THE ELEMENTS OF PHOTOGRAPHY

SECOND EDITION

Understanding and Creating Sophisticated Images

ANGELA FARIS BELT

Notices

Knowledge and best practice in this field are constantly changing. As new research and experience broaden our understanding, changes in research methods, professional practices, or medical treatment may become necessary.

Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds, or experiments described herein. In using such information or methods they should be mindful of their own safety and the safety of others, including parties for whom they have a professional responsibility.

To the fullest extent of the law, neither the Publisher nor the authors, contributors, or editors, assume any liability for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein.

Contents

"Photography" is a *big* word. I wonder if Sir John Herschel could have imagined that the term would grow to encompass such a vast range of uses, processes, media, and *intentions* when he popularized it in 1839. From the beginning, our beloved "painting with light" was diverse and ever changing, and it has grown into a spectrum that spans art, documentary, family snapshots, advertising, pornography, scientific research, and a thousand gradations and variations in between. It includes nearly a hundred distinct photographic processes (so far!), ranging from daguerreotype to Hipstamatic, and is presented on an impossibly wide array of media and substrates, including glass, metal, paper, and LCD, to name just a few.

So how do we make sense of all this potentiality? How do we provide an effective framework for photographers to investigate these worlds without getting lost or distracted by photographic "politics"? Why debate the virtue of one technique over another—daguerreotype versus ambrotype, platinum print versus silver, film versus digital—when the real question is, how can we learn to use the camera as what Minor White called "a metamorphosing machine"? How do we make images that take advantage of the elegant and universally understood visual syntax we share as humans to create something beautiful—such as songs, poems, and stories in photographs—or show others things we have seen, or manifest our dreams on paper?

You teach people to fish. I love this book because it gets us thinking about "why to" rather than "how to." Naturally, the book includes plenty of practical information (and wonderful examples to illustrate the text), but more important, it delves into the *thinking process* that underlies the making of all good photographs. By emphasizing four immutable elements, derived from and rooted in the biological hard wiring of human perception, *The Elements of Photography* provides a timeless structure—a practical framework for exploring photography, regardless of process

or technique. This book not only accommodates but also embraces the fact that cameras, darkrooms, and software are constantly changing, so step-by-step tutorials inevitably fail. Understanding how to redirect attention with light, focus, and geometry, however, is a completely non-version-specific form of visual alchemy.

Angela Faris Belt has done a beautiful job of providing workable instructions for practicing this kind of photographic magic by distilling more than a century of hard-won photographic wisdom into a couple of hundred pages. She focuses, literally, on the big picture: teaching photographers how to analyze and deconstruct the building blocks of photographs in order to develop the critical skills necessary to evaluate and improve their work,

and find their own style. She provides a starting point for exploring pictures, and a way for photographers to begin to train themselves to see each successful or unsuccessful picture as the result of numerous distinct and conscious choices, rather than a single intuitive leap. It has taken me the better part of three decades to understand what it means for a picture to work on every level—why some pictures are great, while others "almost" work. This book expedites that process by helping photographers figure out what, exactly, might be missing from their pictures, and what to do about it. Once we understand that, the sky's the limit.

Jean Miele

Acknowledgments

Several years of more and less tangible work go into writing a book, and many people played significant roles in this book's creation; I offer my sincere gratitude to them here. To my father, James Michael Faris, and to my mother, Charlene Brown Faris, who taught me by example the importance of discipline and hard work, and who nurtured my dreams unconditionally. For your years of belief and encouragement and for sharing the gift of your lives with me, I acknowledge my family, Jim Faris, Mary Stine, and Ahndrea Pett, and the few I call friend, in particular Rachel Paul, Greg Marion, and Dennie Eagleson; and my mentor, Sean Wilkinson. To Randy Wolf, my dear friend from our first conversation about cats and dogs, who departed this world in 2011, for demonstrating the true meaning of courage and reminding me that life is lived in the moment. Heartfelt thanks to three wonderful spirits—Angie Buckley, Jill Mott, and Elaine Blackmer—for your wisdom, faith, and honest reflection during the past few years.

Most humble thanks to all of the photographer-artists and photography contributors to this book; your amazing works are more telling of the nature of photography's depth and power than my words could ever be.

Thanks to Frank Varney and to my students and colleagues at the Art Institute of Colorado for your patience while I once again diverted time and energy to revising this book. Thank you also to three fabulous women, Cara Anderson, Stacey Walker, and Laura Aberle, and all involved in production at Focal Press for your dedication to quality photography publications and patient assistance in the difficult task of preparing them.

Most important, my undying love and gratitude to my husband Dave, for your support and encouragement, for sharing the depth of your wisdom and being, and for your eagerness to explore, understand, and embrace the Universe from which we came and to which we will finally return.

> One fact that is not in dispute is that there is a…gulf between art and commercial photography, between professors and professionals.
> —Bill Jay from *Occam's Razor*

I began the first edition with a discussion of the dichotomy existing between commercial and fine art photographic practices. (Although commercial photographers are commonly referred to as "professional photographers," I avoid the term because both commercial and fine art photographers are professionals in the field.) The response was notably mixed among educators, commercial photographers, fine artists, and students, at times turning into impassioned polarized debate. Much of the debate centered on how photographic practices are defined and what I meant by "fine art." I decided I hadn't provided clear distinctions in the first edition, so I'll attempt to do so here.

Consider this: commercial photography can be defined as *any work created with commerce as its primary goal* (hence the shared root word). This includes most photography from advertising to editorial, consumer portraits to high fashion, architecture to public relations, and corporate and decorative art made to adorn public and private spaces. Under this definition, commercial photographers are like prose writers—their work has commercial or functional value in society. Commercial photography has direct, tangible economic value; its purpose in many ways is to provide images for its intended contribution to society. Fine art photography, on the other hand, can be defined as *any work created with poetic, self-expressive, research, or innovative use of visual language as its primary goal*. This includes most museum, academic, and documentary photography. Under this definition, fine artists are like their academic and research counterparts in any other field, but whereas these researchers express their theses', findings, and

IMAGE © ANGELA FARIS BELT, *Found (Some While Different),* 2009.

conclusions using written language, fine artists express them using visual language. The purpose of fine art, like other research, is to increase our knowledge, to promote positive social change, and to contribute to humankind's collective growth, understanding, and wisdom. As such, the commercial value of fine art photography is often secondary, although many fine artists can and do profit from their work through display in galleries and museums, and through commercial and editorial use gained by marketing.

Unfortunately, the commercial versus fine art dichotomy is perpetuated via the historically prevalent model of photography education; and while the exception is becoming more the rule, many educators still advocate one discipline's value over others. I believe that hierarchical positions regarding fine art and commercial photographic practices are detrimental to students' success, but I want to take a moment to clarify my position for those who feel my critique is too harsh.

I'll begin by stating that I don't advocate abandoning programs or curricula that adhere to a single, specific discipline. Photography encompasses a vast field of practices, and as such a range of educational philosophies helps to maintain a healthy and diverse professional dialogue; this includes concentrated programs of study whose goal is to graduate students with specific expertise. Second, I'll state that this book is for the entire range of photography practitioners, and although photographic language is based on technical attributes that *all* camera-made images share, there are some practices I don't discuss. Specifically, in scientific, biomedical, and forensic fields, objectivity supersedes any commercial, expressive, or subjective use of the medium. This is true for photojournalism as well, although enlightening, expressive, highly emotive photojournalistic and scientific images are made every day in which degrees of objectivity are maintained.

The commercial versus fine art definitions can be illustrated through an analogy of two types of written language: prose and literature. Just like uses for photographs, there are a multitude of uses for written language. If, for instance, I need a technical manual to help me operate a piece of machinery, then I don't want it written in poetic form. I don't want to learn about its history or potential existential meaning. I need the manual's author to use straightforward language, and I need the information to be clearly delineated so that I can use and troubleshoot the machine. Similarly, if I want to read a biography of the historical figure who invented said machine, I don't want the author to embellish about the

inventor's life; I want to trust in the accuracy of the author's written word so that I have a clear picture of the inventor and perhaps draw my own conclusions about her. On the other hand literature, a novel or poem, say, written about the same inventor, could be characterized by its imaginative, metaphoric, or inventive use of the same language applied to the author's research and interpretation. I might read said literature for enjoyment or to enlighten my understanding of the nature of invention, machines, or anything the writer related to the inventor. All types of written language—from technical manuals to biographies to literature—are constructed using the same grammatical rules and the same vocabulary, but each serves its own purpose in the world. There is no hierarchical structure; they simply serve to achieve different goals. This analogy is good to keep in mind when referring to photographic practices.

The observation that throughout photography's history practitioners have been segregated into commercial or fine art practices is not new. Since the medium's invention, photographers have taken great pride in their type of practice, to the point of disavowing contributions made by photographers on "the other side of the aisle." But in the 21st century, where the odds of success necessitate that photographers diversify their practice to ever greatening degrees, the dichotomy is becoming increasingly detrimental. The constant dissemination of innumerable images via the Internet and social media, film and television, print media and advertising, galleries and arts organizations, as well as an increasingly global culture has created a generation of photographers who don't feel constrained by discrete disciplinary boundaries. Their approach to photographic practice reflects the expansive melting pot of influence in which they were raised.

But counter to this contemporary model of photographic practice, a vast number of commercial practitioners still fail when vying for art world representation, and an equal number of fine artists fail when trying to support themselves in the commercial fields. One reason for this is that their photography program adhered to a single disciplinary line, with commercial schools concentrating on technical training and business operations, and fine art schools concentrating on aesthetics, theory, and interdisciplinary education. This approach is ideal in some instances because specialized education enables graduates to rapidly advance in a specific field of photography. One drawback to this approach, however, is that in a diversified contemporary

marketplace, graduates' chances of success decline without the useful carryover of techniques and ideas between disciplines. Taken to the extreme, photographers emerging from narrowly focused programs practice photography in relative ignorance of the myriad ways in which the medium's "other half" could inform and enhance their work, and all viewers suffer from the unexplored potential.

Graduates from commercial schools are adept at using the most complex, state-of-the-art equipment and materials; they produce images demonstrating perfect technical execution with eye-catching style. But many of their best photographs lack substantive meaning, and at worst they *miscommunicate* because these graduates were under-educated in the areas of art history, visual literacy, critical theory, and aesthetics. To quote the conceptual fine art photographer Misha Gordin, "The poor concept, perfectly executed, still makes a poor photograph." On the other side of the educational spectrum, fine art school graduates fully understand the theoretical and historical underpinnings of photographic work; they produce images filled with insight, passion, depth, and meaning. But many of their best photographs lack sophisticated technical accomplishment because they are underpracticed in the medium's technique, mechanics, equipment, and materials. Technically poor

images are like poems written with poor grammar—they may have volumes of insight to convey, but they have difficulty doing it successfully. To paraphrase Misha Gordin, the blend of talent to create a concept and the technical skill to deliver it is necessary for making successful photographs.

To complicate matters, the advent and rapid evolution of digital technology has created a relatively new fissure within photographic practice, this one based on photographic media itself. Reflecting this, many academic programs have been forced to choose between two discrete light-sensitive media—traditional or digital—the majority choosing digital. The decision is in part based on their need to maintain relevance within their particular discipline or industry, but it's also due to the unavoidable financial pressures that bear on academic institutions such as hiring for faculty expertise, limited curricular time to cover a vast amount of material, and space limitations for darkroom and digital facilities. Many programs (and practitioners) have chosen to adopt an either/or approach, suggesting that abandoning traditional for digital media will advance those leaders who embrace it and retire those relics who don't. But this approach can limit the medium's collective advancement in several ways. First, students tend to learn and practice only the technologies available to them

through their academic program, so the unique visual outcomes of alternative media options often go unconsidered even after they graduate. Also, an either/or approach neglects careful examination of the broader potential offered by *both*. Maintaining a balance between technical and aesthetic, traditional and digital, historical and contemporary, provides solutions allowing more expansive use of the medium.

In addition to polarized academic approaches and the proliferation of new media, many students unwittingly set themselves up for failure in a particular branch of photography because they are unfamiliar with the dichotomy when they enter a college program. Every professor knows scores of students who did not consciously choose the type of photography program they found themselves in. That is, they did not make informed decisions by sufficiently defining their future goals and applying to institutions that, through research, they learned would best help them to meet those goals. Two years and tens of thousands of tuition dollars later these students begin to understand what direction they wish to take in their photography career. Unfortunately, too many of them simultaneously discover that they are not in a program specifically designed to get them there.

IMAGE © ANGELA FARIS BELT, *LIGHTS*, 2008.

So what's the good news? The negative effects of these combined problems—polarized academic emphases, the pressure to adopt solely digital media, and students' unknowing of the range of programs and potential careers in photography—can all be mitigated through courses that simultaneously balance and broaden the way we engage in photographic practices. One way to accomplish this is through courses that integrate hands-on practice in photographic technique with simultaneous study of how the

inherent visual outcomes create meaning. By engaging a more holistic approach to photography education, graduates emerge armed with sound knowledge of the range of available tools, are historically and conceptually informed, and are better able to define and redefine the emphasis of their photographic practice throughout their careers.

This book provides such a course. It allows practitioners to gain a better-rounded, contemporarily relevant education in the medium. Originally designed as an intermediate-level portfolio development course, *The Elements of Photography* solidifies technical skills while deepening conceptual awareness and expanding visual literacy. Based on four immutable elements (outlined in the Introduction) inherent to the making of *all* photographic images, this course remains successful even as photographic materials continue to change and evolve. How is this possible? Because the principles that make a photograph, well, photographic, never change.

The approach outlined in this book, which anyone can learn, is based on a single theory: *photography is a unique form of visual language based on a specific technical grammar.* Anyone who studies a language intently begins to understand its grammatical structure and can use it to

This book examines four elements specific to every image created through the action of light. These elements form what I call *the grammar of photographic language*, because they constitute the technical foundation, as well as dictate the visual outcome, of all photographic images. They are: the photographic frame and its borders, the aperture or lens and its effects on focus and depth of field, shutter speed and its effects relative to time and motion, and the physical media used to create the aggregate image. Together these elements answer a three-part question that defines the essence of photographic language: "What are the essential technical elements inherent to photographic image making, how do those elements dictate discrete visual outcomes, and what meanings do those outcomes suggest in relation to the subject?" To fully mine the medium's potential, these grammatical elements must be expertly addressed by photographers, regardless of media choice and the intended use of the images.

communicate more precisely. A photographer with a curious and conceptual mind who understands the grammar of photographic language can effectively use it to share insights and interests. The most successful fine art and commercial photographers—those whose work has the power to enlighten and educate, to persuade and advance

change, and to heighten our perception of people, places, events, and things—share a common characteristic: their work acknowledges that the power of photographic image making lies in the interconnection between the medium's technical structure and its visual outcomes. When photographers learn to integrate technique and aesthetics, they become better able to create successful, meaningful images in any branch of the profession.

I have shared this course and its methods with a broad audience of educators through the first edition of this book, and the quality of their students' images and growth in understanding have been as impressive as that of my own students. Using this book helps educators to bridge the institutional gap between technical and fine art practices, as well as the gap between traditional and digital media, and helps to ensure that students receive a comprehensive education in photography that will serve them well in any branch of the profession they gravitate toward. But this book isn't only for college photography students; self-taught and practicing professionals have also used it to broaden their approach to image-making, and they've done so with excellent results.

This second edition expands greatly on the first, and is organized to allow beginning photographers easy entry to the principles outlined within. The format of this book, its principles and content are outlined in the Introduction. Also found there is advice about how you can gain the most from the reading and the practical exercises. As you embark on this photographic exploration, remember to enjoy the process as you celebrate your progress!

INTRODUCTION

LIKE ALL ART, PHOTOGRAPHY CREATES ITS OWN REALITY. AND THE BEST PHOTOGRAPHS ARE NOT THOSE WHICH SUCCINCTLY RECORD WHAT HAS BEEN SEEN, BUT THOSE WHICH UNDERSTAND HOW TO STRUCTURE THIS ACCORDING TO RULES AND LAWS SPECIFIC TO THE GENRE. —FROM *ICONS OF PHOTOGRAPHY*

There is just "something about" certain photographs, isn't there? If you're like me, you pause at the sight of them in magazines and journals, on gallery and museum walls, in family archives and in antique stores, and marvel at that "something." What makes them so intriguing is difficult or impossible to describe verbally because it exists as a strictly visual construct. But even if we can't describe it, we know when we see it. It occurs when the *form* of a photograph inextricably ties its *subject* and *content* together (we'll explore this in Chapter 1). This cohesion, particular to photographs possessing "that something," is created most often by photographers who see photography as a visual language, and who use its grammatical elements to express meaning.

WHAT ARE THE ELEMENTS OF PHOTOGRAPHY?

Grammar can be defined as "the foundational elements that comprise a science, art, discipline or practice," so in addition to its ability to strike fear into the hearts of grade-schoolers, grammar is the basis upon which every form of language is built. That's what this book is about—*the grammar of photographic language*—that is, the elements that make up the technical foundation, as well as dictate the visual outcome, of all photographic images. These elements are: the photographic frame and its borders, the aperture or lens and its effects on focus and depth of field, the shutter speed and its effects relative to time and motion, and the physical media used to create the aggregate image.

The elements do not operate in a hierarchical or sequential manner; they each play a unique role as they combine to form a coherent visual statement. This book explains the nature of the four photographic elements as well as how to control them technically. It demystifies their compositional and visual outcomes, and it examines their communicative and conceptual implications. Consciously employed by a skilled photographer, these elements will add advanced levels of depth, dimension, and meaning to your photographs.

WHY THE ELEMENTS MATTER

Just as avid readers don't gain much enjoyment or insight from novels written with little command of the language in which they're written, avid viewers don't gain much enjoyment or insight from photographs made with little command of photographic language. It's because just as combining parts of speech dictates the form and meaning of sentences, combining photography's grammatical elements dictates the visual properties of photographs, which is how they communicate meaning. The relative success or failure of a photograph can be attributed to two things: what the intent behind the image is, and how well the image fulfills its purpose or communicates its message. Quite simply, *photographs structured on the grammatical elements of photographic language as they relate to specific subjects are more likely to communicate successfully.* A photographer's control of the medium's grammatical elements acts as a filter through which viewers see the world; often transparent to viewers, they are the primary means through which we transform our world into photographs. Insofar as a filter's significance lies in how it alters something, the degree to which a photographer understands, employs, and manipulates these elements dictates the degree to which their photograph successfully communicates.

Beyond using grammar to structure and filter information, additional parallels can be made between written and photographic language, and their uses. For example, both types of language have practical and expressive uses. We use both written and photographic language to describe the world around us in informative ways; further, we use them to encapsulate, summarize, and communicate that information in ways that others can understand. We use them to "sell" others on ideas and commodities and as a means of propaganda and influence. We use them to record our personal and collective histories, to preserve them and share them with others, and to carry them into the future. We use both written and photographic language to interpret and evaluate events as they happen in our lives and in the larger world;

we use them to theorize, synthesize, and conjecture, and even to obfuscate or to pose unanswerable questions. We use them scientifically, to research and express our findings. We also use them for the purpose of making art, as a means to express our personal perceptions of the world—its beauties and its horrors—and to experiment with unconventional uses of the language, thereby broadening and shaping our collective understanding of subjects and the language itself.

Whether we're composing a technical manual (which we might equate with scientific or forensic photography), prose (photojournalism, documentary, or advertising photography), a personal journal (wedding or portrait photography), or a collection of poems, a novel, or research (fine art photography), the formal basis and structure of the language we use—its grammar—remains consistent consistent. Like the grammatical rules of written language, the grammatical rules of photographic language remain consistent regardless of how or to what end we use them. For all these reasons, photographers address the elements of photographic grammar, to the best of our ability, in order to fully mine the medium's potential. At a time when more people than ever are making photographs professionally, to set yourself above the rest it's imperative to study the elements upon which photography is based, and to implement those

elements as communicative tools so that you can make visually literate images.

As previously stated, the four key technical elements that constitute the grammar of photographic language are: the photographic frame and its borders, the aperture or lens and its effect on focus and depth of field, the shutter speed and its effects relative to time and motion, and the physical media used to create the aggregate image. Because these elements are inherent to cameras and the physical media upon which images are captured, they provide an excellent framework for studying photography. In the end, photographers who understand these elements can successfully distill images from ideas; photographers who control and consciously put them into practice in their work can create images that perfectly represent their vision.

HOW TO USE THIS BOOK: A CHAPTER OUTLINE

Chapter 1, "Before You Begin," examines and explains how to use subject, content, and form—the three aspects that comprise any kind of composition. This part of the chapter guides you in selecting a single subject to explore throughout the exercises in the book. It also discusses what I call *finding your thread*—knowing what drives you to make

photographs—through collecting tear sheets, forming critique groups, and writing artist statements.

Chapter 2, "Metering and Exposure," provides a solid background in photography's essence: using light to create images. It covers in-depth the methods for controlling and interpreting image density and histograms, as well as how to select the proper ISO, aperture, and shutter speed for a given situation. This chapter is a must for anyone who is relatively new to photography, but even if you've been making photographs for years, you can refresh your technical knowledge by starting here.

Chapter 3, "Framing, Borders, and Multiple Frames," is written in three parts. First it studies the most fundamental means through which we transform the world we see into a photograph—the frame. The frame is the first photographic element because the camera's imposed viewfinder is immediately placed between the photographer and the world. The first part of this chapter, "Framing," discusses how to organize the frame using picture planes, vantage point, and juxtaposition—all natural outcomes of the camera's translation of our three-dimensional world into a two-dimensional representation of it. This section also discusses frame format, media dimensions and cropping. Part two, "Borders: the Exterior Edges of the Frame," examines the

outermost boundaries of the frame—the borders of the media and print—because they contribute significant visual information relating to the image itself. Part three, "Using Multiple Frames," teaches you methods of expanding on the photographic frame by exploring single images created through gestalt, including diptychs, typologies, contact sheet images, and multiframe panoramics.

Chapter 4, "Apertures: Focus, Lenses, and Clarity," examines the nature of apertures as a portal through which the image is transported. It examines types of lenses to focus the image, as well as the relationship between the lens plane and media plane. This chapter discusses pinhole cameras, various nontraditional lenses, and several notions of clarity associated with lens quality, focus, and depth of field.

Chapter 5, "Shutter Speeds: Time and Motion" examines the world of motion as it appears when recorded onto static media (light-sensitive film, paper, or sensor). Part 1 outlines numerous technical considerations in order to demystify the process of successfully recording the range from frozen to blurred images. Part 2, "Multiple Moments in Time," looks beyond a single exposure to the potential offered by multiple-exposure techniques, the use of sequences, and the use of single frames viewed over time.

Finally, Chapter 6, "Materials, Processes, and Presentation: The Aggregate Image," deals with the physical attributes of the printed image and the meanings suggested by both capture and output media. Part 1, "Going Back to the Beginning," examines attributes of size and scale, and grain structure, tint and tone. Part 2, "How Images Exist in the World," expands on this discussion to include the means through which we display and share our images with viewers, in particular in gallery settings. Here I discuss several contemporary presentation methods as options to the traditional window mat, glass, and frame.

The book concludes with a discussion of the work of a single photographer, David Taylor, and how he uses all the elements of photography in ways that enable him to communicate his ideas to a diverse audience.

FORMAT

The format of *The Elements of Photography* will lead you to greater understanding of how photographs communicate by progressing from technical considerations to visual outcomes to potential for meaning through each chapter in succession.

Throughout the book you'll find "Image Discussions" that explore various attributes of photographic language and use them to determine the meaning of the image.

Additionally, each chapter contains "Chapter Exercises" designed to help you engage, experiment, and create using the technical, visual, and theoretical information provided in the chapter. These exercises encourage you to broaden your thinking about how use photographic language to express your ideas.

Finally, each chapter ends with inspirational "Portfolio Pages" with selections from several photographers' work intended to enrich the chapter's information. I have written a brief "Elements" introduction to each portfolio to facilitate understanding and discussion of how the photographers successfully use photographic language to make their images. The photographers have provided Artist

This is not an Adobe Photoshop text, but its principles can be mimicked using image-editing software programs such as Adobe Photoshop. If you wish to mimic camera techniques using digital means, it's best to know what those techniques look like when they're created through authentic means. The way to go about this is to use keywords from the chapter contents to research tutorials that mimic the techniques believably. Image editing after the fact can be made to look the same, but as every professional photographer knows, it's more costly and time consuming than getting the image right in-camera. And that's what this book is all about!

Statements addressing their work's creative and conceptual meanings. These photographers' work is not *about* the elements of photography, but they use the elements expertly in a wide variety of ways to illuminate viewers about the intended meaning of their work. The Portfolio Pages primarily represent fine art photography, but they also include documentary and commercial-editorial work to provide readers with an idea of the possibilities that control of these elements offers all photographers.

I have taught photography for more than a decade using this approach, and I am consistently amazed at the power of the imagery, both technically and creatively, that engaged practitioners achieve once they begin to explore the world through the grammar of photographic language. Using this approach, you too will become practiced in photographic technique, gain a more concrete understanding of photographic visual literacy, and build a strong body of work with which to demonstrate your unique vision to viewers including portfolio reviewers, employers, and image buyers. You will build confidence with the medium's technical principles and how those principles translate into visual images, and you'll develop a working method that is proven to be engaging and successful when exploring a subject photographically. You will stop "taking pictures" and begin "making photographs" because while anyone can take pictures, photographers understand and consciously utilize the medium's grammar to make photographs. Through practice you will begin to make photographs that accurately communicate your message whether it's political, personal, poetic, spiritual, aesthetic, or journalistic. Using the techniques outlined in this book, you'll be well on your way to making the photographs you envision, successfully and with a sense of personal style.

I strongly advocate to image makers the necessity of incorporating interdisciplinary studies into your practice. I cannot emphasize enough the importance of carefully reading this and any book relevant to your field of study and thoughtfully researching any work about subjects that ignite your passion. Be inquisitive; be willing to explore. Don't limit your research to direct information about your subject; look into how it influences or is influenced by broader cultural history, religion, philosophy, politics, sciences, social sciences, literature, photography, and other arts. Seek out information shared by others who are passionate about similar subjects to the point that they have researched and studied, written or made art about it. Using an interdisciplinary approach to understanding your subject is a photographer's best asset; it informs your work in ways that visual exploration alone cannot.

EQUIPMENT AND EXPERIENCE NEEDED

The information and techniques included here were developed for photographers at any level who possess a basic foundation in the technical aspects of camera operation, as well as a fundamental working knowledge of darkroom printing or Adobe Photoshop (whichever suits your preference). The techniques explored in *The Elements of Photography* can be practiced with historical, traditional, digital, or a combination of media. Advanced practitioners can use this text to develop a portfolio that reflects a broader visual and theoretical perspective. These techniques are by no means an exhaustive study of photographic image making; rather, they are tools for developing a deeper understanding of the possibilities inherent within photographic practice.

Additional equipment such as specialized filters, alternative lenses, and tripod heads are discussed throughout the book. Most of these supplements are affordable and have the potential to enrich your exploration, but they are not required in order to practice and create an impressive body of photographic work. Above all, have fun and expand your photographic ideas to the limit!