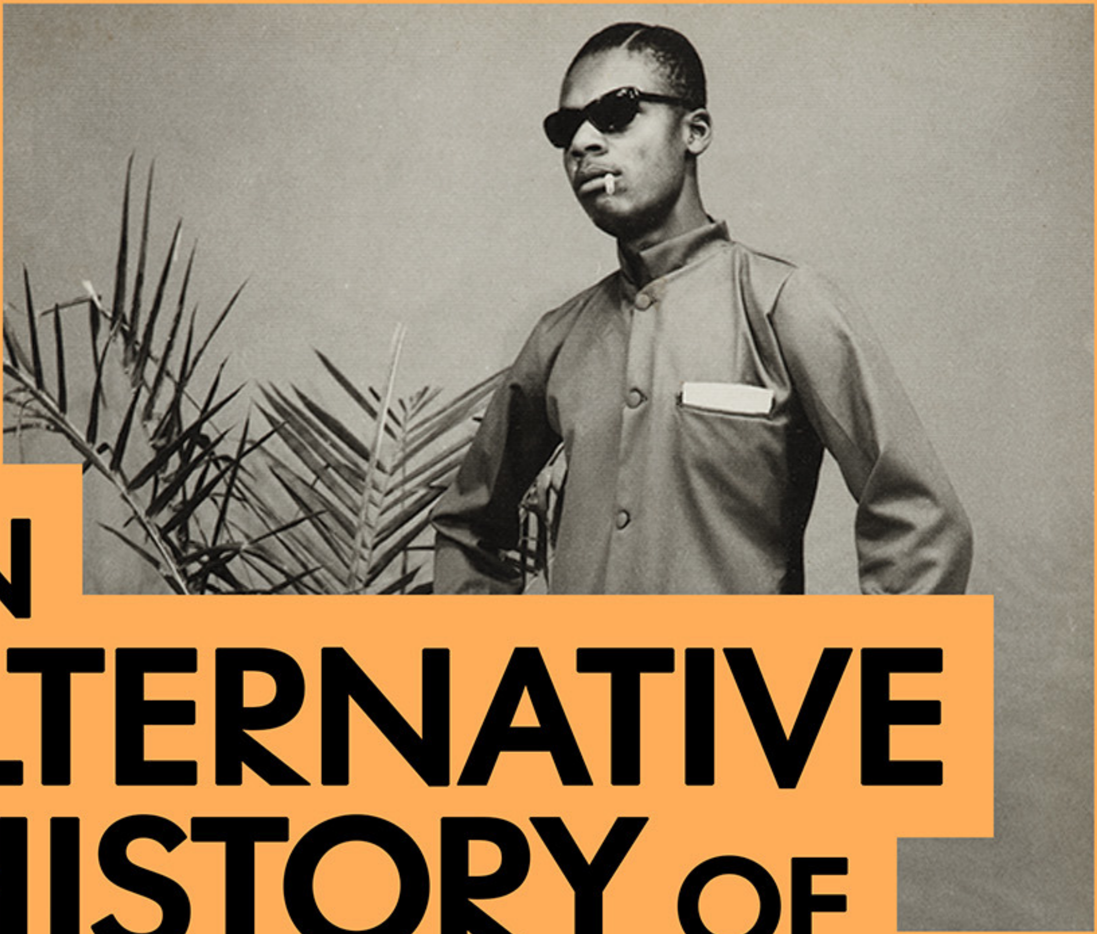
PHILLIP PRODGER



AN ALTERNATIVE HISTORY OF PHOTOGRAPHY

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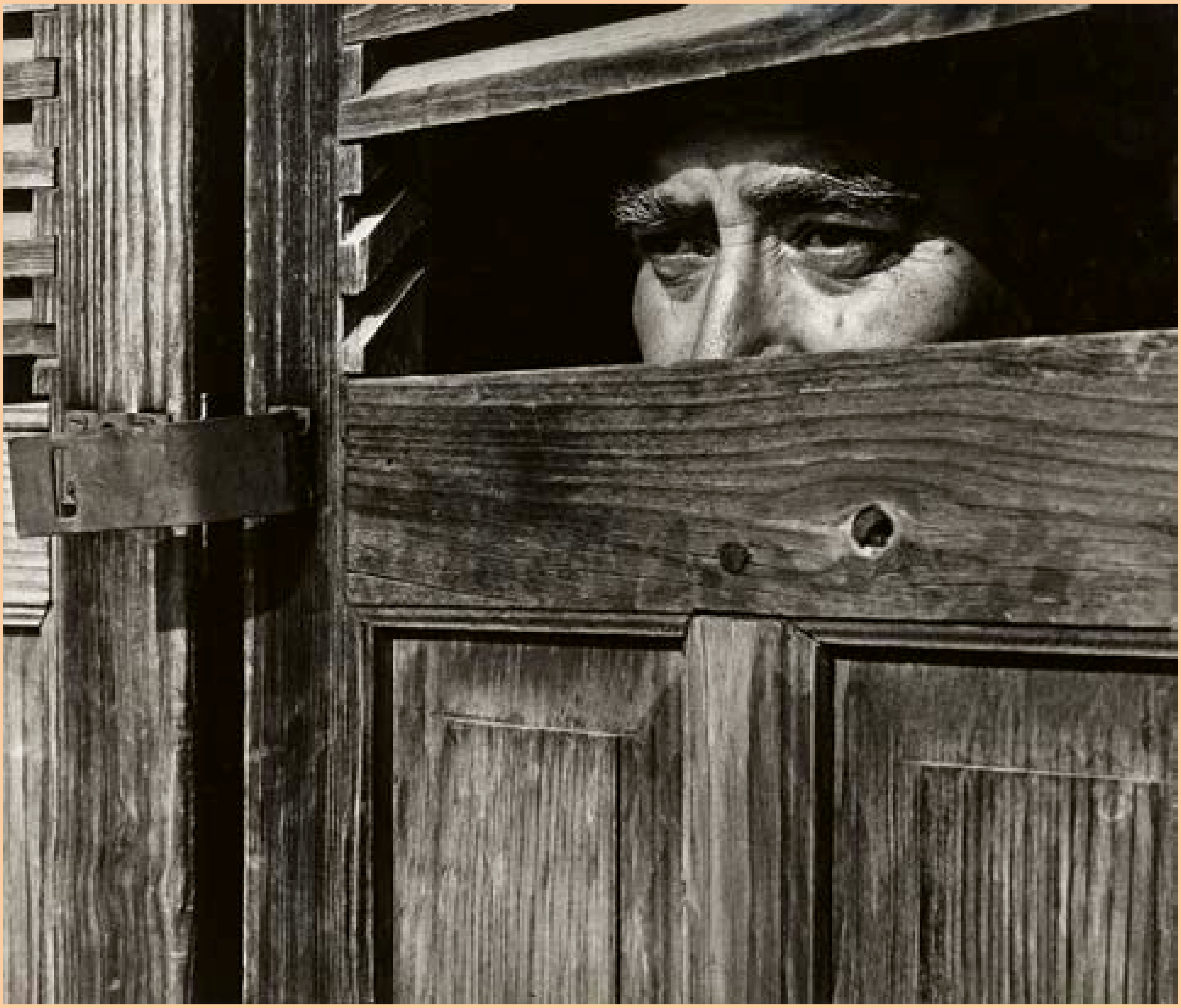

Nacho López, Mexico, 1923–1986
Looking, ca. 1955
Gelatin silver print

AN ALTERNATIVE HISTORY OF PHOTOGRAPHY

PHILLIP PRODGER
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All works courtesy Solander Collection

[SOLANDER]

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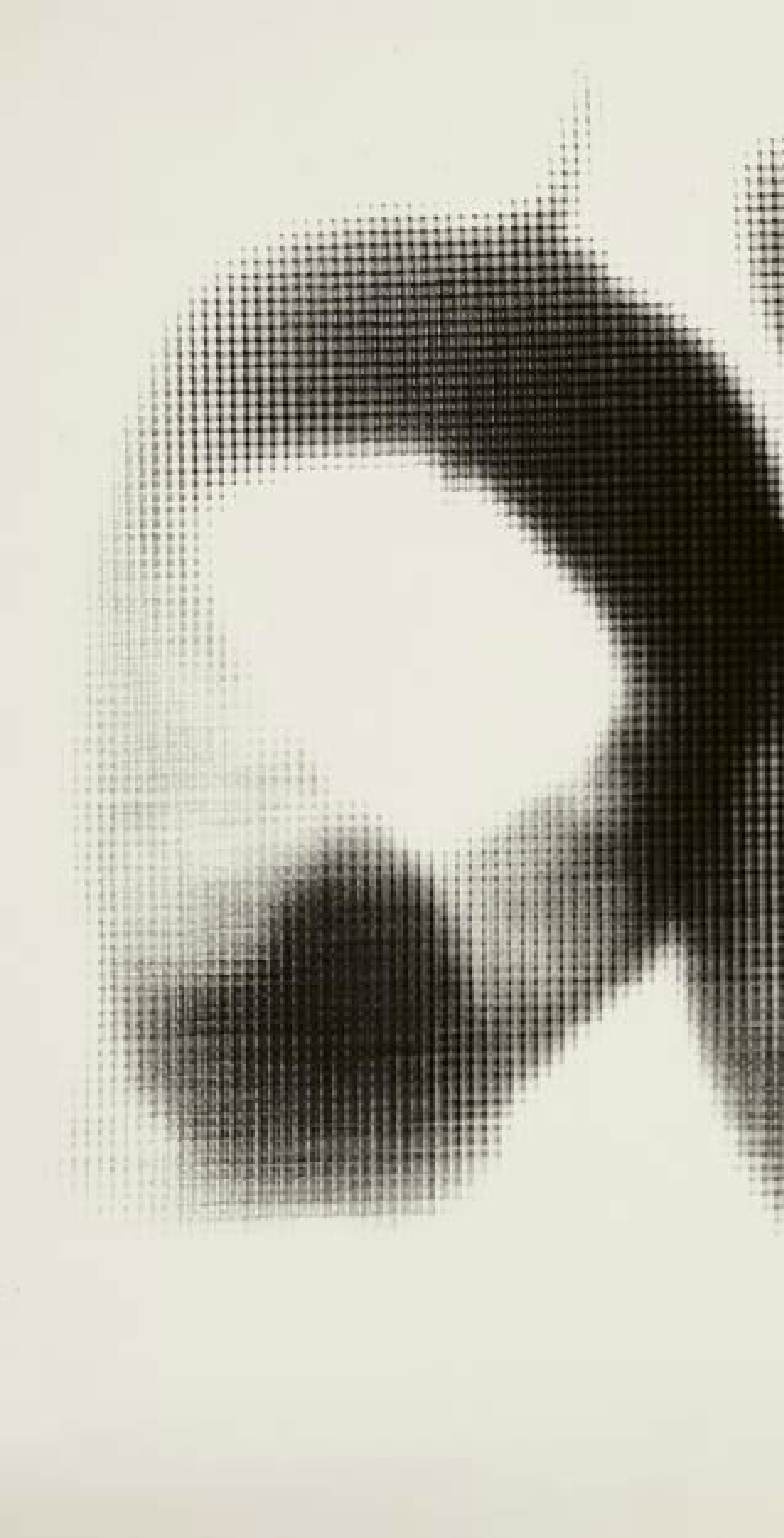
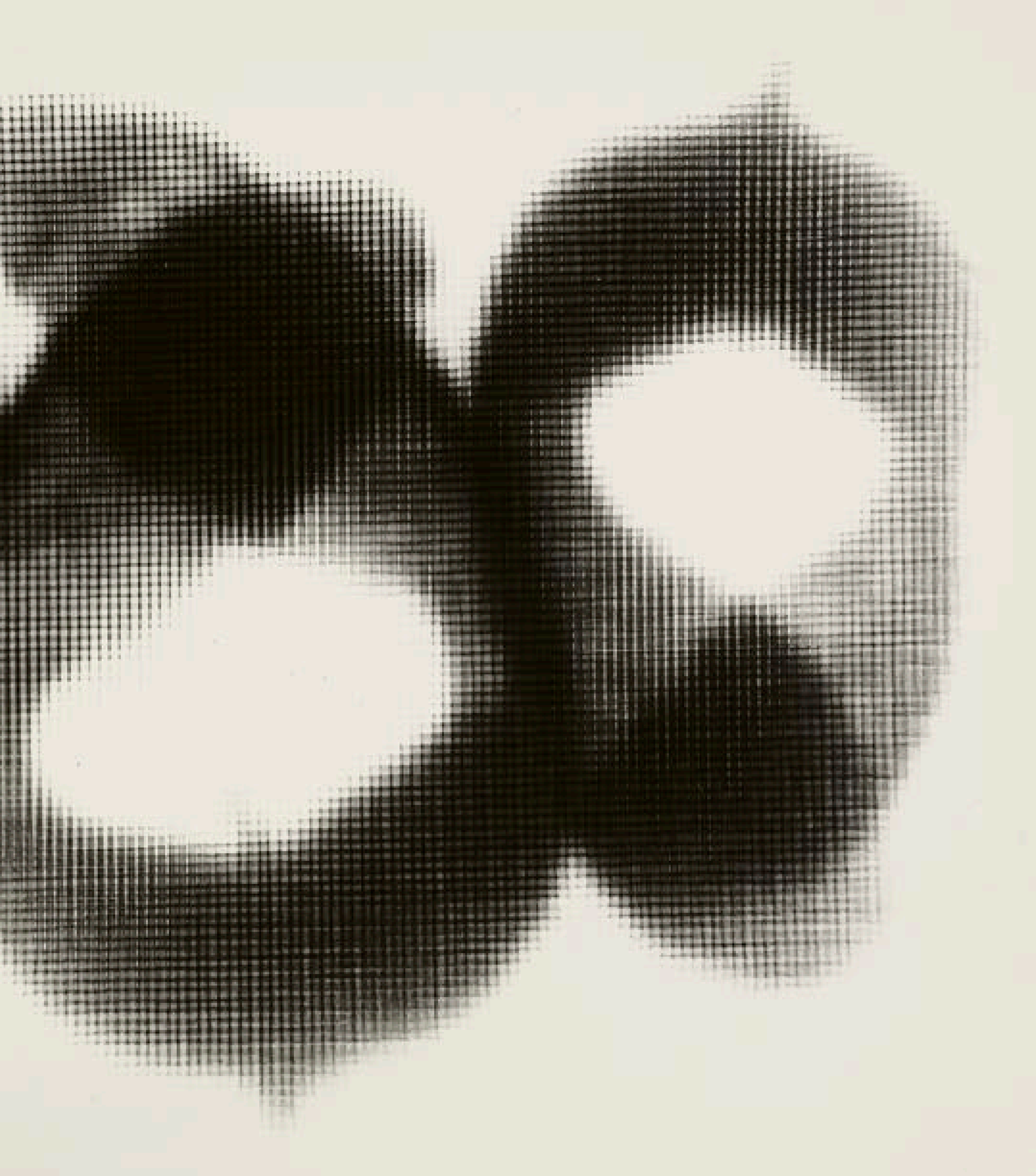


Běla Kolářová, Czechoslovakia,
1923–2010
Cranesbill, 1964
Gelatin silver print



PREFACE

Phillip Prodger

Years ago, a group of sponsors approached me to write a history of Korean photography. They had seen curator Anne Tucker's landmark book, *The History of Japanese Photography* (2003), and wanted to commission something equally exciting to represent their country. Although I neither speak nor read Korean, and have never studied Korean photography seriously, the idea was to provide me a research assistant and a generous travel budget, which would allow me to dig through libraries and archives and meet with artists, scholars, and collectors, to gather the facts to enable me to write a book.

On one level, it was an outrageous idea—why bring me in, when there were already any number of scholars in Korea more qualified to do the job? Yet there was some logic to it, since at the time I was Curator of Photography at the Peabody Essex Museum, which holds one of the largest and best collections of Asian photography in the world, including a small but important Korean section. Opportunities to write a history for an entire nation don't arise every day, particularly one as important and dynamic as Korea, so I began to think seriously about the project and how to go about it.

Leaving aside the very real obstacles of being an outsider to Korean history and culture, my own language limitations, and the geographical distances involved, it seemed to me there were still serious problems with the plan. Many of these plague any history, including the one told by this book. Real histories are as complicated as the people who make them. How could anyone, even a specialist, hope to capture something as nuanced, complex, and irregular as the history of photography in Korea—an ancient nation with diverse traditions in art and literature, blending unique indigenous practices with those adapted from its near neighbors, China and Japan? A country with a legacy of occupation, brutally colonized in the twentieth century and so riven by war and social conflict that it was cut in two? In the end I declined the offer, but it caused me to reflect on how histories are inscribed.

Why are such histories written anyway, and who gets to decide what's included? Knowledge and understanding are noble causes in themselves, as is communication—celebrating achievement, sharing cultural heritage, fostering creativity, and finding common ground among peoples. We might add to this the recognition of past wrongs, and a need to heal and learn from mistakes. However, there are also other, less clear-cut reasons. The sponsors of the Korean project, for example, were motivated by national pride and a desire to demonstrate the excellence of Korean photography. Pride is not a bad thing on its own, of course, but there is a danger of shaping history to fit a political agenda. Consciously or not, all published histories contain an element of bias. At their worst, they can even perpetuate sexist, racist, and post-colonial prejudice.

At the same time, the relationship between photographic history and the marketplace is complicated and intractable. From an economic perspective, what is "in" accepted histories can have a profound effect on what collectors admire and are willing to purchase. The converse is also true. Works that sell for princely figures may land in the histories for no other reason than they command high prices.

Museums play a significant part in this exchange. Their role is inherently suspect, because the growth and spread of museums is deeply entangled with the aims and assumptions of European and American colonialism, even now. In spite of this, museums still act as cultural kingmakers, and the willingness to acquire or, in museum terms, "accession" a work is perceived as a tacit endorsement of that work's value. The higher the status of the museum, the stronger that endorsement is seen to be.

Ironically, even the wealthiest museums depend on direct gifts of art to build their holdings and have limited funding to buy works themselves. One unintended consequence of this situation is that while museums determine whether or not to accept the gifts they are offered, most arrive pre-selected by the system of commercial galleries, dealers, and auction houses that makes up the art economy. Moreover, the decision to accept or decline a work is deeply subjective, and may be influenced by any number of factors not directly related to the quality of the work in question, including the promise of future gifts or donations.

In the 2010s, my colleague Graham Howe and I began to discuss these issues, with an eye to developing more informed exhibitions. The CEO of the art services and exhibitions company Curatorial, Inc. in Pasadena, California, Graham started his career as the founding director of the Australian Centre for Photography. Having grown up partly in Singapore, Graham has a long-standing interest in international artists, and spent much of his career championing underappreciated figures. In particular, he has dedicated himself to preserving and sharing the estate of Emil Otto (E. O.) Hoppé (p. 146) arguably the most famous portrait photographer in the world in the 1920s, but who fell largely out of favor after World War II.

What if, Graham and I wondered, we could tell a history that foregrounded under-recognized figures? One that capitalized on the incredible research performed in recent decades by scholars around the world, featuring women, people of color, and the rich variety of underappreciated traditions worldwide? In addition, could we look anew at already famous artists, engaging not just their most famous bodies of work but other, equally powerful projects? Despite the strides many museums have made in these areas in recent years, such a history would be impossible to tell using any one existing collection. So we decided to create a new one—Solander—and began to collect according to these principles.

This book is the result of that effort. The Solander Collection (named after the Solander box—the cloth-covered black box that museums use to store flat works like photographs) is not comprehensive, and the selection reproduced in this book is not meant to be definitive. Moreover, the stories told by these pictures end around 1980. Close readers will notice many great and wonderful photographers missing, from Eugène Atget to Henri Cartier-Bresson, or from Anna Atkins to Cindy Sherman. Their absence does not mean we consider these artists unimportant, only that we felt their contributions were admirably addressed in other publications, and we did not find examples that we could acquire that met our standards for inclusion. For this reason, ironically, there are also no Korean photographs in this book.

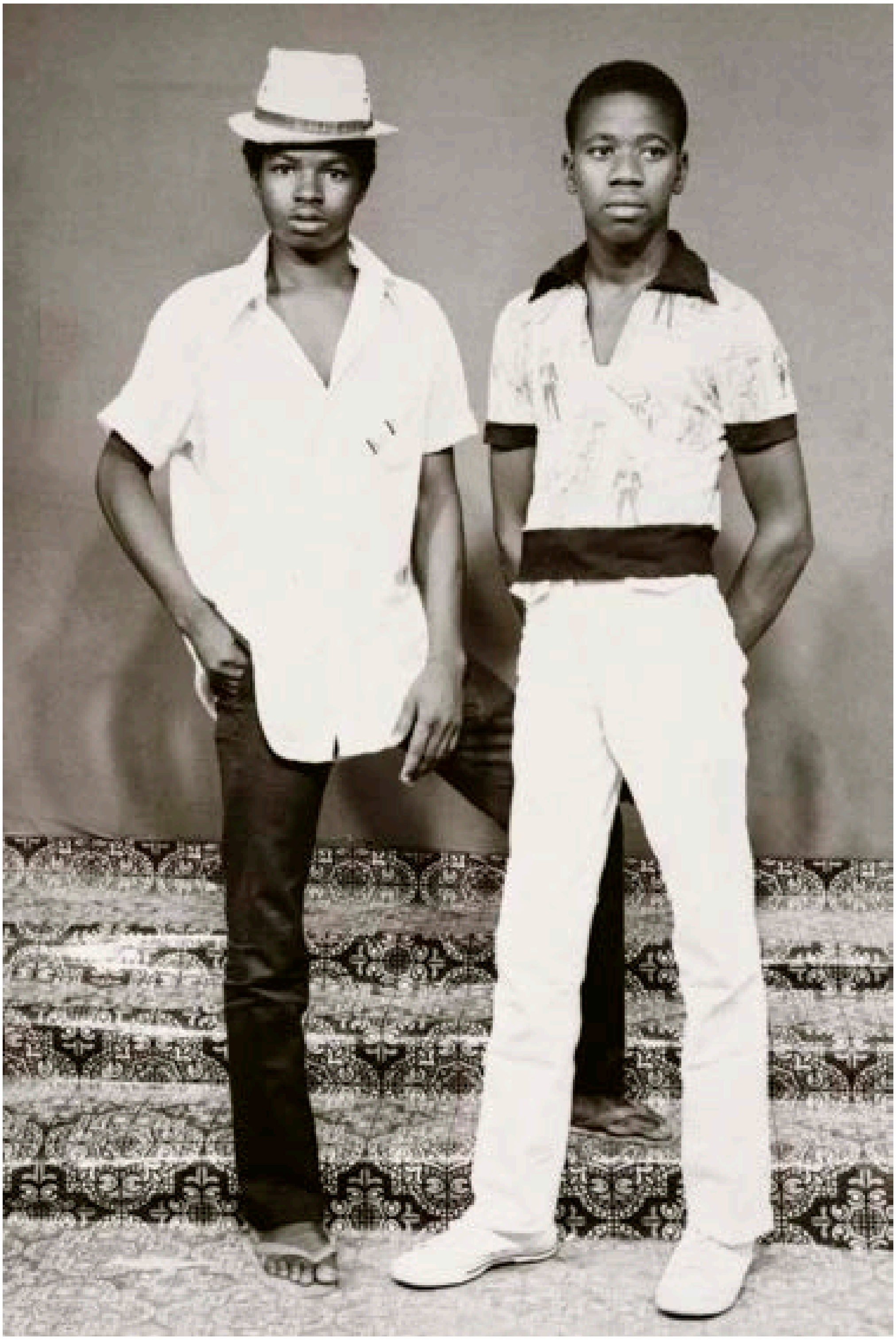
With few exceptions, all of the photographs in the Solander Collection are vintage, meaning they were made within a few years of the negative, where one was used. And all are in the best condition in terms of printing and preservation. We sought photographs with psychological charge—that get under the skin, and have the capacity to make our hearts skip a beat. We also put a special emphasis on rare, lesser-known works and conceptual "firsts," in accordance with our plan to rethink what a photo history might look like in the twenty-first century. In short, we looked for pictures that told stories and have soul.

Solander is a teaching collection, shared through exhibitions and publications like this one. It was founded on principles of diversity, inclusion, and the democracy of images. Through it, we aim to make photography more inclusive and welcoming. It is not intended to revolutionize the field, but to join determinedly in its evolution, facilitating discussion and debate.

All histories, photographic and otherwise, reflect the perspectives of the people who make them. Art histories in particular are built according to personal taste, intuition, and standards of connoisseurship. The historian arranges their choices according to a framework or agenda in order to make certain points. The Solander Collection is no different. What is unique is our commitment to acknowledge omission and prejudice head on—to explore the rise and fall of reputation and fashion, and embrace interesting historical cul-de-sacs.

We have been aided in this endeavor by an extraordinary team of scholars worldwide, a number of whom provided commentaries on included works, as indicated. Like the pictures themselves, these writers represent a diversity of philosophies, specialisms, and perspectives. Each was given free rein to interpret the works as they wished.

My mentor, the photographer and photo historian Joel Leivick, used to begin his Introduction to the History of Photography lectures at Stanford University by saying "there is no such thing as the history of photography." By this he meant that the best one could hope for with something so ubiquitous, varied, and multifaceted as photography is to blaze a trail through the enormous volume of pictures that still exist, and even some that were left behind. He would go on to describe possible "alternative" histories based, for example, on the representation of industrial machinery, of dime-store portraiture, or human conflict. In retrospect, it seems to me this was the best introduction I could have hoped for—a caution not to get too attached to any one way of viewing history. And to remember there are an infinite number of answers to the seemingly simple question: "What is the history of photography?"



Sanlé Sory, Burkina Faso
(formerly Upper Volta), b. 1943
Untitled (Two Men), 1970s
Gelatin silver print

A MORE PERFECT VISION: RETHINKING THE HISTORY OF PHOTOGRAPHY

Phillip Prodger

Revolutionary as Gutenberg's printing press and common as a nail, photography is the most dynamic, accessible, and inclusive medium that has ever existed. In many ways, the history of photography is the history of us all over the last two centuries, independent of any single tradition or culture. Yet until recently, published histories have not been equitable, disproportionately celebrating the achievements of European and American white men. Why does this rich and multifaceted history, as it is so often told, not more fully reflect the diversity of peoples engaged in making and consuming photographs? The answer lies in the preferences, prejudices, and inclinations of those who wrote them.

In the late 1970s, the scholar Helmut Gernsheim, author of landmark books including *New Photo Vision* (1942) and *History of Photography from the Earliest Use of the Camera Obscura in the Eleventh Century up to 1914* (1955),[1] was asked if there was anything left to discover in the field. He replied with confidence:

> I don't think there are any major photographers left to be discovered. The technical evolution has also been researched extensively, but there is much scope for critical analysis, old photographs seen under new aspects, national histories of the Scandinavian and East European countries, and much better monographs than we have had of late. Too many writers with nothing to say compile picture books which do not convey any meaning, either.[2]

Gernsheim was a gifted scholar and a passionate advocate for photography, who with his wife Alison spent countless hours engaged in primary research—tracking down old journals, rummaging through picture libraries and archives, and visiting photographers' estates. Yet his view of photographic history was ultimately narrow in scope. He was convinced there were no more "major" photographers left to discover because he had visited just about every major resource in Britain, Germany, and elsewhere in Europe, and had turned over seemingly every leaf. The circumstances of the Cold War made Eastern European collections hard to access, and he was aware he had missed out on some interesting Nordic photographers, but as far as he was concerned these were relatively minor concerns. But what of Africa? Asia? South America? And what is a "major" photographer, anyway?

Some fifty years later, we may look at photography with fresh eyes. Gernsheim's mistake, if we may call it that, was to think of photography as a great white whale, to be tracked, harpooned, and landed. More properly, it is a heaving mass of wriggling eels, writhing this way and that and looping back on itself—a group of organisms so incomprehensibly complicated and intractable, and involving so many variables, as to defy mathematical modeling. Understanding this makes photographic history harder to wrap our heads around, but it is worth the effort, since the payoff is a history that is truer, more exciting, and rife with possibility. In reality, photography delivers more fully on its democratic promise than early scholars ever imagined.

Gernsheim's belief in "major" photographers suggests that the field is led from the front. This implies the existence of certain pivotal makers who set the example that others followed. This notion is deeply entwined with the notion of a photographic canon—a pantheon of greats who make up its key practitioners. Yet photography's grassroots character is one of the things that makes it so special. Without question, there have been influential figures and groups, as well as momentous pictures, famous books and exhibitions, grand declarations and manifestos. However, it is striking how many successful photographers were self-taught and unaffiliated, developing their practice in isolation, out of the limelight, sometimes with scant knowledge of other photographers. Seen this way, the canon is little more than a thin crust perched atop a bubbling cauldron of creative expression.

The canon is problematic for other reasons too. In recent decades, scholars have brought to light hundreds of artists who until now been left out of established histories. A disproportionate number of these are women, people of color, Indigenous makers, and peoples from historically marginalized communities, including LGBTQ+ artists.

Since photography came of age during a peak of European expansionism, questions inevitably arise about its connection to the colonial enterprise. During the nineteenth century, for example, photography was regularly used to mediate encounters—for many Europeans and Americans it was the first and perhaps only way of getting to know peoples from faraway lands. This precipitated an outpouring of anthropological surveys conducted for ostensibly scientific reasons to convey to European and American audiences the "types" of people inhabiting various regions of the world, what they looked like, and how they lived. The irony of this endeavor is that photography is not an especially good tool for gathering this kind of information. It excels at rendering the precise details of a particular subject at a unique moment in time, whereas surveys were meant to broadly characterize entire populations. Leaving aside the dubious ethics of such sampling, photographic surveys generally failed to provide meaningful results, reducing proud peoples and cultures to a series of specific, intrinsically flawed examples, through no fault of the sitters.

As the product of deeply unequal relationships, nineteenth-century anthropological photographs frequently bear the mark of colonial exploitation, much as geological and industrial photographs sometimes reflect attempts at political and economic gain. However, not all such photographs can be easily discredited. There are many examples in which encounter was positive and constructive, notwithstanding the circumstances. Thomas Child, for instance, working in China in the 1870s, was the very definition of a colonial representative—a senior engineer who worked for the Chinese Maritime Service, established by the Treaty of Nanjing (1842) to control and regulate China's foreign trade. He lived in Beijing for nearly twenty years, and seems to have immediately fallen in love with the city. During his first year in China he wrote back to England to say he was taking three hours of Chinese language lessons every day, and he soon became fluent, immersing himself in local life. His photographs are among the first ever made of the city, and included portraits, architectural views, and street scenes. This alone would make them worthy of note, but they are further distinguished by their humane and sympathetic character. Child's hauntingly beautiful photographs of the ruins of Yuan Ming Yuan (known in English as the Old Summer Palace), for example, which was sacked and plundered by a punitive Anglo-French raid in 1860, have an elegiac quality that makes his grief over such barbaric actions clear.[3]

Child's photographs have only recently begun to receive the recognition they deserve. Although made by an English visitor, they are part of an important and robust tradition of photography in China led by native practitioners, all but absent from early histories. From studios in Hong Kong, Lai Fong (p. 86) became one of the most accomplished photographers of his day, not just in China, but arguably the world. His photographs were widely distributed both within China and abroad. Others such as Hong Kong- and Shanghai-based portraitist Liang Shitai, or Fuzhou-based landscape photographer Tung Hing, contributed to a distinct autochthonous tradition that is only now beginning to be explored by Chinese and international scholars. Unfortunately, such blind spots are not unusual. Great photographic traditions in Sub-Saharan Africa, Persia, Central and Southeast Asia, and Latin America are only now beginning to receive the attention they deserve. There are undoubtedly more left to discover.

How did such conspicuous omissions arise? The answer lies, in part, in some of the first photographic histories, which prioritized technical advances over creative expression. For example, one of the earliest, Jerome Harrison's *History of Photography: A Practical Guide* (1888), begins promisingly with a thoughtful discussion of photography's rival patriarchs: Louis Daguerre and Nicéphore Niépce in France, as well as Thomas Wedgwood and William Henry Fox Talbot in England (p. 26).[4] However, all the stars of Harrison's history were technical innovators—Frederick Scott Archer and his collodion process, for example, or Edmond Becquerel's experiments with color. Drawn largely from accounts in trade journals, especially the *British Journal of Photography*, Harrison's history may make for dry reading to a lay reader, but it was a balm for the professional and serious amateur photographers who were its primary audience. Even now, Harrison's history serves as a reasonable primer on the development of photographic technology in Europe.

Published two years later, John Werge's *The Evolution of Photography: With a Chronological Record* (1890) altered the formula slightly. Described as a personal reminiscence, Werge's history was more conversational in tone, tempting the reader with an account of the growth of "so beautiful and fascinating an art-science,"[5] but delivered something closer to Harrison's technical account. Werge playfully divided his history into chapters including "The Dark Ages," "Collodion Triumphant," and "Gelatine Successful." However, Werge made little mention of photography as a form of creative expression, and scarcely any photographers were discussed at all,

Unknown, USA
Camera and Blossoms, April 1913
Gelatin silver postcard

unless they were responsible for a new technique, device, or chemical recipe.

In addition to their emphasis on the technical, these founding texts share three unmistakable qualities. Each focuses entirely on activity in Europe, especially Britain, France, and Germany. They also feature only the accomplishments of men. And they exclude makers and artists—those actively working on the front line of photographic picture making—unless they were responsible for technical innovations. As much as we may value these early texts for the technical history they contain, and excuse their shortcomings as products of their time, they created a deficit from the very outset that was difficult to make up.

By failing to separate technical advances from creative expression, early writers perpetuated myths that persist to the present. Foregrounding the tools with which photographs were created—camera and lens, paper, film, and chemistry—made heroes out of inventors at the cost of those who used their inventions to best effect. This line of reasoning relegates the agency of the photographer to a secondary role, implying that the act of producing a photograph is wholly mechanical—expose the picture at the right time and process it correctly, and great results are sure to follow. It is hard to imagine a history of painting centered wholly on the inventors of various oil pigments, or the technical advances that led to the development of acrylic paint. Nor would one be likely to analyze the works of Picasso, Leonardo da Vinci, or Rembrandt exclusively through the prism of the brushes, canvases, and wood panels they used. Yet this was precisely the approach the first photo historians took. It was as though the creative decisions made by the photographer were inconsequential—photographs emerged not from the mind of the maker, but from the built-in qualities of the materials they used.

Ironically, the first history to break this mold decisively was written by a chemist, the Viennese technician and historian Josef Maria Eder, whose *Geschichte der Photographie* (*History of Photography*) appeared in various revised and expanded forms starting in 1891.[6] Widely distributed in German and published in English in 1945, it would influence all subsequent histories.

The first 250 pages or so of Eder's epic 860-page history paralleled and expanded on the work of Harrison, Werge, and others, detailing photography's prehistory from Aristotle to Niépce, Daguerre, Wedgwood, and Talbot. Eder's retelling of the story of photography's invention differed somewhat from its predecessors, with several early figures receiving renewed appreciation, such as the chemist Humphry Davy, and the extraordinary polymath Sir John Herschel (p. 24). Yet it differed in other important ways too. Crucially, while retaining an emphasis on technical advances, Eder's history introduced a new element—the contributions of photographers not directly tied to inventions or improvements.[7]

Eder not only explained the progress of photographic technology, he gave examples of specific pictures and notable photographers who worked with new materials as they arose.[8] He also attempted to identify photographic "firsts"—such as the earliest nudes, which Eder cautiously admired:

> The first attempts to portray the human body by daguerreotype as an aid in the fine arts or for attractive subjects for sale were made in the forties in the last century in Paris. The earliest daguerreotypes of this class which I have seen date from 1844–1849 and represent the most technically perfect daguerreotypes which have been preserved from that time. They bear only the name and age of the model and were undoubtedly made for erotic purposes, for the collection contains, among others, pictures of two persons which could not be reproduced.[9]

Although noteworthy photographers appear throughout Eder's text, it was not until chapter 43 that the author tackled the development of photography as an art head on, identifying the 1840s Scottish duo of David Octavius Hill and Robert Adamson as the medium's first artist-practitioners.[10] He went on to single out Henry Peach Robinson (pp. 62–63) as "the founder of the English School in pictorial photography,"[11] although in retrospect that title might more properly be given to his contemporary, Roger Fenton (pp. 32, 87), whom Eder noted only as an early war photographer for the pictures he made in Crimea (comparing him to the American, Mathew Brady).[12] Eder went on to cite other important photographers, including John Jabez Edwin Mayall, Oscar Rejlander (pp. 60, 64), and Peter Henry Emerson. Julia Margaret Cameron, too, was finally acknowledged. Eder explained that while "not at all sharp," her pictures were of "real artistic merit and were even appreciated, but it was not until many years later that they received the general recognition and praise they deserved."[13] Incomplete as Eder's attempts to tackle creative photography may have been, remarks such as these marked a turning point in the way photographic histories were conceived. The photographer had arrived in photographic history.

This brief overview of three early photographic histories is not meant to oversimplify or minimize the significance of other early histories, or nineteenth-century biographies, reminiscences, and monographs. Period journals contain many reviews of artists' books and exhibitions, as well as detailed obituaries of influential makers. Nevertheless, their main characteristics are remarkably consistent. Early photo histories were largely male-dominated, and the question of invention and technological progress took center stage in photographic discourse from the start. Since much of this technological activity took place in Europe and the United States, the history has also been skewed toward scientific centers from the beginning.

This explains Helmut Gernsheim's claim that by the 1970s all the main players in photographic history were largely known. To him, and others working previously, photography had emerged from a technological hub in Europe, specifically Britain, France, and Germany, and to a lesser extent the United States. As a result, the great photographers naturally came from these capitals, since they were the places where experimentation was most active, and equipment the most abundant and up to date. European photographic societies and salons became platforms for the display and exchange of pictures; later, photographically illustrated books and magazines, organized out of these same centers, enabled pictures to freely spread. It seemed natural to Gernsheim to organize his researches accordingly. In Gernsheim's *History*, for example, the formative years of daguerreotypes (photographic images exposed directly on silver-coated copper plates) are divided into just four sections, to the exclusion of all others: France, America, Great Britain, and German-speaking countries.

Lee Lim, Singapore, 1931–1989
Burden of Livelihood, ca. 1955
Gelatin silver print

It may seem churlish to focus on what Gernsheim's history omits, since it remains an impressive achievement despite its imperfections, brimming with information and detail, and still useful to students and researchers nearly seventy years after its publication. Moreover, Gernsheim separately wrote two of the first critical biographies of Victorian photographers, *Julia Margaret Cameron* (1948) and *Lewis Carroll* (1949), and would go on to write the influential *Creative Photography and Aesthetic Trends* (1962). Yet a contemporary reader cannot help but notice the neglect not just of Scandinavian and Eastern European traditions, as Gernsheim himself admitted, but of non-European traditions worldwide.

This approach was re-evaluated when the great scholar and curator of New York's Museum of Modern Art (MoMA), Beaumont Newhall, published the exhibition catalogue *Photography, 1839–1937* (1937). Arguably the most successful book of its kind ever written, it went through five editions over the course of forty-five years, including a comprehensively revised edition of 1949, when it was renamed *History of Photography*. It has been in print ever since, and remains, even now, a standard textbook.

The exhibition that Newhall's book accompanied consisted almost entirely of loans from artists, estates, and collecting institutions, since at the time MoMA's own collection was thin. Consequently it was not, at least in its first iteration, a definitive history, because Newhall was not able to borrow everything he wanted, and could only work with the pictures he was able to obtain. In the preface, he noted tartly:

> An exhibition covering so broad a field must necessarily be limited. Certain omissions have been deliberate. Book illustration and photo-mechanical reproductive processes demand an exhibition of themselves. The development of photo-montage (the assembling of photographs to create a new picture) and layout, while dependent on photography, have an independent esthetic character. Certain omissions have been due to lack of material. Few collectors have turned their attention to photography for its own sake, and it is hoped that the exhibition will bring to light many photographs whose existence was unknown to the Director of the Exhibition. At the request of the photographer the later work of Alfred Stieglitz has not been included.[14]

Newhall's *History* was born in modernism's heyday. MoMA itself was only eight years old at the time and still actively seeking to assert its relevance as a repository of, and advocate for, modern art. Photography's role within that sphere was still unsettled.

Photography, 1839–1937 joined a number of other historical surveys produced by MoMA during the museum's first decade, including several written by legendary founding director Alfred H. Barr Jr., such as his *Brief Survey of Modern Painting* (1934). Holger Cahill, former director of the Works Progress Administration's Federal Art Project during the New Deal, also contributed titles including *American Folk Art* (1932), *American Painting and Sculpture: 1862–1932* (1932), and *American Sources of Modern Art* (1933).

Newhall's book was written in this same spirit. Serving as introduction and standard reference, it made the case for photography's artistic legitimacy. It had an agenda—to obtain credibility for photography as a means of creative expression. As Newhall explained:

> Even at the risk of falling into philosophical quagmires, the question "is photography art?" cannot be ignored.... Photography was brought into being by a desire to make pictures. Without exception, those men who were instrumental in making it practical were impelled by artistic urge. Wedgwood was the son of the great potter; Niépce had been experimenting with lithography; Daguerre painted scenery and illusionistic panoramas; Fox Talbot wished to sketch but could not.[15]

Turning the tables on earlier histories, Newhall focused on creative advances rather than technical ones. Acknowledging Eder's earlier history in his book, he damned it with faint praise: "The standard technical history of photography and the only book which covers the field completely. Unfortunately chauvinistic and exceptionally full of typographical errors."[16]

Newhall righted many of the wrongs of earlier histories. He newly emphasized the importance of women photographers, whose contributions to the modern art movement of the 1920s and 1930s in particular were widely acknowledged. And he made tentative gestures to practice in non-Western countries, noting the Scottish photographer John Thomson's work in China, for example, and Maxime Du Camp's forays into Egypt. In hindsight we may have asked him to go farther, since he focused primarily on European and American travel photographers, rather than native practitioners, perpetuating the old idea that photography emanated from a European and American hub. Newhall also fell short on racial and ethnic diversity, failing in later editions to mention even celebrated African American photographers such as Roy DeCarava and Gordon Parks. Still, it was revolutionary compared to previous accounts.

Captivating, accessibly written, and copiously illustrated, Newhall's *History of Photography* was a breath of fresh air, and it answered the call for a book grappling with the development of creative photography. However, its runaway success had unintended consequences. By the force of its authority, it had the effect of elevating certain figures to the forefront of photographic practice, establishing a cast of characters perceived as central to the history of the medium. Furthermore, it lifted certain individual images to iconic status, a situation which was to have profound consequences for future histories and the art marketplace.

Newhall's history includes numerous photographs that undoubtedly deserve pride of place in our appreciation for photographic history: William Henry Talbot's *The Open Door* (1843), for example, with an ivy-clad doorway cast in shadow, a lamp, and a broom leaning at the entrance; Hippolyte Bayard's *Self-Portrait as a Drowned Man* (1840), his moldering corpse evidence of the artist's feigned suicide; Peter Henry Emerson's *Gathering Water Lilies* (1886), the glass-like shimmer of a soft gray pool cradling a rowboat as a woman reaches out to pick flowers; or Alfred Stieglitz's mesmerizing *The Steerage* (1915), in which upper-class and cut-rate passengers are shown divided between two decks of a ship, the graphic shapes of the boat's fittings and the occupants' hats and clothes playing off each other like so many visual exclamation marks.

Reproduced in Newhall's history, these and other images became centers of attention for anyone wishing to engage with photographic history, and proof that photography was capable of feats of extraordinary artistic achievement. Nevertheless, their inclusion was something of a self-fulfilling prophecy. Newhall included them for their excellence; at the same time, by being included in such a high-profile publication, they bore the stamp of excellence. They became icons—staples of the photographic canon—establishing many of the "major" photographers and works to which Gernsheim referred in the 1970s.

The trouble is, photography does not by its nature lend itself to canonization, and the selections made by Newhall and others are not inevitable. It is easy to imagine a completely different and equally compelling history told through a different set of pictures. Indeed, had Newhall received different responses to his 1937 loan requests, the history as it is now known could have been indelibly changed. In addition, the old idea of a European/American-centered history continued to haunt even Newhall's relatively progressive book. Had he known the extent of developments in other countries, he might well have included them. Yet there was something more fundamental at play. Photography was not led from the front, as previous scholars, and even Newhall to some degree, had supposed. Previous art histories, of painting or sculpture, for example, were not the best models to follow. Photography was special—a decentralized and participatory medium.

Eveleen Myers, England,
1856–1937
Rebecca, ca. 1891
Photogravure

It is instructive to compare the photographs included in the 1937 show with those published in later editions of Newhall's history. A number of new pictures were added over time, but many were dropped entirely. Talbot's *Open Door*, for example, was not included in the first edition, nor Bayard's *Self-Portrait as a Drowned Man*. Conversely, artists including Laure Albin-Guillot, Ilse Bing, Anton Bruehl, Hugo Erfurth, François Kollar, Remie Lohse, and Paul Wolff, all of whom appeared in the first edition, were left out of later ones. Newhall was entitled to reappraise and restructure his selection; however, had these photographers been retained, the perception of their work, and their canonical status, might have been different. The writing of history is an act of interpretation. The history itself did not change, only Newhall's way of representing it.

Newhall built a thoughtful and convincing history, arguably the most compelling yet written. While it provides an excellent starting point for thinking about photography and its origins, it is not, and was never intended to be, a catalogue of photography's greatest hits. Photography does not work that way. It is an avalanche—thunderous, voluminous, and unpredictable—its twists and turns every bit as moving as its milestones. It is not a march of progress or a chain of neat relationships—A begat B, begat C, with Old Testament inevitability. In its immensity, volatility, intimacy, and spread, photography is fundamentally different from any other art. Its trajectory was not determined in salons, galleries, and museums.

In the twenty-first century it is time to pursue a more perfect vision—one that embraces diverse practices from Australia to Uzbekistan, and from China to Chile. The makers who thrived in these places were not outliers, since photography has never been controlled from a center, and there is no single course it has followed. The invention and refinement of photographic technology does owe a debt to early European and American practitioners, but this is not the end of the story. Photography is alive and free—created, received, and interpreted by ordinary people and professional alike, equally and with unique perspectives, around the world. That, more than any other quality, is what makes it so exciting.

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1 Helmut Gernsheim with Alison Gernsheim, *The History of Photography from the Earliest Use of the Camera Obscura in the Eleventh Century up to 1914* (Oxford, 1955).

2 Helmut Gernsheim, in Paul Hill and Thomas Joshua Cooper, eds., *Dialogue with Photography* (New York, 1979), p. 200

3 See Phillip Prodger, *Vision and Reflection: Photographs of China in the 19th Century from the Loewentheil Collection*, exh. cat. Tsinghua University Art Museum (Beijing, 2018).

4 William Jerome Harrison, *A History of Photography Written as a Practical Guide and an Introduction to Its Latest Developments* (Bradford, 1888). Note: the American edition is dated 1887, possibly in error.

5 John Werge, *The Evolution of Photography: With a Chronological Record of Discoveries, Inventions etc., Contributions to Photographic Literature, and Personal Reminiscences Extending over Forty Years* (London, 1890), p. 2.

6 The publication of Eder's *History of Photography* is complex and difficult to chronicle. 1891 is the first year the book appeared in German under that title.

7 Photography was such a hands-on process throughout much of the nineteenth century, "makers" and "innovators" are admittedly hard to separate, since photographers were constantly refining and developing new proprietary techniques, some of which they kept secret.

8 Curiously, the illustrations that appeared in earlier German editions were left out of the English edition, since they were considered of "only an ornamental value and are of little practical use to the student." Edward Epstean (translator), writing in Josef Maria Eder, *The History of Photography* (New York, 1945), p. xiii.

9 Eder, *The History of Photography*, p. 315.

10 Ibid., p. 349.

11 Ibid.

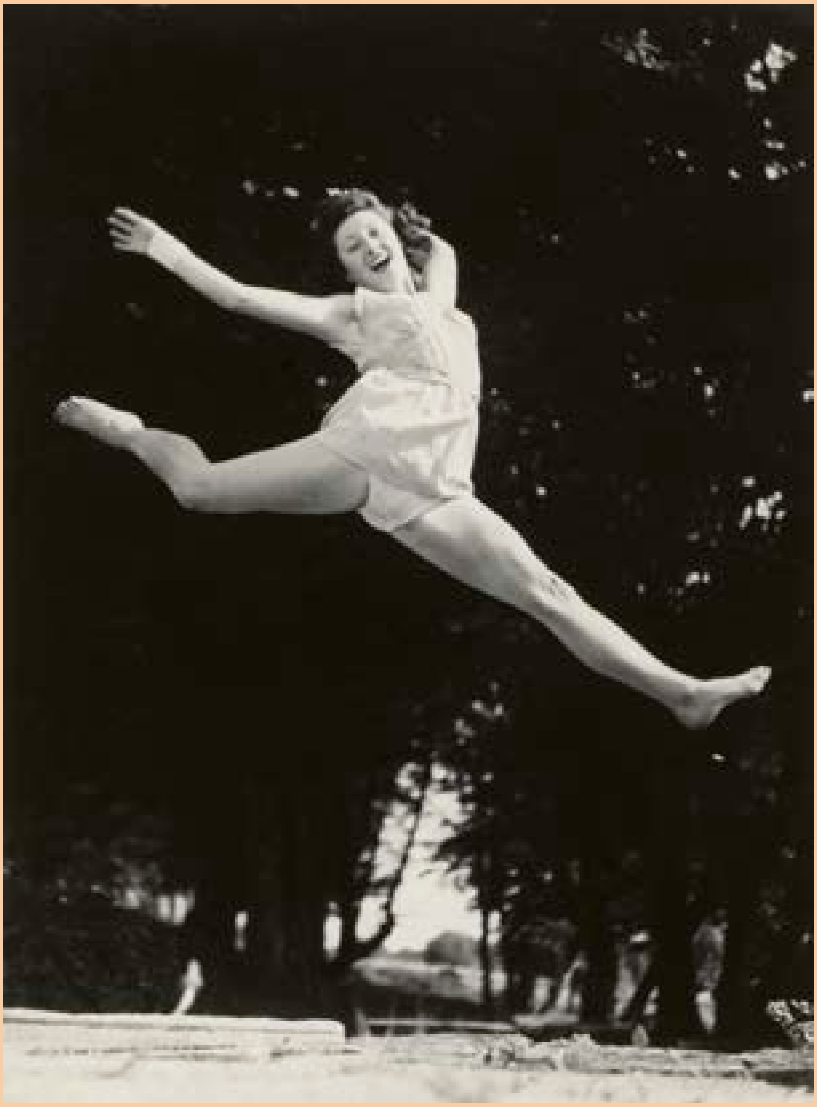
12 Ibid., p. 380.

13 Ibid., p. 350.

14 Beaumont Newhall, *Photography, 1839–1937*, exh. cat. The Museum of Modern Art (New York, 1937), p. 8.

15 Ibid., p. 40.

16 Ibid., p. 92.



Jacques-Henri Lartigue, France,
1894–1986
Huguette Sabouret at the Château des Essarts, Veyvialle, France, 1942
Gelatin silver print

ABOUT PROCESS

The immense variety of photographic materials may seem overwhelming, but it can be useful to know how a particular photograph was made. Since commercial products often have specific dates of manufacture and geographic distribution, identifying them can help determine where and when a photograph was produced. In addition, the capabilities and limitations of certain materials can help us understand why pictures look the way they do, and the thinking behind their creation. Results reflect choices made by the photographer, and compromises struck between various competing factors. The main elements can be grouped into three categories.

CAPTURE

In the twenty-first century, the majority of photographs, including those made with cell phones and tablets, are produced digitally. In a digital camera, light passes through a lens, strikes an electronic sensor, and is stored as data. Although digital photography existed in research labs as far back as the 1950s, it did not become mainstream until the turn of the century.

Previously, most photographs were made using a negative made of paper, film, or glass, or positive transparency (slide) film. Most of the pictures reproduced in this book were made using one of these methods. There are many ways to make negatives and transparencies, but for the first fifty years or so, the basic procedure was to load a camera with a single sheet or plate, taking one picture at a time; or, from the late 1880s on, it was also possible to use flexible roll film, allowing the photographer to wind from one frame to the next without reloading. When exposed in the camera, such pictures are described as latent, since they are invisible until chemically developed.

One of the earliest photographic inventions, Louis Daguerre's daguerreotype, was made using highly polished photosensitized plates made of silver-plated copper that were loaded directly into the camera, resulting in unique positive images. They could be hung on the wall (passepartout) or carried in a velvet-lined case made of leather or gutta-percha. Although the popularity of the daguerreotype began to wane in the 1850s, the practice of presenting images in cases continued throughout the 1800s with newer, cheaper processes such as ambrotype (photographed directly on glass) and tintype (photographed on a thin sheet of asphalt coated iron).

The negative/positive process can be traced to another of photography's inventors, William Henry Fox Talbot (p. 26), whose talbotype, also known as the calotype, used a negative made of translucent paper. Black-and-white negatives have their tones reversed in development, and are reversed again in printing to look visually correct.

Color negatives work by a similar but somewhat more complicated process, breaking colors into layers of red, green, and blue (RGB), which are translated into cyan, magenta, and yellow (CMY) when printed (the acronym CMYK in commercial printing adds a layer of black—"K," or "key"). Transparencies skip the negative/positive step, producing a "true color" original directly. Polaroid, and newer Impossible Project and Fuji Instax films, also result in direct positives (Polaroid also made a negative film, but this is less common). Polaroids develop right away because a small amount of developing chemistry is enclosed in the film pack.

Negatives and transparencies have evolved over time. The earliest negatives, based on Talbot's method, used paper as a base, sometimes made more transparent by applying wax or oil. Although not completely clear, paper was more practical than the alternatives, since without special preparation, photo chemistry beads up and drips off slick surfaces like glass. For a short time, albumen was used as a binder, but in 1851 Frederick Scott Archer figured out how to stick photo chemistry to glass using a viscous solution called collodion (the binder in liquid wart remover). Such negatives had to be made on the spot, exposed while wet, and developed before they dried. For this reason they are often referred to as “wet-plate collodion.”

Convenient gelatin-based plates arrived in the late 1870s. Because these were available prepackaged and ready to use, they are sometimes called “gelatin dry plate.” The first were made with glass, but in the 1880s lightweight and convenient flexible film bases became increasingly available, beginning with highly flammable cellulose nitrate. Nitrate was soon replaced by “safety” films (safe because they did not catch fire), initially made using cellulose acetate and later various synthetic polymers.

As technology advanced, the effects a photographer could obtain changed. Paper negatives had a pleasing soft-focus appearance but required long exposure times. Later techniques were faster and sharper. Transparency and negative films could be purchased in many different speeds to compensate for high or low light conditions. Generally, fast films result in grainier images than slower ones. The size, or “format,” of film used also mattered. Larger film formats such as 8 × 10-inch or 4 × 5-inch sheet film are capable of recording more information than small ones like 35mm roll film, and as a result are usually more detailed.

LENS

Lenses range from normal in length (approximating human vision) to short (wide-angle) and long (telephoto). Short lenses enable the photographer to take pictures in close quarters, and at their most extreme create a distorted fish-eye effect. Long lenses work like telescopes, enlarging the subject and tending to flatten space.

The hole through which light passes in a lens is called an aperture. In early lenses the aperture was fixed. Later lenses have a mechanism that allows the hole to be opened or closed according to light conditions and desired optical effects. Opening the aperture admits more light, allowing for shorter exposures, but tends to narrow the depth of focus. Closing down the lens (making the aperture smaller) has the opposite effect, reducing the amount of light and creating a relatively deep range of focus from foreground to background.

Apertures are usually described on a logarithmic scale measured in f-stops. Every time an f-stop number doubles, the amount of light passing through the lens is halved. This is how the influential San Francisco-based Group f/64, which counted Ansel Adams, Edward Weston, and Imogen Cunningham among its members (pp. 180, 182, 184), chose their name—f/64 was the smallest aperture setting on many professional lenses, resulting in pictures with maximum depth of focus, but requiring long exposure times.

Cameras are usually used with the lens parallel and in line with the film holder, creating linear perspective. However, “swings,” “tilts,” and “lifts” can be used to change the orientation of the lens relative to the plane of the film in order to alter perspective or to help with depth of field. In black-and-white photography, colored filters were sometimes attached to the lens to bring out certain tones.

OUTPUT (THE PRINT)

In the twenty-first century most pictures are no longer printed, but instead shared through a variety of digital platforms. When prints are needed, they are most often made using a variation of the inkjet process—also known as pigment, giclée, or less commonly, Iris prints—in which a computer-controlled nozzle sprays tiny droplets of ink on paper to make the picture.

Before the advent of digital printing, a wide variety of techniques were used. From the 1860s to the 1880s, many photographs were printed on albumen paper, which used egg white to bind photosensitive sodium chloride and silver nitrate to paper (for this reason, commercial albumen paper factories were often located near mayonnaise or patent leather factories, where the yolks could also be used). Albumen paper usually has a distinctive reddish-purple to brown tone, which is why old photographs are often described, somewhat inaccurately, as “sepia.”

In the late 1800s photographers explored a wide range of alternative printing techniques, many of which had been invented decades earlier, to create painterly effects. A substantial number of these used potassium dichromate (often called “bichromate”) as a photosensitizer. Potassium dichromate is an oxidizing agent that accelerates certain chemical reactions—it is used, for example, to help poured concrete dry more quickly. It is also sensitive to light, and hardens gelatin and gum arabic in proportion to the amount of UV light that is applied. Photographers figured out how to use this property to make pictures, combining potassium dichromate with gum arabic and pigment to create gum prints (pp. 109, 115). When exposed to light through a negative, areas that receive the most exposure harden. Using a water spray removes areas that remain soluble, resulting in a photographic image. Since the gum solution could be manipulated with a brush or fingers in processing, this technique enabled photographers to create pictures barely recognizable as camera-based. Carbon printing also uses potassium dichromate to harden gelatin like a gum print does. Other contemporaneous processes included oil print, bromoil, and oil transfer (pp. 111, 108) which are capable of similar effects but use gelatin silver paper to create the image.

Another family of prints relies on the light sensitivity of an iron salt, ferric oxalate, to make pictures. These include platinum and platinum palladium prints—lustrous, subtly toned photographs in which platinum and palladium metals form the image (pp. 107, 120, 178).

In the twentieth century, the most common form of black-and-white photograph was the gelatin silver print, also known as a “bromide,” since such papers are made using silver iodide and silver bromide chemistry. Most of these are described as developing-out papers, because they are printed in a darkroom using an enlarger (a device used to project a negative on photographic paper). Developing-out papers have to be developed, and later stopped, fixed, and washed in chemical baths for the image to be stable. Less common, particularly in the latter half of the twentieth century, were printing-out papers, in which the image emerges during printing. Printing-out papers use light to develop the print, darkening like a suntan without a developer, and needing only fixing and washing to stabilize the image. Since printing-out papers are comparatively slow, they are usually made in contact with the negative.

Gelatin silver papers arrived out of the box in a variety of paper colors, with underlayers ranging from bright white to cream, although more exaggerated colors were also available. They were prepared with emulsions (photochemical surfaces) ranging from cold (bluish), to neutral, to warm (reddish), and with different degrees of contrast and grain. Photographic printers could also control these factors using light filters and developers during processing, changing the temperature of their chemical baths, dying (sometimes with tea), and/or chemically toning their prints after development.

Color prints took many forms. In the latter half of the twentieth century, the most common process for both casual and fine art use was the color coupler print (Kodak Type-C), often called “chromogenic,” in which a negative was used to expose the paper before development. Working from a positive transparency (slide) to make a print required reversing it using an intermediate negative (internegative), or so-called reversal paper (Kodak Type-R). Also referred to as a dye destruction print, reversal papers were known by trade names including Cibachrome, Fujichrome, and Ilfochrome.

Transfer techniques, including carbro color and its cousin, dye transfer, involve using separate sheets of colored gelatinized paper called tissue, carefully layered by hand, one on top of the other. Carbro color prints use gelatin paper as a matrix for the image, whereas dye transfer uses gelatinized plastic, glass, or metal. Carbon and color carbon prints are based on the same principle, but printed in a single monochrome layer.

PLATES
WITH
COMMENTARY

Sir John Herschel

England, 1792–1872

Lake Brienz from Iseltwald, September 23, 1821, or after
Camera lucida drawing, pencil on paper

The inventions of photography united two historical lines of inquiry: one optical, the other chemical. Sir John Herschel, a brilliant mathematician and scientist, played a key role in both.

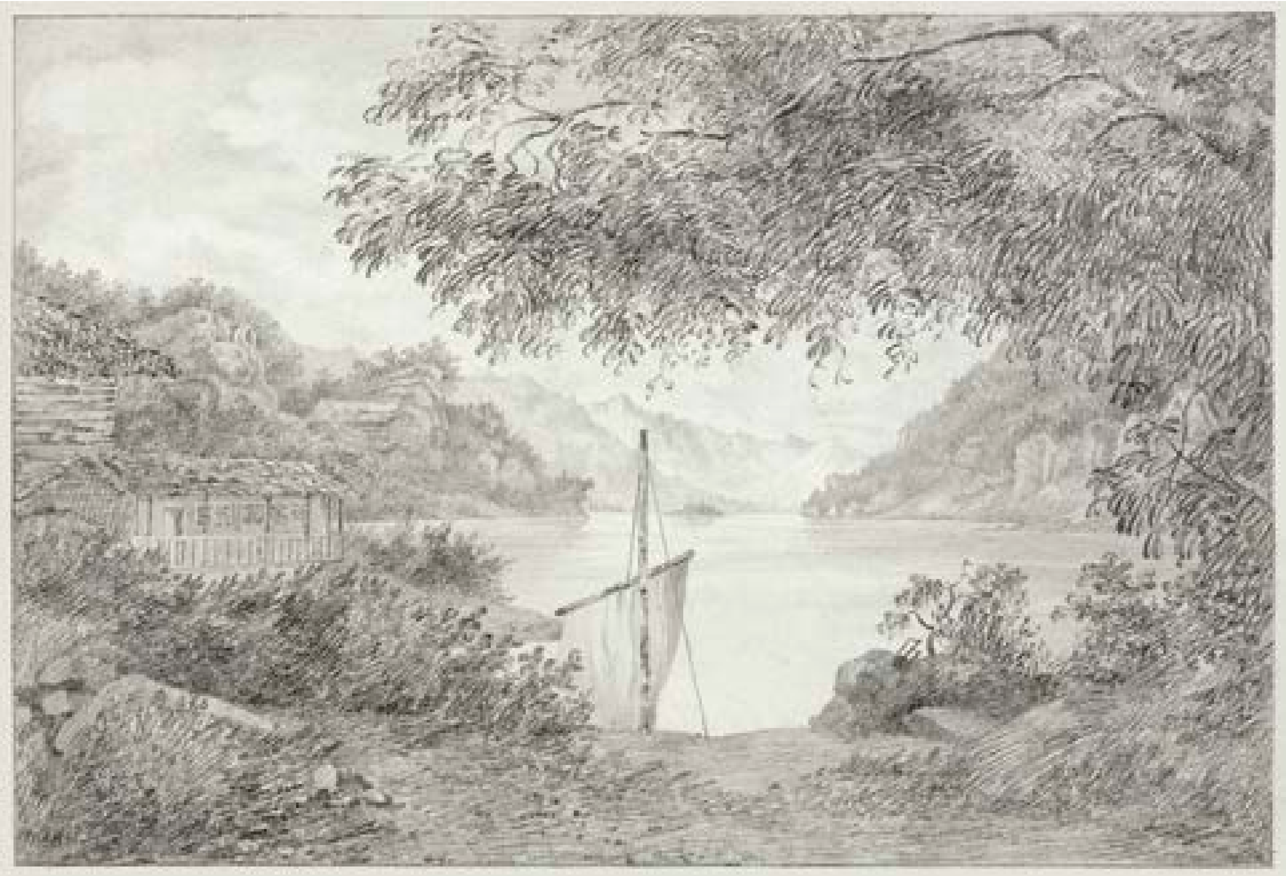
Herschel had an aptitude for drawing. Beginning in 1816 he used a camera lucida to make optically correct pencil sketches. Introduced in 1807, this device consisted of a small prism mounted on an adjustable metal column. On looking down into the prism, one saw the scene straight ahead superimposed on drawing paper below. This method of sketching may sound "easy" but it required uncommon patience and skill.

Between 1816 and 1870 Herschel made over 300 camera lucida drawings, including this detailed rendition of Lake Brienz, in Switzerland. Far from a simple "study," this is a finished picture, in pencil, with a recognizably optical verisimilitude.

Beginning in early 1839, Herschel made monumental contributions to the development of photography. Indeed, once he focused on the problem, Herschel invented photography, entirely on his own, in a week.

Notably, however, Herschel was uninterested in *making* photographs. One suspects that he found photography too automatic and indiscriminate. By contrast, the camera lucida allowed him to engage in sustained acts of contemplation that perfectly united perception and judgment, the eye, mind, and hand. While his friend Talbot celebrated "the pencil of nature," Herschel took pride and pleasure in his own representational agency.

— Keith F. Davis



Madame Gelot-Sandoz

France, 1803–1846

Philosophy, after Raphael, ca. 1843
Daguerreotype

The first wave of photographers included a significant number of women, including Paris-based Madame Gelot-Sandoz. Since she died prematurely in 1846, aged forty-three, her work is now exceedingly rare, and little is known about her practice. She was one of, if not the, first female photographer to open her own studio, where she advertised portraits, “reproductions of paintings, engravings and views,” and offered lessons in the daguerreotype process.

This large daguerreotype, exposed directly on silver-plated copper, underscores the intricate relationship between photography and its cousins, printmaking and drawing, around the time of photography’s invention. Early adopters praised photography for its mimetic quality—the ability to produce faithful reproductions without introducing human error. Gelot-Sandoz’s daguerreotype reproduces an engraving by the Italian Renaissance printmaker Marcantonio Raimondi, which itself is most likely an interpretation (not an exact reproduction) of a fresco by Raphael on the ceiling of the Room of the Segnatura in the Vatican, or a related preparatory drawing. Like most daguerreotypes, it is mirror-reversed. Given this extraordinary chain of relationships, one might reasonably question whose artistic vision this photograph represents—the original artist, the printmaker, or the photographer herself?

The reason Gelot-Sandoz made this work is unclear, however it may have been a demonstration piece to show potential clients. In offering reproductions of prints and paintings, Gelot-Sandoz was on precarious ground since at the time the expense of producing daguerreotypes, particularly at this scale, would have been prohibitive.