# NIGHT PHOTOGRAPHY AND LIGHT PAINTING

Finding Your Way in the Dark



SECOND EDITION

LANCE KEIMIG



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# NIGHT PHOTOGRAPHY AND LIGHT PAINTING



Self-portrait, Steve Harper, 1980

This book is dedicated to my friend and mentor, Steve Harper. Your teaching, encouragement, and friendship over the past 25 years have shaped my career. I'm quite sure that this book, or the first edition, would never have been written if I'd not discovered your classes so long ago. You inspired a generation of night photographers, and I am proud to be one of them. Thank you Steve.

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# Foreword

### Foreword

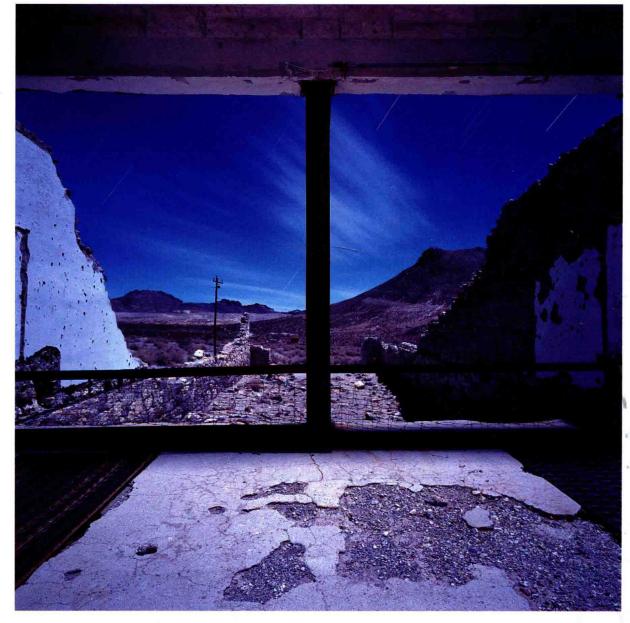
#### TIM BASKERVILLE

"On any given night . . . "

I first met the author in 1991 through an introduction by fellow night photographer Steve Harper. Lance Keimig had recently moved from the East Coast to San Francisco, essentially to study night photography with Harper; I was a former student of Steve's, busy working on an exhibit of night photography—The Nocturnes—featuring the work of Bay Area photographers who were exploring the expanding genre. It was clear from this auspicious meeting that Lance had more than a passing interest in the transformative nature of night photography; thus began a working relationship that has now surpassed 20 years—and many cold nights spent photographing the abandoned, the forgotten, and the unobserved. In 1996 both our work was showcased on the newly developed Nocturnes website, and in 1997 we began planning The Nocturnes Workshop Series, which launched with three workshops the following year. Shortly afterward, Lance relocated back to the East Coast and continued to exhibit and teach there, as well as "commuting" to California for workshops where we taught together. In hindsight, I think this expanding reach of our workshops, exhibits, and other efforts set the stage to accommodate the explosive growth of interest in night photography, mirroring the accelerated evolution of digital photography. At this point we were true evangelists of night photography, owing a huge debt to Steve Harper's tutelage and mentorship.

For the past 20 years, Lance has shown an inspiring commitment to the art and craft of night photography, to fostering night photography education, and to a philosophy of it. Lance and I (like Steve Harper before us) are of the same mind: that there is something special, something unique about night photography—an intrinsically transformative quality in its nature that you don't find in other kinds of photography.

This "philosophy of night photography "—what is it, what does it involve? Well, it is a bit like the Slow Food movement (or the other "Slow" initiatives: Slow Art, Slow Technology, etc.), encouraging a contemplative approach to the making (as opposed to the *taking*) of an image. It involves an emphasis, less on gear and gadgets (things), and more on the creative process, experimentation, and the experiential nature of the act of photographing at night.



Rhyolite, Tim Baskerville. Porter Brothers Store, rhyolite, NV Hasselblad 500/CM, 80 mm planar, 22 minutes, f8, at ISO 64, tungsten balanced film.

Nowhere is this more evident than in photographing the landscape and the night sky. Long exposures (again, "slow") reveal the inherent transformative potential of night photography. In minutes (or hours) long exposures of straight lines (actually, long arcs) etched onto film or a camera sensor do not trace, as it would seem, the stars' movement across space, but instead, our movement, this planet's rotation, relative to those stars' positions. We don't ordinarily see the quantitative element of "distance over time" rendered in such an aesthetic manner. As Lance points out: "In Night Photography, time is compressed—it's almost like shooting a movie and the camera jams, so the entire film is recorded onto a single frame—and that one photograph may represent 10 minutes, or 20 minutes . . . or six hours!"

Transformative experiences rely on rituals to organize and codify those encounters, and night photographers, from the earliest days of the genre, have their own set of self-organizing rituals. One such ritual would find "full moon" photo enthusiasts from Edward Steichen to Troy Paiva out in the cold night air, every full moon cycle (approximately 29.5 nights—photographing two nights *before* the full moon rises—in addition to the actual night of the full moon, and maybe (depending on the season and early sunsets) one night *after* the full moon.

The cornerstone of this "slow" philosophy of night photography is in distinct counterpoint to the ever-escalating pace of technology and of life in the 21st century. Even the photographic tools we use—while we love them for what they enable us to do—are a result of this ongoing parade of technological "wonders." We long for some solace, a retreat into the calm of night.

How then does this timeless ethos of night photography square with the breathtaking pace of technological innovation in digital photography? It is as if the very thing that has helped advance night photography in recent years is the thing that many seek escape or refuge from. Can the author help us "re-find" our way in the dark? When I was first asked by Focal Press to review the proposal for a new edition of *Finding Your Way in the Dark*, I wondered how such an already highly regarded and successful text could be improved. But, I think that Lance has done it, making the hard choices (e.g., dropping the film section) while surveying the current state of the art today.

In this new edition, the author addresses recent developments in high-ISO photography (both for low-light testing and for astrophotography), as well as the increasing interest in light painting and *light drawing* (finally, a distinction has been made!). For this new edition, Lance has again invited several photographers from the night photography community to contribute—a fitting measure, indicative of the cooperation and openness that characterizes the night photography community. As I've often said: "Some of the nicest people I have ever met are night photographers!"

# Acknowledgments

When the first edition was published in August 2010, I never imagined that a book on night photography would go on to be reprinted several times, and translated into six different languages. It is a testament to the ever-increasing popularity of the subject, one that has been deeply personal to me for nearly 30 years. Night photography has been the cornerstone of my life's creative efforts and I feel truly fortunate to have been able to make it the foundation of my photographic career. I owe a real debt of gratitude to the many hundreds of students and workshop participants who have studied with me over the years. It has been one of the greatest pleasures I've known to see the spark of night photography catch fire in so many of the wonderful photographers I have had the privilege of working with over the last 16 years of teaching.

This revised and expanded edition of *Night Photography and Light Painting: Finding Your Way in the Dark* has been a long time coming. First and foremost, I want to thank Kimberly Duncan-Mooney at Focal Press, who first contacted me in January of 2013 about a second edition. Thank you also to my editors at Focal, Alison Duncan, Anna Valutkevich, and Nicola Platt and Emma Elder at Taylor & Francis for your persistence, patience, and encouragement along the road to producing this new version of the book. Thanks also to Matthew Scotti at Focal for your help with researching images and copyright holders for the history of light painting. Thank you also to Jason Page for your help with the history chapter. Your research into the history of light painting has become the foundation of all knowledge on the subject.

Many thanks to Tim Baskerville of The Nocturnes for his excellent Foreword and editing suggestions. To the many photographers and light painters whose words and images grace the pages of this book, thank you. Your images and willingness to share your knowledge are a big part of the success of this book. I want to thank Alister Benn, J. Michael Sullivan, and especially Keith Kiska, who all wrote guest sections that were ultimately cut due to space limitations. Your excellent work is appreciated and I'm sorry that it didn't make it to print. Thank you also to Rick Whitacre, Troy Paiva, and Michael Frye for your informative articles.

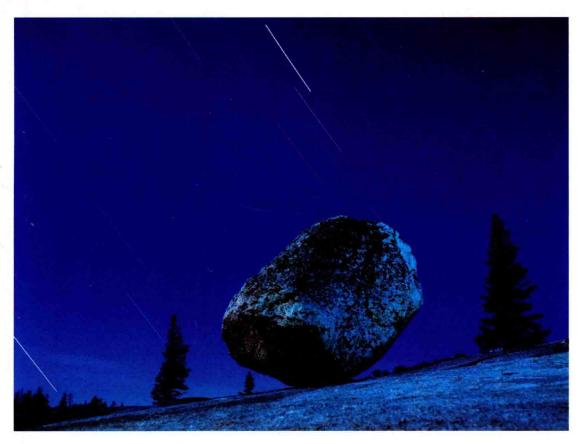
Peggy Hansen quickly figured out just the right balance between encouragement and space for me to work. I have so much to thank you for. You helped make this project possible in a very real way. Scott Martin has been my friend, mentor, and workshop partner since 2007, and my advancement into the digital age has been skillfully guided by his great knowledge,

and kindness. Thanks also to my friend Tom Paiva; knowing you and seeing your fine work over these many years has been, and continues to be, an inspiration. A huge thank you to Susanne Hupfer, my 2 am editing specialist. Christian Waeber and Katherine Moxhet were present during the creation of many of the images in both versions of this book, and their nocturnal camaraderie over these many years has been a welcome constant on many a dark and stormy night. Katherine, thank you also for your gentle nudges that helped to keep me on track, for your heroic last-minute work reviewing the proofs, and for continuing to carry the torch for film-based night photography. I hope you never let it die out, and I look forward to many more *Acros Adventures* with you.

My son Skye helped with editing, and your music kept me going through many a long night while writing this book. You are my biggest inspiration. My mother has loved me as only a mother could, through thick and thin, and the longest, darkest nights. Your belief in me has kept me going at times when little else could.

### Introduction

In August 2008 I was invited to write a book on night photography by Focal Press, something I had thought about doing for many years. I was at Mono Lake in California's Eastern Sierra teaching a workshop on the subject when I received the call; ironically, my friend Jill Waterman, whose own night photography book had just been published, was a guest at the workshop with me. Jill had freshly printed copies of her book with her, and I was eager to recommend it to my students. Along with Andrew Sanderson's earlier film-based night photography book,



Steve's Rock, Olmsted Point, Yosemite National Park, CA, 1991

This is the original image of the boulder in Yosemite that is known to a generation of night photographers as Steve's Rock. Steve Harper shared his passion for night photography with hundreds of students during his many years teaching in San Francisco from the late 1970s to the early 1990s. Had I not made the fateful decision to move across country to study with him shortly before he retired, this book may never have been written. Thank you Steve.

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Jill's was one of the few books on the subject to embrace night photography for its own unique characteristics and not simply to teach people how to shoot fireworks and ferris wheels at the county fair. Jill had the misfortune of publishing just at the time when digital technology had advanced to the point where night images taken with digital cameras were as good or better than those shot on film. Because of the long production time required to write, edit, design, and print a book of this nature, she had been working on the book while digital cameras were still struggling to cope with the extreme demands of night photography, and film shooters still made up a large percentage of night photographers. This, combined with the fact that Jill was (and still is) primarily a film photographer, made for a book that lacked much of the technical information on digital night photography that people were craving.

Still, Night and Low-Light Photography: Techniques for Commercial and Artistic Success is an inspiring book. My favorite thing about it is that Jill took a collaborative, community-based approach to writing it. Night photographers have always banded together to share images and experiences. Perhaps in part because no one else understood our passions and obsessions—especially security and law enforcement personnel—and also because of the many common experiences shared by night photographers everywhere, a collaborative project made perfect sense. Jill included the writing and images of many different photographers, all with different interests and points of view. Rather than producing a book with a single perspective, Jill presented the collective experience of some of the best night photographers of the time in one publication.

On the other hand, I was fortunate that my first book was published at just the right moment: digital technology had finally caught up with film, and interest in the subject was growing exponentially. Still, I never imagined that the book would be as successful as it has been. The first edition of this book is now outdated, having been written in 2009. Technology has continued to advance at a staggering pace; cameras, lenses, postprocessing software, and even flashlights and batteries have evolved dramatically.

Probably the biggest technological change is the ever-increasing quality of images shot at high ISO. When the first edition was written, I advised that photographers should stick to their camera's native ISO whenever possible for optimal image quality. Many current DSLRs are capable of producing high-quality images at 3200, 6400, and even 12,800 ISO, and the possibilities offered by this new technology are practically limitless. We can now photograph a moonless landscape and night sky with exposures as short as 10 seconds, rendering the stars as points of light rather than the star trails that come with long exposures shot at 100 or 200 ISO.

One other recent advance worth mentioning is the introduction of smaller mirrorless and other compact digital cameras that are capable of excellent image quality even under the demanding

conditions of night photography. None of these cameras can rival the image quality of a full frame DSLR, but not everyone needs to have that level of quality, and these smaller, more affordable cameras help to make the exciting world of night photography and light painting accessible to an ever-widening audience. An overview of these new cameras, their advantages, and their limitations is included in the equipment chapter.

I chose the same approach as Jill when writing the first edition of this book, and invited several colleagues with specific knowledge and insights to contribute to the project, and I believe that *Night Photography: Finding Your Way In The Dark* was a better book for it. This new edition also contains contributions from several guest photographers and writers who each specialize in a specific aspect of night photography.

It is with some regret that I omit the chapter on film-based night photography from the first edition, but as there are fewer and fewer films, papers, and photo labs to work with each year, as well as fewer photographers using them, it only makes sense to remove it from this revised edition of *Finding Your Way in the Dark*. I photographed at night with black and white film for over 25 years, and although I rarely venture out with my view camera anymore, at times I do miss the darkroom and the craft of working with film. If you are interested in shooting film at night, I recommend Jill Waterman's and Andrew Sanderson's books, or the first edition of this book, all of which cover the subject in depth.

The first edition of *Finding Your Way in the Dark* opened with a chapter on the history of night photography, which was, if truth be told, my favorite part of the book. Steve Harper always began his classes with a historical overview, giving his students a glimpse into the challenges that earlier generations of night photographers had overcome. I've always remembered those lessons, and usually start my own workshops and classes the same way. This edition begins with a history of light painting, starting with some of the earliest uses of added light in photography.

When Tim Baskerville and I began teaching night photography workshops together at Rayko Photo Center in San Francisco during the late 1990s, we were practically the only ones in the US routinely teaching the subject. We are both alumni of Steve Harper, who developed and taught the first college-level class on night photography at the Academy of Art in San Francisco in the 1980s, and have been proud to take the torch and carry it for him ever since. These days (perhaps I should say these nights), there are workshops with very specific themes, such as light painting in automotive junkyards, cemeteries, or ghost towns, and night photography in urban environments with artificial light, or in national parks using long exposures and star trails or short exposures using high ISOs to capture images of the Milky Way. With these increases in accessibility and popularity of night photography, there is an ever-expanding range of available

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resources, and I am happy to include a listing of classes, workshops, books, eBooks, and online resources for those interested in additional information or inspiration.

Night Photography and Light Painting: Finding Your Way In The Dark was written for aspiring amateur photographers and artists interested in exploring the creative possibilities of night photography and light painting. It is assumed that the reader will have at least a basic understanding of photographic principles such as manual exposure mode and depth of field. At least rudimentary familiarity with RAW file image development will be invaluable in understanding the contents of the text. My own postprocessing workflow is straightforward and Lightroom-centric, and I avoid using Photoshop except in cases where Lightroom can't do the job, such as image stacking for long star trails or expanded depth of field, or for exposure blending using layers. I never presume that my way is the only way or the best way; I just do and teach what works for me. I encourage you to explore any and all the techniques you can, both in the field and behind the computer.

This book is suited for advanced beginners through professional photographers, but those with very limited photographic experience may be better served by my friend and fellow night photographer Gabriel Biderman's *Night Photography: From Snapshots to Great Shots.* If you have an eagerness to explore the night and the many artistic possibilities it offers, and have a good understanding of basic photography principles, then *Digital Night Photography and Light Painting* is for you. As Gabe likes to say, *carpe noctem*—seize the night!

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