images seem to have a very strong sense of subtext. Is that a result of the discipline of filmmaking? Are there specific story lines driving your images?

I love images that imply a narrative, even if it's not clear what exactly the story is. The tension between feeling there's a story there and not being able to say for sure what it is can be a real force in an image. This preference may be related to my film work, though in film the aim is usually to tell a story, not just hint at one! Painters like Kitaj and photographers like Lorca-Di Corcia are certainly an influence in the kind of suspended narratives they conjure. As for the parallel with film, I find it really exciting that, say, "The Piano" was apparently inspired by a photograph. But sometimes "cinematic"

can be too obvious an effect for a photographer to aim for—unless you're Cindy Sherman and you're subverting the whole thing. I suppose my photography keeps my film-making image conscious, and my film-making keeps my photography aware of narrative. What I don't do is work out elaborate plots which I try to represent in the pictures—I'm more interested in leaving part of the story open to interpretation. Photo-stories can be wonderful—I've loved Duane Michals' work since I first saw it as a kid—but that's a whole other thing.

Q: How would you say your photographic consciousness has changed over time?

I think I started out, like a lot of beginner photographers, very focused on composition and form. Over time I've got more interested in atmosphere and implied story and let the compositional elements become more submerged. I think a good photograph has to be interestingly composed, but it doesn't have to make a big deal out of it.

Q: Did Duane Michals or some other photographer inspire you to pick up the camera?

Drtkol and Duane Michals were probably the two photographers that most impressed me when I was first picking up the camera—they don't have much in common! Cartier-Bresson is unavoidable too—I spent a few of my teenage years taking pseudo-Cartier-Bresson portraits of all my friends.

Q: How much pre-visualization goes into your nudes? Do you go so far as to sketch or storyboard what you plan to shoot? How much do improvisation and "happy accidents" figure into your work?

It varies. I always spend some time thinking about what I want to achieve from a shoot, and I have a bank of references for poses and situations that I'd like to explore. But I spend a lot of time trying to work against anything

that looks posed. Often it's the position the model takes between rolls of film that I end up focusing on. So in that respect I try and find a little bit of documentary in what is essentially an artificial situation. One reason I don't tend to do sketches in advance is that my film work is very thoroughly prepared—it has to be given the number of people involved—and I like my photography to be opposite to that.

Q: Still shooting all film? What type? Medium format?

I only use digital as a prep tool—for casting photos, location recces, etc. All my "real" pictures are shot on film, and most are 6 x 7 or 6 x 9 cm.

Q: When and how do you decide that a story should be told as a still, or perhaps a series of stills, rather than as a film?

Right at the beginning—I think the ideas come from different parts of my brain. But, now that you mention it, cross-pollinating them might be a good idea!

Q: When you shoot stills, are you thinking in terms of capturing a single image? When do you know that you have something that works?

I certainly feel that I only need one successful image for a shoot to be success—sometimes having too many from one shoot feels like a waste as it's harder to use them all without seeming repetitive. But I try to leave space to see what happens spontaneously, rather than just homing in on one key shot. I can know very early if I'm getting something that works—if the model and the location are right then the odds are very good. I rely a lot on casting and locations, so when one or both is disappointing then it can be a struggle. The location has to have a tonality that lets me create some contrast (so many rooms have pale walls, which make things much harder for me) and the model has to have something truthful about them—my biggest struggle is when the model is too professional-seeming: I'm not interested in pictures of models modeling.

Q: Light seems to be an important part of your shots. Is everything lit, or do you rely on available light? How much does the lighting affect the amount of work you can produce in a session?

I work with as little additional lighting as possible. I've been lucky enough to work with some of the great cinematographers (people like Eduardo Serra) and I've learned that it's often a case of what you don't add rather than what you do.

Q: Has working with cinematographers strengthened your ways of thinking or communicating about visual ideas?

Working with cinematographers can be a wonderful dialogue—it's a collaboration you don't really experience as a photographer. There's always a dual aspect to the dialogue—it's partly about story-telling and partly about aesthetics. Good cinematography is when the aesthetics are a key part of the storytelling, and not merely decorative.

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Q: Many of your photos have a look that evokes the painted portraits of the likes of van Dyck, and possibly Sargent. They also remind me somewhat of Tina Barney's photographs, and she has said outright that she was influenced by Dutch painting. Is this semblance in your work the result of a conscious intent? What would you say are your primary visual influences?

My primary influences probably aren't directly comparable to my own pictures. I'm certainly not trying to restage the masters. Tina Barney's work has a different texture to mine but the way she presents people is very interesting and unforced so I'm flattered by the comparison. Aside from the people I've already mentioned, I'd say Kirchner, Hockney, and Modigliani are painters that I love. Photographers I'd mention are Drtkol, Goldin, Roversi, Penn, Brandt. More recent enthusiasms for me

have been the photographs of Bill Henson, David Hilliard, and Eleanor Carucci.

Q: If your influences are not visible in the look of your work, then your connection to them is not about the surface. Can you say a little more about some of the ideas that come from these influences?

I think the biggest influence I get from looking at other people's work is in expanding my idea of what can make a photograph. It's easy to get caught up in your own spiral of obsessions, and seeing another photographer create fascinating images from something totally different can free you up a bit.

Q: What do you think is the value of being aware of your influences?

Being aware of your influences can help you avoid merely aping them.

Q: Your images seem to be set in pretty affluent surroundings. Are you trying to make a particular statement or portray a particular idea? Is there a central theme uniting your images?

There's no statement in the location choice whatsoever. The affluence of the surroundings is coincidental and the result of upmarket hotel rooms of a certain sort being one of the surest sources of mid-tone (or darker) walls, deep colours, and a bit of window light. A lot of my shoots are quite opportunistic—I'll find myself in a strange city with maybe one day to spare and there won't be time to do a big location recce, so I often end up in a hotel. But my mental list of locations to explore next is hotel-free.

Q: So you're free for a day, and you only found out the day before—that's usually how it goes, right? How do you go about networking to find models, makeup, etc. and put together a shoot with such short notice?

I usually know in advance that I'll have a day that I can schedule a shoot for, so it's not all conjured instantaneously. My models are a mixture of friends, colleagues, actresses, singers, and professional models. I'm lucky in that I tend to have more people who want to model for me than I have time to shoot.

Q: Can you describe the sort of direction that you give to your nude subjects? Do you direct your subjects for still shots in the same way that you direct film actors?

I think the fundamental interaction is similar in that you're trying to relax people so that they can give of themselves unselfconsciously. But I don't put my nude subjects through the kind of exploratory, improvisational process that I find

works well for actors. Maybe I should. Then again, I often find inexperienced models produce the best results and they've usually got enough on their mind doing their first photo shoot without me throwing drama games at them.

Q: What do you think your sitters need from you to give a great portrayal in front of the camera, and how does one learn to be an effective director?

Actors often tell me that they like working with me, and hopefully they're mostly sincere! But it's hard to know why or how you're effective as a director as it's quite rare to see other directors or photographers in action. I think I have good instinctive communication skills with actors, so I don't try to impose a system.

I think actors need to feel simultaneously that you know what you want but that you are also open to what they want to try. With my photographs there's an element of trying to normalize an odd situation—the model is in a strange place with someone they don't necessarily know well, possibly taking their clothes off in front of the camera for the first time. So a large part of my direction is just maintaining a normal, relaxed interaction. I've had some first-time models move, in just a few minutes, from apprehension about being naked to actually forgetting that they're naked and wondering why passers-by look at them strangely if they stand by the window during a break. I think this has a lot to do with the atmosphere you create.

INTERVIEW WITH SAELON RENKES (WWW.SAELON.COM)

My photos are most often about the kind of world I want to live in. Photography gives me a way to connect to this world—a world with quiet places of beauty, places of wonder, places that make me want to drink them in deeply—and to share them with others. I'm in love with the natural world, with the diversity in all its forms of life (both plants and animals), and with all the real people and real shapes within it. I'm fascinated by the emotional range of the human temperament, and by finding its reflections in the poses and expressions that people take on naturally.

After getting a B.A. in Biology, I joined the Peace Corps and lived in Guatemala for a while, where I fell in love with travel as well. I took photos all the time and became fascinated with the variety of human culture, but then had a very bad accident. It was during the time of surgeries and learning to live with pain and physical limitations that I discovered my art. Making art is an amazing process, hard to understand or really describe. There are lots of techniques to learn, lots of processes to figure out, and lots of studies to be made, but in the end I find that all that stuff only helps one to give the art a voice that is recognizable by others. The art itself comes from somewhere within and can scarcely be shaped or planned in a fully conscious manner.

Ruth Bernhard has been one of my strongest influences, and I've been particularly affected by the theme of one of her books, *The Gift of the Commonplace*. In her work this often refers to commonplace objects, and in the workshop I took with her she challenged us to find something beautiful to photograph within a limited number of feet of our meeting room. I love working this way, and I love to take this same approach with photographing the human body. Like many feminists who came of age in the 1970's, I came into photography with my own biases about nude photography, and from the beginning I wanted to pursue work that

affirmed the beauty of ordinary human bodies, rather than contribute to a process that would further the insecurities the average woman has about her own body. Perfect bodies are beautiful, and they are lovely to photograph, but when I can find expressions of extraordinary beauty in a completely real-world body is when I feel that I am doing my best and most significant work.

I've studied photography, painting and printmaking with David Bayles, Ruth Bernhard, Lucien Clergue, Steve Kiser, Alan May, Ted Orland, Holly Roberts and Brian Taylor, in private workshops, at UC Santa Cruz Extension, the Pacific Art League, and at Foothill College.

I've taught workshops for UC Santa Cruz Extension, St. Mary's Art Center and privately. I've been exhibiting my work since 1994, on the web and in galleries, and it has been included in many private collections. I'm currently living in Los Gatos, California (about 25 miles south of San Francisco), with my husband, Steve Fend (a USGS stream ecologist). I'm represented by The Main Gallery in Redwood City, and I exhibit my work in other places when the opportunity presents itself.

Q: How do your painting and printmaking studies relate to or impact the photographic work you produce?

In addition to straight photography, I've also studied oil painting (mostly on photographs, but with a little work on regular blank canvas), printmaking (including monotypes, linoleum block prints, and various etching processes) and encaustic painting (beeswax on various surfaces). These processes very much enrich one's vision, opening it up to new possibilities—even when you aren't actually mixing these techniques with photography it still opens one's eyes a little more to colors, color depth, compositions, and constructions. To date the influence has been of that kind, as I haven't yet produced enough work mixing these additional media with photography to have a body
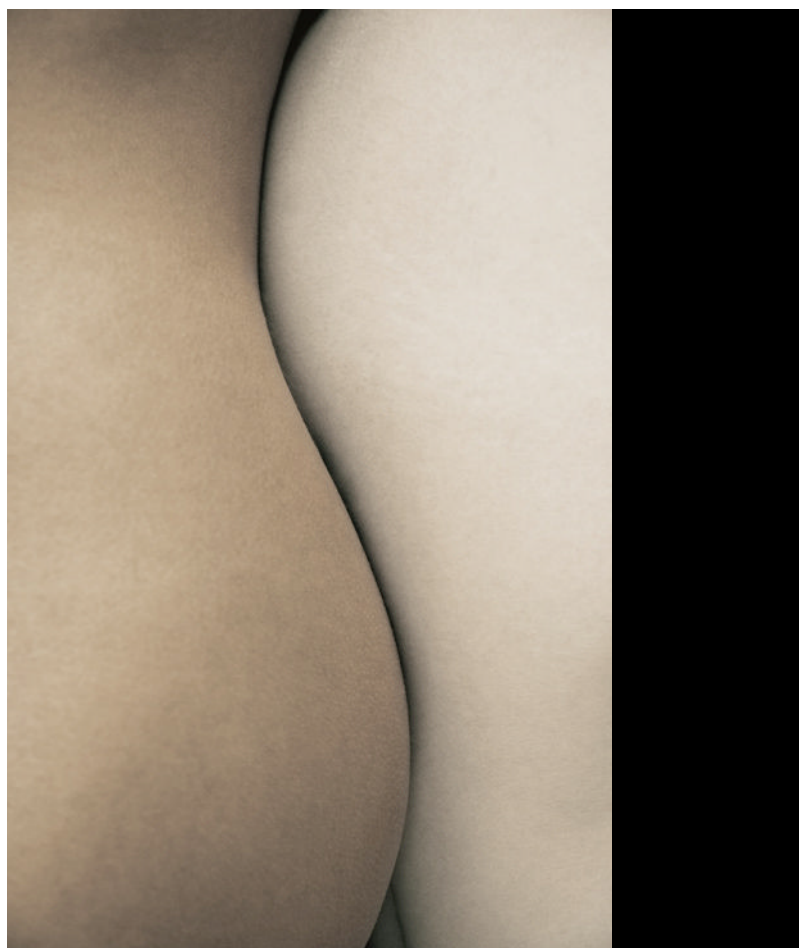
of mixed-media work to show—but I expect that to happen somewhere down the road.

Studying these techniques also left me with much deepened respect for those who can actually draw well. When combined with photography you can do quite a lot without being able to draw particularly well as the photograph supplies as many of the lines as you wish, but that can also be a trap, as it is all too easy to simply slap something on top of the photo without integrating the two media. If it means no more than a bit of lipstick, then I think it detracts rather than adds to the image.

Q: Your hand-painted and digitally manipulated images are clearly constructed; is there a kind of construction that goes into your other images, or are they more "readymade"?

ever making it to the proof sheets (or folders full of digital files). So much of good photography comes down to severe and careful editing, and pre-visualization is the first step in that process. Even in the digital age, with so many image adjustments possible, the final images are always better if they've been created with the right values in the first place. On the other hand, I still do a fair amount of post-visualization too, and refuse to take on any sort of guilt over that. The creative process doesn't stop with the click of the camera shutter. If I can create a final image that works, I don't care if it is the same thing I pre-visualized or not.

Q: How do you create narrative in your pictures?

I wish I could lay this out better. Creating narrative is something that I struggle to do and yet have very little idea how to accomplish effectively. I am a very intuitive sort of worker, so even when I have a pretty specific idea to work with I can only go so far with pre-planning the layout. I try to plan out several approaches with a few different layouts and lots of different props as possibilities, then I bring in my models and we set things up together, trying out different variations using all the ideas that come up between us. By including the models in the process the end result is often different from what I first had in mind, but it always works better than trying to force everything to fit my initial vision. It can work especially well when the narrative is something that is really part of the model's own story—though that is not a necessity, it is really a great benefit when it does work out that way and it makes for the simplest process.

Q: How would you describe the relationship between you and the sitter; can you say something about how you interact during a shoot?

I especially enjoy working with non-professional models—friends or acquaintances—because they tend to bring more spontaneity

I'm afraid the answer here is both—many are found images, while some are definitely constructed. I know some photographers feel that they are bound to show the truth, the whole truth and nothing but the truth, to make no real changes in the material they photograph, but this stricture has never been able to gain a foothold in my own thinking. The only rules I'm willing to follow are those that make the image work and help it to say what I'm trying to say. That said, I still admit that the majority of my images tend to be found images. I think that is the path of least resistance, and really, there are so many wonderful images out there just waiting to be discovered. Most of the time all it takes is a really open mind.

Q: How much do you pre-visualize?

I do a lot of pre-visualization in the field and in the studio. It is an extremely useful process that saves time by making it far easier to get the best print in the darkroom or at the computer, and also prevents a lot of garbage from

to the photo sessions, and they are less likely to offer me a repertoire of the same old poses. They also tend to be more nervous about the sessions at first—they may not be comfortable with having me really look hard at their body, or they may be shy about offering up poses or thoughts. I work hard to establish some level of comfort; I really don't like to make people uncomfortable in the first place, but also the kinds of images I am trying to make almost always require relaxation on the part of the models. This is where the photographer really needs to know what they are trying to achieve though, as I have one photographer friend who is completely the opposite—he is particularly interested in capturing that very same discomfort that I am trying to banish.

As a general rule, I prefer to have models in poses that are natural and comfortable to them, and to be as at ease as possible. Photographs always have a lot of the photographer in them, and while I feel that when the model is ill-at-ease the photograph becomes even more about the photographer and less about the model, it is also possible that my preference has more to do with my own search for emotional comfort. At any rate, I do try to help the model feel comfortable and relaxed, and I like to sort of experiment slowly until we find the poses that come most naturally to the model.

My usual process is to try to have a few simple ideas planned out to start the session out, where I just tell them what I want them to do, as a means of breaking the ice and giving me a chance to see what their bodies are really like. If I haven't worked with the model before, these are almost never the images that work best, but they do serve an important function in getting things warmed up.

For those models who stay nervous a little longer and are still somewhat stiff while being observed with the camera, I find that it can work wonders to stop to change film (or

change the memory card or battery). Tension is fatiguing, so those particularly nervous models often sigh a great sigh of relief when the camera is finally turned away, and really relax. A few glances in that direction while fussing over the camera can sometimes reveal a really great pose, and I've often done an abrupt shout of "wait, don't move at all, that's a fantastic pose." Most models are even more relaxed once they've seen that you are really happy with what you are getting.

Q: How did your self-portrait work inform the way you interact with models?

I've actually done very little in the way of real self-portraits—only a few as needed for business uses. I have, however, used myself as a model occasionally in the past. I don't think of these as self-portraits, but just as myself standing in for

a model. I found this to be excellent training early on. I modeled for other photographers and for myself, and I learned more about how to work with models by being one than from anything else.

Q: How do being a feminist and your training in biology affect your work?

It took me a bit longer to gravitate towards nudes because of my concern with exploitation of the female body. I struggled with that one for a little while, but I was especially interested in the timelessness that one can get with the nude figure. My feminism surely has guided some of my approach in how I work with the models. For instance, my insistence on providing what they need for their own comfort, both physical and emotional. I don't want to make a photograph that either of us is not comfortable making. It is always a collaborative effort and the model has as much say as possible. Originally I put some effort into finding male models as well, as part of a feminist urge to keep things equal. I didn't really keep this up very long though—since I do prefer working with friends or friends of friends, and those males very rarely are willing to model. To my mind it is still a bit odd, but men are often more shy about being photographed nude than most women.

I don't think my training in biology has an effect on my work with nudes, though it certainly does influence my work in other genres, particularly my wildflower series. Perhaps I should consider ways to bring it into play in my work with nudes—that could be interesting.

Q: What impact do Uelsmann and Bernhard have on your work today?

Both are (or were, in the case of Bernhard) absolute masters of printing, and both have been incredibly generous to students of photography, sharing freely of their techniques and insights. Both have provided considerable inspiration—Uelsmann with working beyond the normal constraints of reality, and Bernhard with the art of finding beauty in the commonplace. Bernhard gave especially good workshop assignments, such as to find a number of good images within 25 feet of the classroom, or a number of good images without getting out of bed, things like that. These are excellent exercises, and ones I repeat frequently on my own. There are incredible photographs right under our noses all the time!

Q: How has teaching informed or changed your practice?

I'm not sure how teaching has changed my practice. I've certainly learned a lot from it. First of all, I always feel like I have to study really HARD before teaching, so I won't give the students any wrong technical information (or at least none that I can avoid). Secondly, I've discovered that there are a lot of unexpected reasons for signing up for a photo workshop, and it is not uncommon to discover that some of the participants have at least as much to teach the group as the instructor does. Once I figured this out I started to lean more towards leading "artist's retreats" instead of regular workshops, with a configuration that allowed all of the participants to teach from their own strengths and everyone to learn from each other. Third, teaching photo workshops made me finally get over being shy about having people watch me make a photograph. I think there is a great deal to learn by watching other photographers go through their process of creating a photograph, and teachers should always provide an opportunity for their students to watch them and to watch other students when possible too.

Q: Do you have advice for beginning nude photographers?

Yes indeed! I strongly believe that anyone who wants to do nude photography should experience being on the other side of the lens as well. This is the very best way to learn about

working effectively with a model. I think it's most effective as a learning tool if you model nude for another photographer, but it is also good to practice by using yourself as a model. What do these suggestions bring up in your mind? This in itself is useful to know, as it may offer a little insight into the things that come up in a model's mind. Do you think your body isn't attractive enough? Try to find innovative ways to use only parts of your body—there are many ways to make a beautiful photograph with a human body. Are you concerned with being recognized in ways that might be embarrassing? Think about ways to make it not recognizable by using only part of the body, or by manipulating the lighting or the focus, or by cropping to the point of abstraction. More tips to make this exercise more successful: use a tripod for the camera and place a large mirror behind it to get a better idea of what your layout is looking like. A second tripod can be used as a stand-in for yourself, to give you something to focus on, while also marking exactly where you need to place yourself when you get back on the lens side of the camera. A self-timer can be used to release the shutter, but it sometimes is difficult to get everything completely arranged quickly enough. In that case a very long cable release cord or a remote control can be a blessing. This whole process can be a bit complex and sometimes frustrating, but it is really an excellent way to learn and get some practice without the pressure of worrying about another person who might be getting impatient or bored.

Visit www.TheNakedAndtheLens.com for interviews with the following photographers:
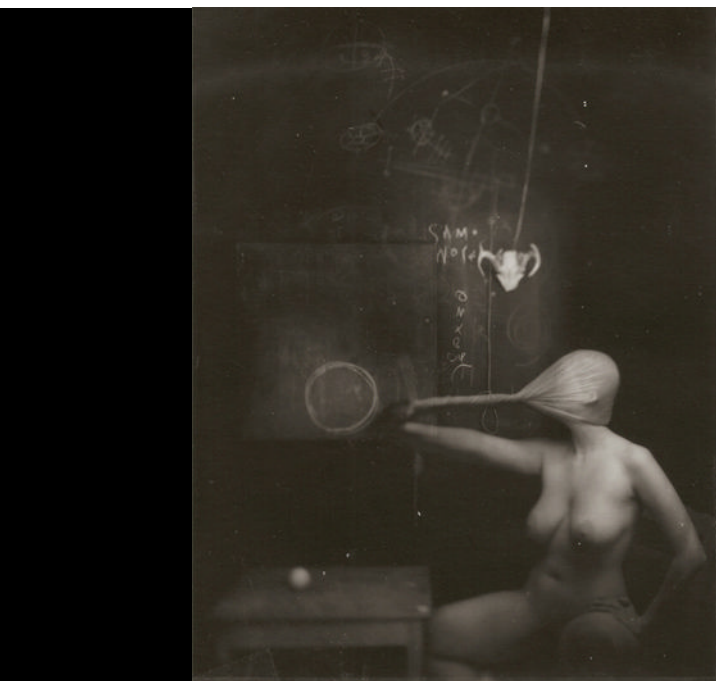
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Pascal Renoux

Nina Pak
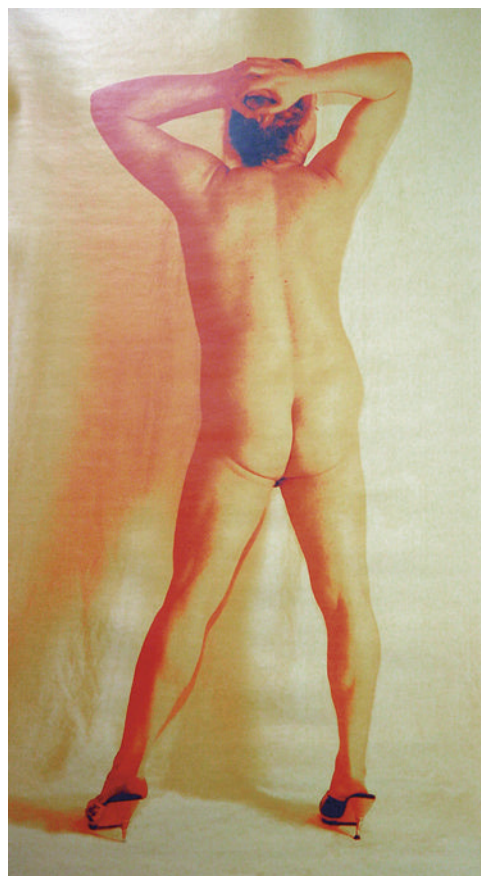
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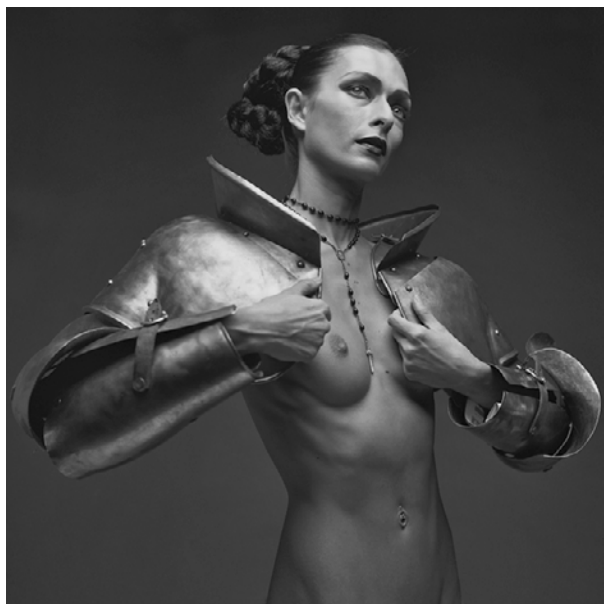
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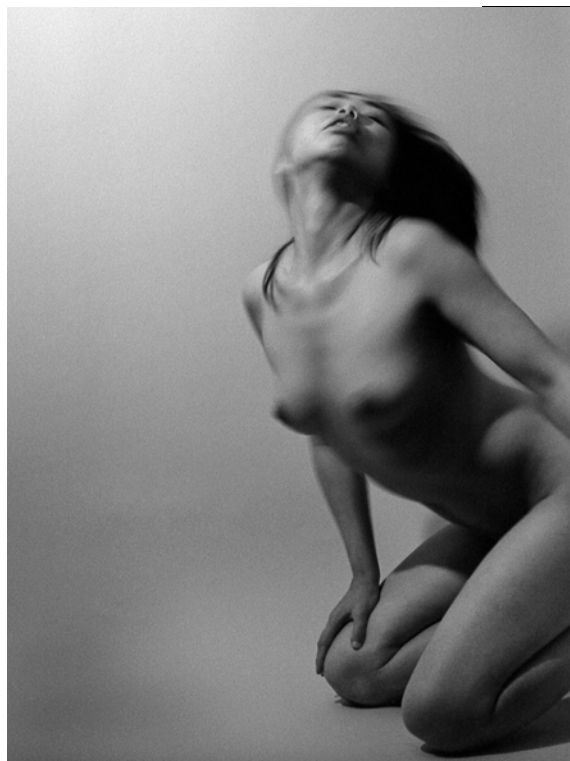
Mayumi Yoshimaru

Harvey Stein

Art is life seen through man's inner craving for perfection and beauty—his escape from the sordid realities of life into a world of his imagining. Art accounts for at least a third of our civilization, and it is one of the artist's principal duties to do more than merely record life or nature. To the artist is given the privilege of pointing the way and inspiring towards a better life.

—*PAUL OUTERBRIDGE*

This book is just one by-product of a personal odyssey. That journey began with plastic cameras bought in drugstores and rolls of film where one shot in twenty even came out. There were various pictures of naked girlfriends, and one who considered herself a charter member of the "No Nude Photos" club. I had an early fascination with "trick" photography, and was blown away the first time I saw a Jerry Uelsmann photograph. Somewhere in that mix of early influences, of course, were the images of *Playboy* and first issues of *Club*.

As my appreciation for art developed, there were visits to photo galleries on *Newbury* Street in Boston in the early 1980s, and the chance discovery of a Modigliani print in the poster shop of the Beaubourg Museum in Paris. During that same trip, I visited the Musée Rodin, saw Iris, Messagère des Dieux (Iris, Messenger of the Gods), and a light went on—art wasn't just about beautiful images or safe subject matter, it was about mixing things up, challenging norms, and breaking taboos, too.

My hope is that by reading this book, you have gotten interested in exploring your own influences and curious about trying new ideas. As Barney Cokeliss said in his interview, it's good to know your influences so that you don't ape them. Beyond that, consciously embracing your influences can be a rich vein to mine for ideas, whether it's exploring your personal peccadilloes, reacting to something you can't stand or referencing the work of someone you admire.

Maybe you'll get out and see something that inspires your work, in a museum, a gallery, or even on the street. I hope you'll remember that too many photographers only look at photography, and that at its heart, the camera is a copying machine. By its nature, the camera invites us to copy—it almost induces us to mimic whatever we see—thus, it takes something extra to go beyond knee-jerk imitation.

Two artists that continue to inspire me today are Egon Schiele and Helmut Newton, and there are two books by other artists that I still refer back to because they demonstrate that nudes don't have to stick to well-worn norms. The first is *Chambre Close* by Bettina Rheims and Serge Bramly, and the second is Lee Friedlander's book of nudes. The Friedlander book has an attitude and energy that I still rarely see in photos of the nude. A third book that inspires me is Flor Garduño's *Inner Light*, because of its poetic treatment of the figure and its minimalist graphic sensibilities.

In writing this book, I got more in touch with some of my own interests and influences. Perhaps the phrase "the journey is the reward" has been overused, but it certainly has the ring of truth. There is much more to shoot, and even more to delve into and write about. I wish you luck and creativity on your own journey.

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