ROLL!

Shooting TV News

Views from behind the lens

Rich Underwood

Focal Press

Roll!
Shooting TV News

You can take all the tea in China
Put it in a big brown bag for me
Sail right around the seven oceans
Drop it straight into the deep blue sea.

You can't stop us on the road to freedom
You can't keep us 'cause our eyes can see
Men with insight, men in granite
Knights in armor bent on chivalry

—Van Morrison "Tupelo Honey"

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Preface

When we think about our recent world history and talk of events such as 9/11, the wars in Afghanistan and Iraq, and countless other tragic, heroic, and life-changing events, our minds play back the images we've seen on television.

The images that we conjure up were first recorded by television photojournalists. These cameramen and women stand on the front lines, engulfed in the moment, their skill and visual sensitivities working to capture history on the fly.

How we see our world was first viewed by them.

The images tell the story, and they are crafted through lighting, lens selection, camera angles, and many of the same skills all camera operators use. However, these "operators" have honed an instant, instinctual feel for how they will shoot the world they've been paid to capture. They watch the world's top stories unfold through small black-and-white television monitors mounted inside their viewfinders.

At thirty frames per second, they choose how we will see ourselves, our joys and successes, our grief and terror, our births and last death rattles. The moments that shape our lives roll through their cameras. Unblinking, exposed, a moving record—our history.

From some far, remote corner of the world to a teeming metropolis or small hometown, they shift effortlessly their abilities to tell their stories with clarity, compassion, and honesty.

This text contains portraits of some of the best television photojournalists in the world. All have received the highest awards and accolades from their industry. They are the noted leaders in their field and share an almost religious dedication to communicate what is true. Their images are arresting and memorable and stick in the subconscious of our mass media culture.

Foremost, they are storytellers, journalists with a lens. Their stories, the equipment they use, and the techniques that serve them every day are outlined in the following chapters.

Their stories have been divided to take the reader through a progression of skills that cover the world of television photojournalism. Each chapter takes the reader into a different skill or knowledge required of today's news cameramen and women. For the working professional, it is my hope that the insights provided by the stories in this book will serve to reinvigorate and offer a lasting homage to the profession of television photojournalism.

Notes on Text Format

The text in *Roll*! is set in two primary typefaces to denote the separation of voices between each chapter's interviewee and the author. This technique helps to create a fluid "train of thought" through the subject matter being discussed. By eliminating the timeworn format of "author said," "subject said," the halts in dialogue are replaced by relevant content that connects, advances, and clarifies the narrative theme.

The author's voice is set in *Times New Roman italic*. The typeface was chosen for its history in journalism. In 1932, under Stanley Morrison's direction, Victor Lardent drew the original Times New Roman typeface for *The Times of London* newspaper. Since its creation, it has become one of the most widely used typefaces for publications.

The interviewee's voice appears in Optima. The designer's "in-the-field" improvisation brought one of the world's most enduring fonts to life. While visiting the Santa Croce church in Florence, Italy, in 1950, designer Herman Zapf made his first sketches of the Optima typeface on the only paper he had available: an Italian 1,000-lire banknote found in his pocket. Zapf's sketches were designed in the proportions of the Golden Ratio and inspired by the Renaissance lettering carved into grave plates on the church floor, circa 1530. Today, Optima continues its memorial legacy as the typeface etched into the Vietnam Veterans Memorial Wall in Washington, D.C.

In addition to the two primary typefaces is a third. The chapter titles, and the running heads and folios, are set in DIN Light and **DIN Black**. *DIN* stands for *Deutsche Industrienorm* (German Industrial Standard). In 1936, the German Standard Committee selected DIN 1451 as the standard font for the areas of technology, traffic, administration, and business. The Committee chose a DIN font because of its legibility and ease of recognition.

Authors' professional titles and affiliations, equipment lists, and captions are set in a fourth typeface, ITC American Typewriter. Patented in 1868 by Christopher Latham Sholes, the typewriter became the tool of the storyteller. Its monospaced typefaces carried dispatches from around the world to newspapers, radio stations, and television news organizations. After being universally replaced by word processing software and computers, the typeface still evokes memories of intrepid journalists tapping out the latest scoop.

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A special thanks to my wife, Kevin, whose love—and machete-like efficiency in clearing away the debris of daily life—made it possible to complete this project. To my parents, Al and Shirley, for their continued inspiration in my life. To my daughter, Hayley: Not a word was written without imagining it through your eyes.

I am extremely grateful for the support and enthusiasm of my original acquisitions editor for Focal Press, Amy Eden Jollymore, and to Cara Anderson, the associate acquisitions editor assigned to this book.

Thanks to Marissa Rocke for her research and transcriptions, and all the hours she put in from the beginning. Ángel Granados served both as my graduate assistant at San Diego State University and as photographer for many of the technical images in the book. Likewise, I have to thank the artistic talents of Paul Cohen for the illustrations he penned detailing the technical concepts of television news photography. The cover design was created by the very talented illustrator Matt Stallings. I'd also like to thank Amanda Rozier, who jumped in during the last phase to help wrangle photo clearances and final details.

Many of the images seen in this book required conversions from one format to the other. These images would not have been possible without the technical expertise of Greg Penetrante and the support of San Diego State University.

Travel played an important part in bringing this project to life. Leslie Overstreet and STA Travel did a wonderful job of getting me there with everything I needed.

I would like to thank Sharon Levy Freed, who runs the NPPA TV NewsVideo Workshop in Oklahoma, for her assistance in locating the best in the business. Thanks also to Bob Fisher for his time and historical perspective.

And, finally, to all the TV news photographers who helped in this endeavor, thank you for your time, stories, and commitment to educating the next generation.

CHAPTER 1

Introduction

Introduction

The History of Television Photojournalism from the Beginning

Bang !

> Genesis 1.3—And God said, Let there be light: and there was light.
> Genesis 1.4—And God saw the light, that it was good: and God divided the light from the darkness.

. . . and at close to 700 million miles per hour, light shoots throughout the universe, illuminating our world for all the days to come.

How magnificent, the first living eyes—capturing the reflections of earth's early environs, absorbing the hues and shapes that made prehistoric earth. At the first blink, light enters the eye and is refracted by the cornea, travels through the opening in the iris (called the pupil), then through the lens and onto the retina. The retina contains two cell types called rods and cones. The rods handle low light vision, while the cones handle detail and color. When light contacts these cells, complex chemical reactions occur, changing light into electric impulses that are carried via the optic nerve to the brain. The result is the experience of sight.

As the sun sets, light carries its qualities of hue, luminance, and saturation. Measured in waves per second, or Hertz (Hz), the eye sees between 430 trillion Hz (red) and 750 trillion Hz (violet). These frequencies represent all the colors we can see in our universe. But, there are more—unseen frequencies whose mysteries will be discovered far into the future and affect the lives of everyone on earth. The mysterious (radio) waves exist in less than a billion Hz, and gamma rays top the spectrum above sight, ultraviolet, and x-rays. But for now, there is the awe of a perfect sunset. As the sun slips below the horizon, yellows give way to blues and darker . . . reds disappear. The end of a day. With it comes a desire to remember, to tell a story that will keep the experience alive for all time

. . . to share our world.

A Timeline of Light and Shadow

Before 1000 A.D.

In 30,000 B.C., in a cave in what's now southern France, early Paleolithic man and woman captured their world in hundreds of paintings made from red ochre and charcoal. It's easy to imagine the effect flickering torches must have had on the mural of a running bison, its extra legs painted to help depict movement. Now referred to as Chauvet Cave, it is the oldest known art gallery. Cataloging and illustrating through art, the Aurignacian painters crafted one animal made of nothing but red dots. Pointillism eons before Seurat.

Around 2200 B.C., papyrus is used in creating documents. Seven hundred years later, in 1500 B.C., the Phoenician alphabet is formed. An exact understanding of written words could be shared then.

Aristotle describes a light after-effect—a persistent image—that slowly fades away after looking at the sun. In 300 to 330 B.C., Aristotle also questions how the sun can make a circular image when it shines through a square hole. This is the first reference to the camera obscura*, the forerunner to the camera. In Latin, "camera obscura" means "dark chamber." The Romans found that if bright daylight entered a dark room through a tiny hole in a curtain or window shutter, an inverted clear (although very dim) image of the outside world appeared on a white wall opposite the hole.*

Roman poet and philosopher Titus Lucretius Carus, in 65 B.C., describes the principle of "persistence of vision," the optical effect of experiencing continuous motion when sequential still images are momentarily displayed. This principle was proved one-hundred and thirty years later by Greek astronomer and geographer Ptolemy of Alexandria in 130 A.D.

In the fifth century A.D., highly polished bronze discs called "magic mirrors" appeared in Japan and China. When a small, bright light source reflects off the mirror and onto a screen, it projects an image, although no image is visible on the mirror itself. Therefore—the magic. The magic image is most often of the Buddha.

From 1000 to 1800

About 1000 A.D., Alhazen (Ibn Al-Haytham), a Middle Ages authority on optics, creates the pinhole camera and explains why the image is upside down.

A blurry devil dances across a wall, frightening everyone in the room. It is a "nocturnal appearance for terrifying viewers" as illustrated in Liber Instrumentorum *by Giovanni de Fontana in about 1420 A.D. It shows a man holding a lamp or lantern, and on the wall is a large projected picture of the devil. This is arguably the first evidence of a magic lantern.*

As Christopher Columbus sails the ocean blue in 1492, then arrives in the New World, Leonardo da Vinci combines art and science in creating the Vitruvian Man*. Six years later, in 1498, he paints "The Last Supper," which depicts the most important event in the Christian doctrine of salvation—the institution of the Eucharist. It has become one of the most widely appreciated masterpieces in the world. In 1519, da Vinci sketches a camera obscura. During the same time, the camera obscura's use as a drawing aid is being touted. The transition between medieval and modern times is defined by discovery, the arts and sciences, and is called the Renaissance.*

In 1589, the book Magiae Naturalis Libri Viginti*, by Giovanni Baptista della Porta, described the ancient art of projecting mirror writing. In 1658, it's published in English as* Natural Magick*. Della Porta*

was also the first European to publish information on the pinhole camera (which he did not invent) around 1600 A.D.

During the early seventeenth century, Angelo Sala notices that powdered nitrate of silver is blackened by the sun.

In Rome, violent criminal Caravaggio paints "The Calling of Saint Matthew" in 1599–1600. It is a beautiful example of chiaroscuro *(Italian for "light-dark"), defined as bold contrast between light and dark, creating a three-dimensional experience through highlights and shadows.*

A German Jesuit priest, Athanasius Kircher, publishes Ars Magna Lucis et Umbrae *in 1646, in which he describes using a convex lens to focus images projected by sunlight or candle light.*

Dutch scientist Christiaan Huygens's father pesters him to send a lantern so he can "frighten his friends" with it. In the mid-1600s, Huygens, who is famous for his wave theory of light, does many experiments with lenses and develops a lantern as early as November 1659. Besides Huygans, elsewhere in Europe, the Danish mathematician Thomas Rasmussen Walgensten also develops a working model of a lantern projector. He is the first person to coin the term Laterna Magica*. Walgensten, realizing the technical, artistic, and economic possibilities, travels throughout Europe demonstrating and selling magic lanterns.*

In the seventeenth century, the camera obscura is used by artists and made portable in the form of sedan chairs. Dutch painter Johannes Vermeer, regarded as one of the greatest artists that ever lived, painted "The Music Lesson" and "Girl with a Pearl Earring." There is widespread speculation that Vermeer used a camera obscura to create some of the thirty or so paintings he did during his life.

In 1727, Professor J. Schulze accidentally creates the first photo-sensitive compound by mixing chalk, nitric acid, and silver in a container. Schulze notices a darkening on the side of the container exposed to sunlight. Schulze also discovers that certain liquids change color when exposed to light. In 1800, "sun pictures" are made by Thomas Wedgwood by placing objects on leather treated with silver nitrate. The silhouettes did not last long because there was no method of making the image permanent.

"Giphantie" by de la Roche is an imaginary tale where captured images from nature appear mirrored on a canvas that was coated with a sticky substance. The image would be permanent after it was dried in the dark. The author appeared to be a photographic prophet because he described an art and process that would occur a few decades after his death.

Ratified in December 1791, The first ten amendments to the U.S. Constitution are known as the Bill of Rights. The First Amendment states: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

From 1800 to 1900

On the third of May in 1808, following a riot the previous night, Murat ordered his Egyptian cavalry to set up a firing squad to shoot anyone who happened to be available. It was the first in a series of brutalities that engraved themselves on Francisco Goya's mind. In 1814, six years later, Goya asked the provisional government for an opportunity to "perpetuate by the means of his brush the most notable and heroic actions of our glorious insurrection against the Tyrant of Europe." His oil on convas painting of this event, "The Shootings of May 3, 1808," has been called the most horrifying record of war ever made in any medium.

Nicéphore Niépce combines photosensitive paper with a camera obscura in 1816. Brilliant! In 1826, he creates a permanent image. Peter Mark Roget rediscovers the persistence of vision principle in the 1820s. He's also famed as the author of Roget's Thesaurus.

Johannes Purkinje describes the change in relative brightness of the long wavelengths (reds) and short wavelengths (blues) as the ambient illumination decreases. His 1823 published report found that at high illumination reds appear brighter than blues, but at low illumination these same blues appear brighter than reds. The effect is referred to as the "Purkinje Shift." It explains the attributes necessary for "day for night" photography and is instrumental in the measurement of stars.

In 1827, taking almost eight hours of exposure, Niepce's the "View from a Window at Le Gras" is the first photograph. In 1829, Niépce agrees to go into partnership with Louis Daguerre.

The illusion toy, the Phenakistoscope, is introduced in 1832 by Joseph Plateau and sons. Pictures on one disc are viewed through slots in the other; when spun and viewed through a mirror, the pictures appear to move. In 1834, William George Horner introduces the Zoetrope based on the same principles except this time the pictures and slots are on the same rotating drum instead of two discs. Also in 1834, permanent negative images using paper soaked in silver chloride and fixed with a salt solution are created by Henry Fox Talbot. Positive images are made by contact printing onto another sheet of paper.

Louis Daguerre calls his discovery the Daguerreotype. A process which he founds in 1837 creates images on silver-plated copper coated with silver iodide and "developed" with warmed mercury. The French government awards Daguerre a state pension in exchange for publication of his methods and the right for other French citizens to use the process. The details of the process are made public August 19, 1839, pro-claiming that the Daguerreotype "requires no knowledge of drawing . . ." and that "anyone may succeed . . . and perform as well as the author of the invention." "Daguerreomania" becomes an overnight craze.

A newspaper report in the Leipzig City Advertiser *states: "The wish to capture evanescent reflections is not only impossible . . . but the mere desire alone, the will to do so, is blasphemy. God created man in His own image, and no man-made machine may fix the image of God. Is it possible that God should have abandoned His eternal principles, and allowed a Frenchman . . . to give to the world an invention of the Devil?"*

In the year the photographic process becomes public, Sir John Herschel is the first to use the term "photography," derived from Greek words for light and writing. During that time, photographic images on glass slides were projected using magic lanterns.

In 1841, Henry Fox Talbot patents his process of negatives on paper under the name "calotype." Samuel Morse publicly demonstrates the telegraph for the first time in 1844. The invention of the sewing machine and other intermittent mechanisms in 1846 lays the essential groundwork for motion pictures. William Thomson (Lord Kelvin) develops his absolute temperature scale in 1848. Degrees Kelvin is the measurement often used to describe a lamp's color temperature: 3200K is the color temperature of tungsten lamps; daylight color film is balanced to 5600K.

In 1851, London sculptor Frederick Scott Archer improves photographic resolution by spreading a mixture of collodion (nitrated cotton dissolved in ether and alcohol) and chemicals on sheets of glass. Wet-plate collodion photography is much cheaper than daguerreotypes. In Paris in 1853, Nada (Felix Toumachon) opens a portrait studio.

In England, photographer Roger Fenton instigates the formation of a Photographic Society that is now called the Royal Photographic Society. In 1855, The Illustrated London News *hires Fenton to photograph*

the Crimean War. On the front lines, Fenton processes his images in a flea-infested converted wine wagon that became an oven during the day and a target at any time. The summer heat often forces him to take his pictures before 7:00 A.M. In all, he shoots more than 350 pictures of the conflict.

Ambrotypes (direct positive images on glass) and tintypes (images on metal) become popular in the United States between 1855 and 1857.

"From the first, I regarded myself as under obligation to my country to preserve the faces of its historic men and mothers," said Mathew Brady in 1856. Brady opens a studio in Washington, D.C., to photograph the nation's leaders and foreign dignitaries. He's known as one of the first to use photography to chronicle national history.

Between 1861 and 1865, 7,000 negatives of the American Civil War are exposed by Mathew Brady and his staff. Although Brady shoots some of the images, he is more of a project manager, supervising photographers and buying photographs to ensure his collection will be as comprehensive as possible. Although the images in the collection are actually the work of many people, when they are published, either as prints or engravings, they are all credited "Photograph by Brady."

A sign, "The Dead of Antietam," is posted on the door of Brady's New York gallery. The exhibit displays photographs of battlefield corpses. In 1862, The New York Times *said that Brady "brought home to us the terrible reality and earnestness of war."*

Using a system he calls the "Pantelegraph," Italian physicist Abbe Giovanni Caselli is the first to send fixed images over a long distance. The "dry plate" process is proposed by English doctor Richard Leach Maddox in 1871. The process uses an emulsion of gelatin and silver bromide on a glass plate. In 1873, English telegraph engineers May and Smith experiment with selenium and light. The results give inventors a way of transforming images into electrical signals.

"Mr. Watson, come here, I want you!" Alexander Graham Bell invents the telephone on March 10, 1876, in Boston, Massachusetts. The word telephone *comes from the* Greek *word* tele- *(meanings "from afar") and* phone *(meaning "voice" or "voiced sound").*

"Do a horse's four hooves ever leave the ground at once?" That is the 1873 bet Eadweard Muybridge is asked to settle by Leland Stanford, the ex-governor of California. Five years later in 1878, Muybridge sets up a bank of twelve cameras with trip wires connected to their shutters. Time-sequenced photography is created as each camera takes a picture when the horse trips its wire. Muybridge develops a projector to present his finding. The answer to the bet is "Yes." He adapts Horner's Zoetrope to produce his Zoopraxinoscope and screens "The Horse in Motion."

On the kitchen table of his mother's boardinghouse in Rochester, New York, a twenty-three-year-old George Eastman invents a machine to manufacture dry plates. Eastman travels to London in 1879 to patent his invention. London at that time is the center of the photographic world. A year later, Eastman, and an associate named Henry Strong, set up Eastman Dry Plate Company in Rochester, New York. That same year, a daily newspaper, the New York Graphic, *uses the first halftone photograph in its publication.*

To transform images into electrical signals, George Carey builds a rudimentary system in 1880 that uses dozens of tiny light-sensitive selenium cells.

Heinrich Hertz's 1887 experiments confirm that electrical energy travels at the speed of light and describe the medium through which the energy travels as the "ether." He also proves that electricity can be transmitted in electromagnetic waves and that the waves possess many of the properties of light. His

experiments with electromagnetic waves lead to the development of the wireless telegraph and the radio. The term hertz *(Hz) used to describe radio and electrical frequencies is named after him.*

George Eastman produces a still camera in 1888 that takes photographs on sensitized paper and sells it under the name Kodak. Also that year, French inventor Louis Augustin Le Prince creates a single-lens camera that he uses to make the very first moving picture sequences. The sequences are made by moving film through the camera's sprocket wheels that grab the film's perforations. Etienne Marey builds a moving picture camera that uses an intermittent mechanism and paper film strips.

The inventor of the electric light bulb and the phonograph, Thomas A. Edison, and his assistant W. K. L. Dickson, begin experiments for making and showing moving pictures. In November 1888, John Carbutt announces his successful production of photographic-quality celluloid, available in 20 x 50 inch sheets. Edison's laboratory decides to order a dozen Carbutt film sheets in June 1889, and the lab starts experimentation on its device called the Kinetoscope. Later in 1889, Edison travels to Paris to see Marey's camera, which uses flexible film.

Reverend Hannibal Goodwin likes to use fragile slides in his Sunday school. In 1889, he comes up with the idea of flexible, celluloid-based transparent film that is unbreakable. With a license from the Newark Celluloid Varnish Co., he proves that celluloid can be flattened, thinned, and used as an image base. George Eastman promotes the product for wide-scale commercial use. Dickson orders a Kodak camera to examine the film inside.

In London, William Friese-Greene makes motion pictures of people on their way to church. The simple scenes of everyday life are called "actualities." They are the very beginning of what become newsreels.

In October of 1890, Monkeyshines *starring one of the Edison laboratory workers fooling around for the camera is W. K. L. Dickson's first motion picture. By 1891, Edison and Dickson are ready to patent and demonstrate their Kinetoscope viewing box and the Kinetograph camera, which uses Eastman film cut into inch-wide strips, punched with four holes on either side of each frame, allowing toothed gears to pull the film through the camera.*

Sir William Crookes suggests that people could communicate using electric waves of specific wavelength on tuned equipment, or "telegraphy across space," in "Some Possibilities of Electricity," published in Fortnightly Review *in 1892.*

Léon-Guillaume Bouly manufactures the Bouly Cinématographe camera in Paris, in 1892.

At the 1893 World's Columbian Exhibition in Chicago, Thomas Edison displays the Kinetoscope. Also that year, the first public exhibition of films shot using the Kinetograph is held at the Brooklyn Institute. To produce films for their Kinetoscope, Edison and Dickson build a studio on the grounds of Edison's West Orange, New Jersey, laboratories. The studio has a removable roof and sits on circular tracks to rotate with the sun. Made of wood and tar paper, the studio is known as the "Black Maria" for the supposed similarities to police wagons of the day. The studio's first film is Fred Ott's Sneeze. *It is also noted for the first close-up and becomes the first officially copyrighted film on January 7.*

At 1155 Broadway in New York City, The Holland Brothers' Kinetoscope Parlor opens on April 14, 1894, with two rows of coin-operated Kinetoscopes. The film "business" begins. Celebrities Buffalo Bill and Annie Oakley are invited to Edison's New Jersey studio to be recorded on film with his Kinetograph.

Shot in the "Black Maria" studio and organized for the cameras by Thomas Edison, Gray and Otway Latham, Enoch Rector, and Samuel Tilden Jr., "The Michael Leonard and Jack Cushing Prize Fight" is decided in six rounds. Leonard wins the match.

Herman Casler files a patent application for an alternative to the Kinetoscope called the Mutoscope, which was developed with the help of Dickson and the Lathams. The Mutoscope uses a flick-book technique instead of using film. A sequence of photographs are mounted on a drum that is spun inside a cabinet. The flipping of photographs gives the impression of movement.

The name "peepshow" becomes the description of single-person viewers like the Kinetoscope and the Mutoscope, because of peeping into an eye hole to view the show.

In 1894 Europe, the Lumière family is the biggest manufacturer of photographic plates. Brothers Louis and Auguste Lumière design a camera that's both a recording device and a projecting device to compete with Edison's films. They call the camera the Cinématographe. It uses an intermittent mechanism modeled on the sewing machine and exposes flexible film cut into 35mm wide strips at 16 frames per second. Edison's camera operates at 46 frames per second. Lumière's 16 frames per second becomes the standard rate for 25 years.

Herman Casler demonstrates a camera called the Biograph to take "views" for the company's Mutoscope in March 1895. Later, a Mutoscope is adapted with a mirror device to project motion pictures. The partners—Casler, Henry N. Marvin, W. K. L. Dickson, and Elias Koopman—soon perfect a through-the-film projector, which they call the Biograph. They establish the American Mutoscope company on December 27, 1895. Dickson goes on to manage the company's London office.

In a Paris café named Salon Indien, the Lumière brothers hold their first commercial exhibition of their camera, projector, and films. The December 28, 1895, screening includes The Arrival of a Train, *which is said to have caused a stampede. Early films are mostly documentaries or "actualités" (films of everyday life) like the Lumière's* Lunch Hour at the Lumière Factory.

In London, Charles Morand Pathé buys pirated Kinetoscopes manufactured by Robert Paul and resells them at fairgrounds in France. His clients, tired of seeing the same films, encourage Charles to find more. In order to renew Pathé's stock of films, he meets engineer and inventor Marie Henry Joseph Joly and advances the necessary funds to make a camera.

In England, news films begin with cameraman Birt Acres photographing the opening of the Kiel Canal by Kaiser Wilhelm II. The Lumière brothers shoot the first news film in France. The topic is a holiday excursion of the Congress of the National Union of French Photographic Societies. The Lumière company later sends Francis Doublier and assistant Charles Moisson to Madrid to photograph a bullfight.

The Lathams succeed in creating a camera and a projector. The unfortunately dim projector uses a system that loops the film, making it less susceptible to breaks and tears. The "Latham Loop" as it is called, is still in use in modern motion picture projectors.

Thomas Armat improves the Phantoscope projector and renames it the Vitascope, then sells it to Edison in 1896.

In Paris in 1896, Charles Pathé and brothers Émile, Théophile, and Jacques found Société Pathé Frères. The first goal is to build cameras and projectors. A year later, the company becomes the Compagnie Générale de Cinématographes, Phonographes et Pellicules (Anciens Établissements Pathé Frères). Émile directs the phonographic aspects of the business while Charles handles the cinematographic.

Russian Alexander Popov begins transmitting wireless electrical signals more than 500 meters through the air. Italian Guglielmo Marconi accomplishes the same transmission three months later. Marconi can send signals more than a mile by the end of the year.

At the Grand Café in Paris, on December 28, 1895, one of the most famous film screenings in history takes place. Customers pay one franc for a 25-minute program of ten Lumière films including Feeding the Baby, The Waterer Watered, *and* A View of the Sea.

On January 14, 1896, Birt Acres presents a selection of his films to the Royal Photographic Society, including the now famous Rough Sea at Dover. *Cameramen Francis Doublier and Felix Mesguich are the first roving motion picture correspondents, sent around the world by the Lumière Brothers.*

After building on inventions and insights by Hertz, Nicola Tesla, and others, Marconi applies for the first patent specifically for wireless telegraphy technology and begins the process for starting a communications company in Great Britain.

Kodak begins manufacturing the first print film designed for projection, opening the way for the introduction of movie theaters.

On April 23, 1896, at Koster and Bial's Music Hall, six films are shown in the first public premiere of the Vitascope. Five of the films were originally shot for Kinetoscope, the sixth is Birt Acres's Rough Sea at Dover.

Before the 1896 election, William McKinley is photographed by Billy Bitzer for the Biograph Company. The 1897 inauguration of President McKinley, the oath, and the parade are photographed by Edison, making him the first president to be filmed in office.

In 1897, German scientist Karl Ferdinand Braun constructs the first cathode ray tube scanning device.

The Spanish-American War in 1898 is the first war to be covered by American cameramen and producers.

The Prestwich Model 4 cine camera is designed by John Alfred Prestwich and manufactured by the Prestwich Manufacturing Company in London in 1898. The camera's reliability is the main reason Australian photographer and cinematographer Frank Hurley chooses a Prestwich as his cine camera for the 1914 Shackleton Antarctic Expedition. Later, Hurley has to abandon his camera when the ice crushes the wooden ship Endurance *on November 21, 1915.*

In 1899, The American Mutoscope Company changes its name to the American Mutoscope and Biograph Company to include its projection and peepshow devices. Dickson sails to South Africa to document the Boer War for the British Mutoscope and Biograph Company. The war is filmed by cameramen from many countries. Dickson spends more than a year with British troops.

W. K. L. Dickson films the Boer War with a Biograph camera.

The Early 1900s

The word television, *first used in 1900, comes from the joining of the Greek word* tele *(meaning "from afar") and the word* vision.

The Pathé company merges with the Manufacture Française d'Appareils de Précision to

form the Compagnie Générale de Phonographes, Cinématographes et Appareils de Précision. From that point on, Charles Pathé develops the manufacture of both negative and positive film, the creation of factories and studios, and the making of cameras and projectors.

Ernest Francis Moy and Percy Henry Bastie's camera, also popularly known as a "Moy," is first made in England by the Moy & Bastie company in 1900. It's rumored that the first Hollywood picture was shot with a Moy camera.

Taking a single-frame exposure every four minutes, eight hours a day, a Biograph cameraman condenses the 1901 dismantling of the old Star Theater in New York. Projected, this spectacular time-lapse scene takes only seconds to watch.

The 1903 Pathé camera is often called a cracker box because of its light wooden construction. Hollywood is incorporated as a municipality in 1903.

For 12 magical seconds above the Kill Devil sand dunes, two bicycle mechanics from Ohio defy gravity and fly their craft into history on December 17, 1903, marking the first manned, sustained, powered flight. Before the day ends, Orville and Wilbur Wright's Wright Flyer will stay aloft for 59 seconds in Kitty Hawk, North Carolina.

Founded in 1904, the New York Daily Mirror *is the first daily newspaper in the world to be illustrated exclusively with photographs. Photonewspapers establish the basic categories used later by the newsreels: catastrophe, celebrities, pageantry and ceremony, sports, political and military, technology, spectacle, novelty.*

The first Nickelodeon opens in Pittsburgh in 1905. R. K. Bonine covers the 1906 San Francisco earthquake and fires for the Edison Company.

George Eastman first meets Thomas Edison in person during a 1907 visit to Edison's New Jersey lab. Eastman asks Edison how wide he wants the film to be for his new cameras. Edison holds his thumb and forefinger about 1–3/8 inches (35mm) apart and says "about so wide." The standard set that day has endured for 90 years.

Theater projectionist Donald Bell and camera repairman Albert Howell establish The Bell & Howell Company on Larchmont Avenue in Chicago, Illinois, in 1907. Their first camera is made of wood; the second is the 35mm "#2709 Standard" studio camera for professional cinematography. Its features include a body machined from cast aluminum, a four-lens turret, and a rack-over system, giving precise through-the-lens viewing and focusing.

In the basement of Boris Rosing's private lab at the School of Artillery in St. Petersburg, Vladimir Zworykin helps Rosing with his experimental work on television. Featuring a very early cathode ray tube as a receiver and a mechanical device as a transmitter, Rosing files his first patent on a television system in 1907. In December, Zworykin, having developed the prototype of the receiver, meets David Sarnoff, who eventually puts him in charge of television development for RCA. Later, Vladimir Zworykin says of his feelings about watching television, "I hate what they've done to my child . . . I would never let my own children watch it."

The voluntary Motion Picture Patents Agreement of 1907 sets specifications defined as standard for motion picture film: 35mm in width, 4 perforations along both sides of each frame, 4:3 or 1.33:1 aspect ratio, and a film speed of 16 frames per second.

In 1908, the American Mutoscope and Biograph Company hires one of the most important silent film directors ever: D. W. Griffith.

In 1908, André Debrie builds the wooden Debrie Parvo camera in Paris. The hand-cranked Parvo (meaning "compact" and of small dimension) at one time was the most popular European-made camera. By the 1920s, the Parvo is the most used camera in the world.

The French firm Pathé Frères is shooting approximately 30,000 meters of film a day in 1909. Their trademark is a golden rooster. In 1910, Charles Pathé introduces the Pathé Journal *newsreel at 6 Boulevard Saint Denis in Paris. The theater is devoted exclusively to showing newsreel material.*

The "Fight of the Century" on July 4, 1910, between Jack Johnson and James Jeffries is one of the most popular news films of the year. The first makeup formulated especially for film is created by Max Factor the same year.

The first produced, assembled, and released newsreel in the United States is Pathé's Weekly *on August 8, 1911.*

A 1912 cameraman's salary is about $35 a week, plus an expense account of around $65 a week. A cameraman shoots about 200 feet on an average assignment.

Pancho Villa signs a contract with Harry Aitkin of the Mutual Film Corp. in 1914 for exclusive movie rights to his battles during the Mexican Revolution in exchange for $25,000 and 50 percent of the royalties.

Pathé has 60 offices in Europe and 37 cameramen in North America, with the New Jersey plant processing 15,000 feet of film per week. Pathé offers a daily newsreel service starting on June 8, 1914. The Pathé Daily News *uses nonflammable safety film stock that can be safely sent through the mail.*

"Writing history with lightning," is how President Woodrow Wilson describes the highly controversial and technically brilliant Civil War epic, The Birth of a Nation *by director D. W. Griffith. The film uses techniques of expressive close-ups, flashbacks, and cross-cutting that are still in use today. It is the first film to play in the White House.*

Frank Hurley, the Australian photographer and cinematographer of the Shackleton Antarctic Expedition, chooses a Prestwich as his cine camera. On November 8, after Shackleton orders "abandon ship" of the sinking Endurance, *Hurley dives into the freezing arctic water of the flooded ship to recover the precious photographic glass plates. Later, with Sir Ernest Shackleton, he chooses to keep 120, smashing the approximately 400 remaining plates. The* Endurance *sinks on November 21, 1915, at 68º38.5' S, 52º28' W. Hurley's photography is a lasting testament to their journey.*

When the United States enters World War I, the Committee for Public Information, or CPI, produces its own newsreel, the Official War Review. *William Randolph Hearst sends Joe Hubbell (his favorite cameraman) to Europe in 1917 to help make films for the* Review. *In Great Britain, The War Office takes over the Topical Budget newsreel and runs it as an outlet for official war film, changing its name to the* War Office Official Topical Budget, *then later the* Pictorial News.

Founded in 1917, the Lincoln Motion Picture Company is the first African-American owned studio. Also that year, the University of Wisconsin at Madison begins radio transmission on station 9XM-WHA.

The Akeley camera, designed by explorer Carl Ethan Akeley for the Akeley Camera Company in New York in 1917, is nicknamed the "Pancake" Akeley due to its unique shape. The quick-change internal magazines let an operator reload in fifteen seconds. Director Robert Flaherty takes two Pancakes to Hudson Bay to shoot Nanook of the North. *Aerial cameraman Elmer Dyer uses an Akeley on Howard Hughes's*

Hell's Angels, *and Harry Perry uses the camera for most of the airplane work on* Wings. *The Pancake was still being made in the 1940s.*

In 1920, Philo Taylor Farnsworth, the fourteen-year-old son of an Idaho sharecropper, chalks his concept for the vacuum tube television display on a blackboard in his high school chemistry class.

KDKA Pittsburgh goes on the air in 1920 with the world's first "scheduled" radio broadcast. In 1921, a cine magazine for women, called Eve's Film Review, *is released by Pathé. The Mitchell Standard camera is introduced in 1921 too.*

The first feature film documentary, Robert Flaherty's 1922 Nanook of the North, *explores Inuit Eskimo life. Made one year later, the German film* Life in a Village *is the first "sound" documentary.*

Intended for amateur filmmaking, Kodak introduces 16mm reversal film and the Cine-Kodak 16mm motion picture camera in 1923. From the 1930s on, 16mm is considered a professional medium.

In magazine advertisements, Bell & Howell markets their new Filmo 70A for the "making of personal motion pictures." The ads run in The Saturday Evening Post, National Geographic, Harper's, *and* Country Life. *The camera sells for the exorbitant (for 1923) sum of $180. However, it does come with a lifetime warranty. The camera can shoot for 35 to 40 seconds, at 24 frames per second (fps), before being rewound.*

Based in Geneva, Ukrainian designer Jacques Bogopolsky—"Bolsky"—patents a 35mm cine camera (the 1924 BOL-Cinégraphe) designed for the growing amateur market. Bogopolsky later produced a 16mm camera, the Auto Cine.

The Odessa Steps sequence of the 1925 Battleship Potemkin *by Russian filmmaker Sergei Eisenstein establishes the montage technique.*

In Selfridges department store on Oxford Street, a crowd of Londoners watch the image of a ventriloquist's dummy's head on John Logie Baird's "televisor." Baird's demonstration of the first transmitted moving image takes place on October 30, 1925.

The top newsreel companies in 1926 are Fox Movietone, Paramount, Universal, Warner-Pathé, Hearst Metrotone, and the March of Time *monthly film "magazine."*

Wound by hand and almost indestructible, the Bell & Howell 1926 "Eyemo" is used by newsreel companies around the world.

David Sarnoff of RCA creates the National Broadcasting Network (soon to be known as NBC) in 1926 for national radio broadcasting.

In 1927, Fox's Movietone is the first sound newsreel and 24 fps becomes the motion picture standard as does the Academy aperture of 1.33:1, established by the Academy of Motion Picture Arts and Sciences.

Over 438 miles of telephone line between London and Glasgow, John Logie Baird transmits a television signal. Philo T. Farnsworth's Image Dissector camera tube transmits the first electronic television picture. Philo applies for a patent on electronic television.

Sound comes to the newsreel.

John Logie Baird's Baird Television Development Company, Ltd., makes the first transatlantic television transmission from London to Hartsdale, New York, in 1928.

General Electric begins regular television broadcasting with a 24-line system from a station in Schenectady, New York. The U.S. government issues the first name, "W2XB," to what becomes known as WGY's Television. By the end of the year, more than fifteen stations are licensed for television broadcasting.

William S. Paley takes over the United Independent Broadcasters network and reorganizes it as CBS (the Columbia Broadcasting System) for radio broadcasting.

Felix the Cat *is broadcast in 1928, 1936, and 1937. A paper maché Felix is the first "stand-in" for television. The thirteen-inch figure is placed on a turntable for RCA's initial experimental television transmissions of 60-line pictures.*

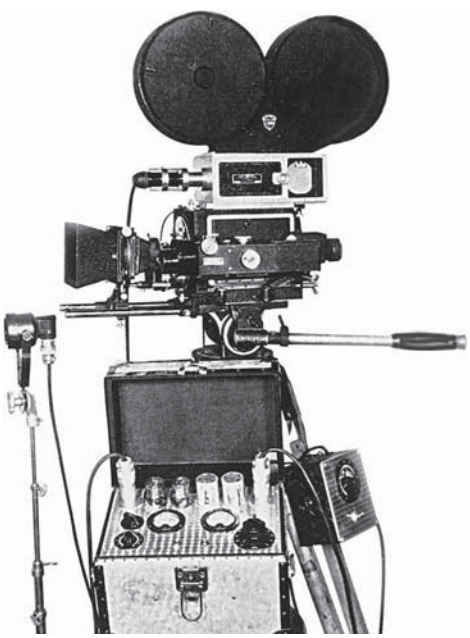
Buster Keaton stars in MGM's 1928 film The Cameraman. *The Prévost Camera, manufactured by the Établissements Lucien Prévost in Paris, plays an important part.*

Man with a Movie Camera, *Soviet director Dziga Vertov's 1928 experimental, avant-garde film, is an excellent example of a "city symphony" documentary. Regarded as "pure" visual cinema, it shows Soviet workers and machines from Moscow, Kiev, and Odessa. The film exhibits radical editing techniques, special visual effects, juxtaposition of images, and double exposures.*

A woman's eyeball is slashed with a razor blade in the opening scene of artists Salvador Dali and Luis Buñuel's surrealist masterpiece, Un Chien Andalou *in 1928.*

The BBC begins test television broadcasting for thirty minutes per day in 1929 using John Baird's 30-line mechanical system.

The all-newsreel Embassy Theater at Broadway and 46th in New York City opens with 544 seats on November. 2, 1929.



The 1930s and 1940s

"Television would soon serve as a theater in every household," writes David Sarnoff for the science page of the New York Times *in 1930. The motion picture studios don't like this idea and begin to develop plans on how to deal with the new medium of television. A large television screen is set up at an RKO theater in Schenectady, New York, as an experiment for Theater Television.*

The Baird Television Development Company made the first television program and the first live transmission of the Epsom Derby for the BBC in 1931.

Berndt-Bach, Inc., begins manufacturing the Auricon professional 16mm sound-on-film camera in Hollywood. The camera is primarily used for newsgathering and virtually all network news departments are using it by 1960. Later, Andy Warhol and Albert Maysles also use Auricons.

The NC (that is, newsreel camera) Mitchell is equipped with single-system sound. The sound is recorded directly on the film.

Technicolor is introduced in 1932 using three black-and-white negatives exposed in the same camera behind different filters.

Dedicated to "straight photographic thought and production," Ansel Adams, Imogen Cunningham, Willard Van Dyke, and Edward Weston form Group f/64.

Henri Cartier-Bresson buys a Leica, then begins his sixty-year career photographing people.

"My work is done. Why wait?" These are the last words written on a suicide note by 77-year-old George Eastman. He shoots himself in the heart with a pistol.

In 1933, Swiss company Paillard introduces the Bolex H16 16mm camera, a design loosely based on Jacques Bogopolsky's Auto Cine camera. The Bolex brand becomes a favorite of independent filmmakers and specialist cinematographers.

Motion picture camera manufacturer Mitchell introduces the "Blimped Newsreel Camera" shown on the previous page in 1934.

The 1935 Newman Sinclair 35mm spring-wound newsreel camera has dual springs that drive 200 feet of film through the camera without stopping. Of the top newsreels in 1935, Paramount is considered the most fair, balanced, and respected of the day. Hearst is the most controversial.

The notorious Czechoslovakian film Extase *(*Ecstasy*) is prohibited from entering the United States in 1935 because it contains nudity and sexual situations—the first time customs laws are used for this purpose.*

Experimental electronic television begins broadcasting in Germany, England, Italy, France, the United States, and Holland.

In Munich, Germany, in 1937, August Arnold and Robert Richter's company introduces the Arriflex 35 professional camera with a groundbreaking continuous through-the-lens viewfinding system.

"Oh, the Humanity!" WLS radio reporter Herb Morrison cries as the German airship Hindenberg *explodes 200 feet above Lakehurst, New Jersey, on May 6, 1937. All the newsreels have cameras rolling for the 34 seconds it takes the doomed ship to fall to earth and become one of the most famous newsreel stories of all time.*

Hearst's newsreel cameraman Wong Hai-Sheng films a scene of a crying baby in the rubble left by the Japanese bombing of South Station in Canton in September 1937. More than 136 million people are said to have seen the image, and it becomes one of the most celebrated symbols of the Far East conflict. The Japanese government is reported to have placed a 50,000-dollar price on Wong's head for filming the scene.

MGM releases Too Hot to Handle, *starring Clark Gable, as a newsreel cameraman, and Myrna Loy in 1938.*

Developed in 1938 by Edward R. Murrow, the 15-minute World Today *program on CBS is the first regular broadcast of daily news on radio.*

Broadcast on W2XB from the 1939 World's Fair in New York, RCA cameras shoot the first president of the United States to appear on television, Franklin D. Roosevelt. The World's Fair introduces the first TV sets (made by RCA) for sale to the American public. The mirror-in-the-lid TRK-12 sells for $600.

Telenews Theater in San Francisco opens September 1 featuring the invasion of Poland. Telenews soon opens thirteen theaters and sets up its own newsreel production company to supply other independent theaters and, later, TV stations. By the 1950s, Telenews provides 90 percent of the television news film in the country.

RCA-NBC goes on the air with "commercial" electronic television on April 30, 1939. The action is not endorsed or blessed by the government, nor will it be until July 1, 1941.

A college baseball game between Columbia and Princeton is the first sports telecast, on May 17, 1939. Princeton wins in the tenth inning, 2 to 1. Also in 1939, the first major league baseball game is televised between the Dodgers and the Reds, at Ebbets Field. That year also sees the first pro football game televised from Ebbets Field.

The first National Television Standards Committee (NTSC) of 168 members issues its standards on March 8, 1941. The television standards are approved by the FCC on April 30, and have remained in effect to the present day. Television would scan at 525 lines and 30 frames per second, composed of 60 fields per second interlaced 2 to 1, in a bandwidth of 6MHz. Electronic (commercial) black-and-white television begins broadcasting in the United States on July 1, 1941.

Starting at 7:56 A.M., on December 7, 1941, in less than three hours, Japanese planes cripple the U.S. Pacific fleet at Pearl Harbor. World War II begins for the United States. During the war, film comes from military cameramen and two pool cameramen from each newsreel company assigned to military theaters. Military censors have to approve all foreign newsreel footage, but there is no direct censorship of the big five U.S. newsreels during the war.

The Office of War Information (OWI) screens newsreel content through a covert organization called the Library of Congress Film Project, which is funded by the Rockefeller Foundation. "Will this picture help to win the war?" The OWI states that Hollywood filmmakers should consider this and several other questions before producing a movie. The War Production Board imposes a $5,000 limit on set construction, and Klieg-lighting for Hollywood premieres is prohibited so that possible enemy planes can't see a target.

Photographers Margaret Bourke-White, Robert Capa, Carl Mydans, and W. Eugene Smith cover the war for Life *magazine.* Churchill's Island *wins Best Documentary—Short Subject at the 1942 Academy Awards.*

Joe Rosenthal shoots the iconic still image, "Raising the Flag on Iwo Jima" in February 1945. The Pulitzer Prize winning photo captures six Marines raising the American flag after the battle for Mount Suribachi. The image is later used as the inspiration for the Marine Corps War Memorial in Washington, D.C.

The day World War II ends, Life *photographer Alfred Eisenstaedt captures a sailor's victory kiss and embrace in Times Square, August 14, 1945. It's one of the most reprinted images in* Life's *history.*

"With this issue is born a voice, one that has been mute much too long," proclaims an editorial on the front page of the first issue of the National Press Photographer *magazine. The National Press Photographers Association (NPPA) is founded in 1946.*

In 1947, Elia Kazan, Robert Lewis, and Cheryl Crawford establish The Actors Studio in New York City as a rehearsal group for professional actors. Later, under Lee Strasberg's leadership, the studio's clients include Marlon Brando, Marilyn Monroe, and James Dean. It's known for advancing the "Method" technique of acting.

The BBC produces its own newsreel in 1948. The television newsreel greatly increases the popularity of television with stories like the live coverage of the coronation in 1953.

Warner Bros.'s coverage of the 1948 Tournament of Roses Parade (Pasadena) and the Rose Bowl is the first to show a color newsreel. Eastman Kodak introduces 35mm tri-acetate safety base film to replace the flammable cellulose nitrate base used in the motion picture industry.

Don Hewitt begins producing the "CBS TV News" with Douglas Edwards in 1948.

The 1950s, 1960s, and 1970s

In 1950, James Dean's first acting job pays thirty dollars for the Pepsi-Cola commercial that launches his career.

"Gort, Klaatu barada niktu" is to become the most famous phrase in science fiction history. The alien words come from Robert E. Wise's 1951 film The Day the Earth Stood Still.

The first television magazine show, See It Now, *directed by Don Hewitt and produced by Fred Friendly, is broadcast coast to coast on November 18, 1951, using newly completed coaxial cable.*

The first practical VTR (video tape recorder) is developed by the AMPEX Corporation in 1951. In 1956, the first commercially feasible VTRs with two-inch tape reels are sold for $50,000.

In 1952, Eastman color film is introduced.

Cinerama (an anagram of the letters in "American"), the wide-screen aspect ratio 2.06:1, is created by three 35mm prints interlocked and projected from three separate projection booths onto a curved screen. How the West Was Won *is the last Cinerama film, in 1962.*

Fifty movie houses in thirty cities are wired together for the Joe Walcott versus Rocky Marciano heavyweight championship fight in September 1952.

Hollywood develops more wide-screen processes like Fox's anamorphic CinemaScope.

The NPPA awards Pathé cameraman Murray Alvey its first "Newsfilm Cameraman of the Year" in 1954. The award later becomes known as the "Ernie Crisp Television News Photographer of the Year."

Edward R. Murrow produces the See It Now *program on Joseph McCarthy on March 9, 1954, and on April 22, the Army-McCarthy hearings are televised live for thirty-six days to an audience of twenty million.*

The BBC introduces live, daily news with newsreaders in 1955.

Driving his new 550 Porsche Spyder, twenty-six-year-old James Dean collides with a 1950 Ford near Cholame, California, and dies. His Best Actor Oscar nominations for East of Eden *and* Giant *are given posthumously in 1955.*

In the late 1950s and early 1960s, the naturalistic, documentary-like cinéma verité (literally meaning "film truth") technique begins to flourish. The technique uses handheld cameras, nonactors, location shoots, and nonintrusive filming. It is also called "direct cinema" in the United States and "free cinema" in the United Kingdom.

"This instrument can teach, it can illuminate; yes, and it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights in a box. There is a great and perhaps decisive battle to be fought against ignorance, intolerance and indifference. This weapon of television could be useful," says Edward R. Murrow at the Chicago RTNDA Convention on October 15, 1958.

In 1961, John F. Kennedy holds the first televised presidential news conference.

Sony debuts the five-inch micro TV-5–303, the world's smallest and lightest television, in 1962. Sony also sells two-inch, open-reel videotape for the PV-100 (the world's first transistor videotape recorder).

AT&T launches Telstar (the first communications satellite) into orbit on July 9, 1962. That year, sex symbol Marilyn Monroe dies of an apparent drug overdose in a Brentwood, California, bungalow.

In 1963, the Ampex consumer VTR can be ordered from the Neiman-Marcus Christmas catalogue for $30,000. Merry Christmas.

Éclair introduces the NPR camera in 1963. The lightweight 16mm camera with quick-changing magazines helps further independent filmmaking and plays a part in the evolution of the cinéma vérité movement.

"The medium is the message,"says Marshall McLuhan in his 1964 book Understanding Media: The Extensions of Man. *McLuhan theorizes that a medium affects the society in which it plays a role, not by the content delivered over the medium but by the characteristics of the medium itself.*

In 1964, California theater owners launch a campaign to ban pay cable TV. The measure (Proposition 15) passes but is later declared unconstitutional.

NBC is the first to produce all of its prime-time programming on color film in 1965. CBS follows the next year and ABC the following season.

Early Bird, the world's first commercial communications satellite, built by Hughes for COMSAT (Communications Satellite Corporation), is launched on April 6, 1965.

Sony introduces the CV-2000 videotape recorder for home use, as well as the first transistor condenser microphone, the C-38, in 1965.

During the mid-1960s, news becomes more important to local stations. Camera crews carry bulky sound cameras and usually an additional small, handheld, silent camera, both loaded with reversal film.

In 1966, WFBM-TV Indianapolis chief photographer Ernie Crisp wins NPPA's coveted "Newsfilm Cameraman of the Year" award. He will become vice president and president of NPPA from 1968 to 1970. Later, NPPA will change the name Newsfilm Cameraman of the Year to "Ernie Crisp Television News Photographer of the Year."

Sony demonstrates the first color home VTR in 1966. In 1967, it introduces the DV-2400, the world's first portable VTR.

On December 26, 1967, Universal Newsreel is the last newsreel, with a running time of six minutes. The 1967 Sony Portapak (out-of-studio video camera and recording system) ushers in the modern era of video.

Charles Kuralt begins his "On the Road" series for the CBS Evening News. *CBS develops "On-Time" the first time code editing system for video.*

Filmed at the Monterey International Pop Festival in California, Monterey Pop *(1968) features Jimi Hendrix, The Who, Janis Joplin, and many others. The concert documentary is a precursor to Michael Wadleigh's* Woodstock *in 1970.*

60 Minutes, *a weekly news magazine/documentary show for CBS, is created and produced by Don Hewitt, a former* Life *magazine reporter.*

General Nguyen Ngoc Loan, South Vietnam's national police chief, executes a Viet Cong officer on February 1, 1968. Eddie Adams' photograph for the Associated Press wins a 1969 Pulitzer Prize. NBC News cameraman Vo Suu shoots the same scene for television.

Jean-Pierre Beauviala establishes Aaton s.a. in 1970 to build an intelligent camera that would be lightweight, rational, and ergonomic. One goal is to give a single reference point to both film and audio takes, recorded on the film stock and on the magnetic audiotape. Beauviala's "cat-on-the-shoulder," 16mm camera project starts winning over camera operators, technicians, and buyers at the BBC, Swedish Television, and then Société Française de Production and French Channel One. In 1971, the first mock-up is shown. The delivery of the first Aaton 7A 16mm camera comes in 1973.

"Houston, Tranquillity Base here. The Eagle has landed," Commander Neil Armstrong reports to mission control on July 20, 1969. Tranquility Base *is on the surface of the moon, The Eagle is the* Apollo 11 *lunar module, and 600 million earthlings watch live television transmissions from the moon 238,857*

miles away. We watch and listen as Armstrong takes man's first step on the moon. "One small step for man—one giant leap for mankind."

The Maysles brothers, Albert and David, shoot the 1969 Rolling Stones tour and the free concert at Altamont Speedway. Their 1970 documentary, Gimme Shelter, *chronicles the tour, the Altamont concert, and the tragic stabbing of an audience member by Hells Angels security guards. Sony introduces the VCR (video cassette recorder).*

A small group of Canadian filmmakers and entrepreneurs design a new system for very large screen productions. Using 70mm film projected onto 80' x 100' screens, their IMAX (Image Maximization) motion picture projection system will revolutionize giant-screen cinema. The IMAX film Tiger Child *premiers at the Fuji Group Pavilion, EXPO '70, in Osaka, Japan.*

Cinema Products introduces the CP-16 camera in 1971. Designed by company founder Ed DiGiulio, (former vice president of engineering at Mitchell Camera), the small, lightweight camera is an instant hit and becomes a mainstay for television news and documentaries. DiGiulio earns Academy citations for technical achievement by developing crystal-control motors for film cameras. His motors eliminate the need for a sync cable between the camera and the sound recorder.

Home Box Office (HBO) sends its first cable television programming to 365 subscribers in Wilkes-Barre, Pensylvania, in 1972 and is the first pay-TV service for cable.

Sony is the first Japanese company to open a U.S. plant to manufacture Trinitron televisions in San Diego. The new U-Matic line of video cassette recorders is introduced.

In 1974, CBS vice president Joseph Flaherty asks Sony to develop a U-Matic model specifically for commercial broadcasting with the same image quality as 16mm film.

The RCA TK-76 19-pound portable camera is introduced at NAB 1976. It requires a separate recorder to record the images. By 1980, more than 2,000 cameras are sold worldwide to news organizations and production companies.

Sony brings its broadcast quality U-Matic system, the Broadcasting Video (BV) series, online. The system incorporates shooting, recording, and editing functions and heralds a new method of news reporting dubbed ENG (electronic news gathering) by Sony's Masahiko Morizono and Joseph Flaherty.

The half-inch Video Home System (VHS) is developed by JVC to compete with Sony's Betamax system. In 1977, RCA begins selling the first VHS video cassette recorders in the United States.

The 1980s and 1990s

Weighing only 2.8 pounds, the first commercial color video camera utilizing a completely solid state image sensor, called a charge-coupled device (CCD), is marketed by Sony in 1980. It is the smallest camera on the market. With only a 3.7-inch diagonal picture, the KV-4000 is the smallest Trinitron color TV available.

The first prototype of a single-unit compact color video camera–cassette recorder system is announced by Sony.

At NAB 1981, the first all-in-one camera/recorder ENG systems are exhibited. By 1986, Ampex, Thomson, and Bosch sign manufacturing and marketing agreements with Sony to produce Betacam products.

In 1987, the SMPTE working group on HDTV approves the 1125/60 standards document. The Japanese demonstrate an analog, high-definition television system called MUSE.

In 1989, the American National Standards Institute (ANSI) gives its final approval to the 1125/60 HDTV production standard.

The drama of Tiananmen Square, China, in 1989 is captured by the media in the scene of a young man standing in front of a line of tanks, unwilling to move.

General Instrument's Video Cipher division announces a digital high-definition system in 1990.

Televisions around the world show green night-scope images sent live from Baghdad as U.S. warplanes bomb the city and Iraqi antiaircraft guns fire into the night sky. On January 16, 1991, Operation Desert Storm's coalition forces, under the command of U.S. General Norman Schwarzkopf, attack Iraq in response to that country's invasion of Kuwait. After four days of fighting, the United States and allied troops halt their attack.

Televisions with built-in closed-caption display capabilities are introduced in the United States in 1991. In 1993, "wide-screen" 16:9 aspect ratio television sets are introduced in the United States.

Replacing the old 1934 laws, Congress passes the Telecommunications Act of 1995. The "Computer Chronicles" is the first television program delivered via the Internet in 1995.

In 1996, there are more than 100,000 World Wide Web sites, and that number is growing fast. There are 45 million Internet users, including 30 million in the United States. Search Web site Yahoo goes public; in three years, its market value will be seventy billion dollars. Mainichi Shinbum, *a Japanese newspaper, delivers its editions online.*

The Federal Communications Commission (FCC) approves a digital HDTV standard in 1996. The first Web logs, or "blogs," appear on the Internet in 1997. Streaming audio and video content is also starting to show up on the Web.

In 1998, 1,280 TV stations and 3,250 newspapers have online Web sites. The first desktop computer feature film is The Last Broadcast. *CBS broadcasts the first HDTV-format NFL game.*

KOMO 4 News Seattle is the first to broadcast HDTV daily local news in 1999.

The Twenty-first Century Begins

In 2000, Sony's HDW-F900 Camcorder with digital 24-frame progressive high definition is used to shoot Star Wars: Episode II.

September. 11, 2001. 9/11. On that morning, America and the world watch their televisions as terrorists hijack domestic airliners and fly two of them into the World Trade Center, one into the Pentagon, and crash a fourth—United 93—into a Pennsylvania field. Evan Fairbanks's camera is rolling on a shot for a documentary about Trinity Church when the planes crash into the towers. His video is shown that day by Peter Jennings, later by Connie Chung, and the next morning on Good Morning America. *Two months later, the 25-minute video is shown as part of an exhibition at the New York Historical Society, where a critic calls it "a Zapruder film for our time."*

The controversial Fahrenheit 9/11 *wins the top prize, the Palme D'Or, at the Cannes 2004 Film Festival. Michael Moore's political film breaks the record for the highest opening weekend earnings for a documentary.*

The March of the Penguins *(2005) costs $8 million to make and earns almost $78 million. It's the second-highest grossing for a non-IMAX documentary.*

In 2005, KUSA-TV in Denver, wins NPPA Station of the Year for the tenth time. The photography staff at KUSA has brought home this award in 1977, 1984, 1986, 1987, 1990, 1992, 1997, 1998, and 2000.

This book gets approval from Focal Press, and the advance check arrives December 17, 2005.

Behind the Scenes

On January 1, 2006, production on this book begins. The idea was always to interview the best television photojournalists from around the world. Timing is everything, and the latest NPPA Station of the Year and Photographer of the Year are both from the last television station I worked at: KUSA-TV in Denver. I spent many years there and still have friends throughout the station and in that area.

The beginning of this book will be easy; some of the best guys in the world are old friends, and one trip lets me get through four or five interviews. My first interview, at which I am able to work out my interviewing methods, is with a very patient John DeTarsio in San Diego, where I live now. Later, I interview Greg Stickney as well as Mitch Wagenberg on assignment in San Diego.

Aside from a snow storm during my Denver trip, the interviews get done without a hitch. I use a small digital Sony voice recorder and then immediately back everything up to a laptop, then burn a CD, and send the file off for transcription. If I can't get promotion stills, I shoot head shots with a tiny Canon digital camera.

My next journey is to London for interviews with photographers from the BBC and Reuters. It's a wonderful experience, and the guys I've only known through e-mails and an occasional phone call turn out to be great.

The feel of the book is starting to develop nicely just as travel funds evaporate. The book advance is gone, and I still have a few more interviews to do. After a few weeks of feeling like I might not get to interview the rest of the photographers face to face, a slightly brilliant idea hits me. Web cams. I buy two Web cams, made by Logitech, and send one to Heidi McGuire in Greensboro, North Carolina. With a few technical glitches, we get through our interview, and, with a little more experimentation, this method keeps improving. I do Web cam interviews from Kansas City, Washington, D.C., Seattle, and Cyprus. In the end, a large portion of the content in the book is gathered face to face. The rest requires many phone calls and e-mails to flesh out the stories.

Now, after more than a year of work, countless interviews, phone calls, cups of coffee, sleepless nights, CD-ROMs, DVDs, reference books, and an eternity on the Internet: Please enjoy the stories, ideas, and work created by the best television photojournalists in the world.

CHAPTER 2

John DeTarsio

A Storyteller's Story

John DeTarsio

Freelance Photographer

CBS News *48 Hours* and *60 Minutes*, *Dateline NBC*, ABC News *20/20* and *Primetime Live*
NPPA Ernie Crisp Television News Photographer of the Year, 1994

It is almost sunset as muddy tires under a grey-green transport van pull to a stop just a few minutes outside Beslan Airport, North Ossetia, Russia, where freelance television photographer John DeTarsio and crew have spent more than an hour gathering up their gear. Beslan is at the foot of the Caucus mountain range, and Hell and gone from anywhere—the flight in was grueling.

The well-worn van has seen many miles; so has the driver. They're etched on his face like the scratches on the hood. Setting the brake, he lights a cigarette; burnt sulfur fills the cabin, and at the end of a long exhale, "Mi zdes." Even with the windows cracked, the blue smoke stings. Through dirty windows the day's withering light illuminates what seems to be fields of flowers. It's beautiful, but it doesn't look like the hotel. DeTarsio's Russian translator relays the driver's words, "We're here." His eyes in the rearview mirror tell all before the translator finishes the driver's next phrase, "Mi u mogyili." A pause. The translation ends: "We're at the gravesite." Slowly, and under closer inspection, the flowers' setting is revealed. Vivid colors, alive in the day's last glow, placed on gravestones, hundreds of gravestones, where just a few weeks before had been a field where children played. The driver stops the engine; DeTarsio and the crew get out. People are at the gravesite, laying flowers, walking from marker to marker. Silence, complete silence.

The transport van waits as DeTarsio surveys the site, making mental notes, getting a sense or feel for the place. Not about to invade the scene with crew and large news camera, he snaps a few images

EQUIPMENT

Sony BVW-D600 Betacam
Fujinon A15X8 BEVM-28
Fujinon 4.8 wide-angle lens
Fish-eye lens
Chrosziel matte box
Arri 100-, 200-, and 400-W lights
ETC 750 Source four-stage lights with 50-degree lenses
200-, 400-, 800-W HMIs
DIVA 200 and 400 Kino Flo lights
Chimera soft bags with diffusion
16 wireless microphones
Shotgun, Schepps, and stick microphones
Mini jib with 6-foot extension
MicroDolly

A

B

A. Gravesite in Beslan.

B. Remains of Beslan School Number One.

on a small personal camera. Like a writer takes notes, DeTarsio uses the lens as a digital scratch pad. Thoughts to keep for future reference.

On September 3, 2004, Russian military forces stormed Beslan School Number One. Chechen terrorists had held children, teachers, and parents hostage since their siege began three days before, early on September 1.

September 1 is the first day of school in this small town of 30,000. It's called "The Day of Knowledge" and is a big holiday, a day of celebration for the children. They bring colorful balloons and flowers as gifts for the teachers. Children and parents come to class together on this hot, late-summer day. Then, suddenly, the cheerful laughs evaporate in an instant as thirty-two terrorists attack the school at around 9:30 A.M., firing automatic weapons and herding 1,200 parents, teachers, and children into the gymnasium. "For three days, time is frozen," says Dariya Fadeeva, a sixteen-year-old girl from Beslan.

In the sweltering heat of the siege, hostages were not allowed water. The children shared flower petals as food. Small hands offering a token of nourishment when there was nothing else. Humanity is simple this way. The terrorists, wired on drugs to keep them awake, paced the school like caged animals.

On the third day, the terrorists began firing on hostages who were attempting to flee. Russian Spetznats *teams stormed the school. Explosions echoed through the compound as the terrorists detonated bombs wired to the gymnasium and themselves, taking with them the children of Beslan and laying waste the hearts of the Beslan community.*

Of the 1,200 hostages, 331 died: 186 of those were children. More than 700 were wounded, and the event left 26 children orphans.

This Is John DeTarsio's Story, and This Is Where He Begins . . .

There are three things I want to accomplish at the start of every story. One, I want to get a sense of place. Two, I want to give an idea of who the characters are, and, three, give an idea of what the journey is going to be. Those things make for a strong story beginning and, if told well, will engage the curiosity of the viewer.

The cemetery seemed as big as two football fields, grave after grave after grave. It was a lesson for us. Some people had built little school desks right next to the graves with photos of the children placed nearby. Most of the people had brought bottles of water and soda, because the

children were so dehydrated in their last hours. So, symbolically, they brought them water. Row after row of kids who had died in this terrorist act. It was a great way to start to understand the story. I wanted to walk through the scene and find the little things, the kind of shots that express emotion. I'll look for someone bowing his or her head quietly. I know the story is going to be very still because what we'll be shooting is only what's left in this town. The main event is over. There is a gutted-out building and a graveyard and some people to interview. When we arrived, we realized it's not a rich community; it's a very hardworking community. They're people just like us, and these people feel the pain just like us and they're living through this. . . . I started to think about my own kids' schools and something just like this happening. Even the ones that lived now have to live with the fact that half of their friends are gone, are dead. When I walked into this cemetery and, seeing the small town they're in, the enormity of it just hit like a ton of bricks.

So, when I went to Russia for a three-week shoot—visually, I already knew some of the building blocks that would tug the heartstrings. But, when I'm working for the major networks, much of the agenda is already set up. There's a field producer who's already been in place for weeks. He knows who the English speakers are, he has pre-interviewed characters, and he has lined up many of the locations to shoot. When I'm working on a program with an approximate budget of $250,000, I am only one part of a huge project, just one piece of the pie. However, it is a joy to recognize other kindred spirits on your quest for story and good TV. Visionaries like *48 Hours'* executive producer Susan Zirinsky and producer Joe Halderman keep this business exciting—to say the least!

But there are a couple of decisions I made that first day in Russia: The interviews were going to be very dark and basic. I wasn't going to do a lot of fancy lighting. I was going to make it very hard and cold visually. I knew how that would work next to the incredible behind-the-scenes footage *48 Hours* had acquired.

A good story is much more than just information, assembled in order, packaged around commercial slots and show bumpers. To give it life, it needs a pulse, it needs elements the audience can relate to if they're going to follow you on your journey. We needed to bring the story to life. To show that life goes on, and give a sense of place to this horrific story. To do this, I'm looking for shots of someone getting a hair cut, a local soccer match, two people holding hands. I'm looking for shots to show these people are just like anyone else. These are the building blocks that will inject emotion into the story. *Empathy is the bond that keeps the viewer connected to the soul of the story.*

Visual storytelling means taking a lot of pictures that are not necessarily specific to the story but give detail and put flesh on the bones. The little doll on the windowsill had nothing to do with the story *(see next page)*, but it was something we saw as we went by. It was a visual reminder of the children left behind—alone. The little kids playing soccer in the courtyard had nothing to do with the school, but it was important for us to get the sense of life.

To give a personal sense of what happened in the school house, to bring it alive and give a feeling of being

Fadeeva's interview is dark, with basic lighting.

The doll in the window is used as a visual reminder.

there, a handheld POV (point-of-view) shot is an effective technique. I'm using wide angles inside the building, running through it, walking through it, spinning around to show havoc and try and bring some life to the images. Shots of just the outside of the building are not really going to do anything. I'm looking for a shot of the wall with the clouds going by and rolling for five minutes to time-lapse the shot to show the passage of time and the building connected together. I'm looking for anything to bring some movement into what was now very still.

The big challenge when you are shooting a story that's already over is bringing it back to life. I tried to use variety in my shots, so when they got back to the editing room they would have a lot to work with. I shot the school building every way I could. For example, I got compression shots of bullet holes in the walls of the building, then stuck the camera on the ground next to a bullet hole on a wide-angle lens so you could feel how deep the bullet hole was. I shot time-lapse shots in the day, morning, and night. *A compression shot is created with a tele-photo lens—where elements in the scene are stacked, usually with a shallow depth of field. A wide lens extenuates depth. Time-lapse shots add motion to still buildings as clouds and sun rays move against the solid structure. Time-lapse conveys a passage of time and the lasting qualities of a structure against the elements.*

I tried to bring movement and intensity to the bland picture of a gutted-out building. I do have this rule of variety. I try and switch angles and focal lengths as much as possible. I switch lenses all the time when I shoot B-roll. *B-roll is an old film term. The A-roll is the primary content roll; it carries the reporter's stand-ups, narration track, and interviews. The B-roll has all the shots that illustrate that content. The term* B-roll *will appear and be discussed throughout the book.*

When I'm shooting and moving, it's always with a wide-angle lens. We did a walking interview with reporter Peter Van Sant and Fadecva Dariya, our main character, walking down the street as she was showing us the town. Again, adding more movement to what could have been a very "still" shot. I shoot with a wide-angle lens, and all the camera movement happens with my feet and body. We were interviewing her, but for a while she was just walking us through what was going on and not really aware of the camera. As she pointed out where people gather, I was whipping my camera around to show some urgency, to bring us back into that movement.

Fadeeva and reporter Van Sant in a walking interview.

One of my favorite techniques that I would use in local news works very well at *48 Hours,* who always wants real-life moments. The goal is to capture footage that feels genuine and real . . . not affected by the TV camera. But gathering those real-life moments is tough when the entire crew is watching every move of the character. By putting a wireless microphone on the character and then interacting one on one (photographer and character), it helps the characters let their guard down and relate to the photographer behind the camera rather than performing for the camera. It's a great way to capture people being human beings and not actors. *When a scene's power and truth are strong enough, the scene remains etched in the viewer's mind. It becomes a memory that connects the story to the emotions of the viewer. The lasting effect is knowledge.*

The most graphic shot was actually an interview with the vice principal of the school. The whole interview was in Russian, and in two whole hours no one moved; we were all so still. It was so quiet you could hear the tape turning in the camera. She was telling us her story, and we were all intrigued. I was watching her face as she spoke, watching her emotions; then a moment later the translator would speak in English. She got to a part about how they couldn't get up for the restroom, and they weren't allowed a drop of water, and people were passing out and falling down. She described how it got so bad; she told us the story about day two when they were totally dehydrated.

This woman said she started to drink her own urine and her son said, "Mommy, save some for me." It took every ounce of strength to not sob aloud like a slobbering idiot. We all started crying, she started crying, even Producer Joe Halderman was quietly crying. That was the low point; it was the saddest thing. The interview ended, and everyone in the room went over and hugged her. She was our hero.

The CBS 48 Hours *program "Hostage" was assembled with the images and story content gathered by John DeTarsio and the crew of producers who went to Beslan, Russia. Film techniques of flashbacks, time lapse, and a haunting a capella musical score enhance the storyline. The show combines DeTarsio's work with Russian video of the siege when it happened, still images from a Russian photojournalist, actual video shot by the terrorists, and interviews from people who survived. The show is punctuated with the information, data, and hard news content that surround the event (see more photos on next page). Of all the techniques used to bring this story to life, the most powerful is silence.*

During the interviews, when the people of Beslan would pause and gather their thoughts or reflect on what they had just said, the interviewer did not jump in with the next question to fill the void; DeTarsio did not cut the camera. They just let the time hang there, quietly waiting for the right time to resume—rolling. The producers and editors bravely let these pauses play out on screen, silence—dead airspace, perfect. We know the hearts of these people more by the silence than by the recounting of events. Throughout the hour we don't know who of their friends and family has survived as they tell their stories about three days in September. The interviews are the string that holds the whole show together and takes viewers on their journey as we wait with them to discover who has survived.

I expected to go into the story as a journalist, and I was an emotional wreck the whole time I was there, and all I wanted to do was go home. But once I got home it didn't end and one night as I was crying on my couch I realized the story was what had me so depressed. I thought it was the bad accommodations, the bad food, or the fact that I might possibly have to miss Thanksgiving at home. But it was the story and the fact that these people lost their loved ones. It got to me. I was depressed by this story, that all these people had lost their loved ones, and kids had lost all of their friends.

A. DeTarsio and Van Sant interview a Russian still photographer who captured the events as they unfolded.

B. Some *48 Hours* "Hostage" footage came from Russian sources. This shot shows a hostage being raced to the hospital.

C. The terrorists themselves shot some of the footage used in the *48 Hours* "Hostage" program with a camera taken from a hostage. The footage was found in a ruined camera in the school's remains.

The Storyteller's Backstory

How do you end up here, back home, crying on your couch—remembering a journey to some far-off land? What does it take to work at this level? Who are the best television news photographers? There were lessons in the Beslan story. The ones who go farthest in their careers are the ones who have a heart—have a lot of passion, who understand human nature and emotions—because that's going give you the instinct to understand where the energy of the story is.

If I come into an office to do an interview with someone I don't know, I look around the room before the interview and maybe I see a picture on the shelf and I say, "Hey, it looks like you have a nice family. How old are your kids?" Just from genuine curiosity. That's the kind of thing that's going to make the person I'm shooting with be more real with me. I would say a photographer that connects with other people and can make other people feel comfortable is probably going to be the most successful in an overall sense. Of course, that photographer is not going to go very far if he doesn't understand the basic building blocks. To be technically the best, you have to study composition, have a natural eye for composition, and understand sequencing.

There are many names that are applied to the men and women who shoot television news: photographer, photog, videographer, photojournalist, television news photographer, shooter, cameraman, camerawoman, cameraperson, camera-op. Not all are considered kind terms or even accurately describe the job. I'm a freelance television photographer. I think the intonation of "cameraperson" feels like an operator. "Shooter" seems like a brainless kind of a thing. I don't mean to be pretentious about it; I'm not a television visual artist or video interpreter, but I'm a photographer. To me a photographer is a

photographer, not a camera operator. *A photographer is someone who "writes with light." It's the writing part that speaks to the idea of storytelling, and it's the storytelling part that separates the best from the rest. The term "photojournalist" more specifically refers to writing news with light.*

Why work as a TV news photographer? It's one really rewarding life. That's plain and simple. Whatever town you are in, you are right there. You are watching news and life go by; you get to witness history as it happens. I used to think of myself as a historian. Maybe something ends up in a time capsule a thousand years from now and they pull it up and they are going to see that right now our world has real living, breathing, loving people, and not a whole bunch of suits going to press conferences.

My reason for going into television was because I like people. I like being around people. I like different challenges every day, different jobs every day, different things to do every day, meeting different people every day. Getting to know a little about something different every day. If you like new experiences, meeting new people, and the responsibility that comes along with all that, then that's why you become a television news photographer. Oh, and you should also like taking pictures.

There are many avenues into shooting television news. Everyone has that split in the road when they know it's the turn they're supposed to make. I was at a rugby match in college, and some local news guy came up and took some pictures of the rugby match. I just thought, wow, he gets to go and stand on the side lines, take a few highlights, shoot some pictures, move on to the next thing—what an exciting life! He's always on the go; he's a cowboy. I want to be a cowboy. It was the moment when I realized that's what I wanted to do.

Of course, you don't just step into the top slot the day you decide this is your calling. There's lots of hard work ahead. My first job out of college was at KOLD-TV, Channel 13, in Tucson, Arizona, making $11,000 a year working as a studio camera operator. *A studio camera operator works and stays in the studio and shoots what the director from a control booth tells him or her to shoot. More often than not it's a head shot of an anchor reading the teleprompter. A teleprompter displays the words the news anchor is reading right over the lens, so it looks like he's actually talking to the audience. Many of these studio camera jobs have been outsourced to robots—not cowboys.*

When I had some free time, I used to take pieces from the news, raw footage from stories the night before and the script, and I taught myself how to edit. I was able to exploit that and get a job as an editor; that was my way into becoming a news photographer. It is really hard to get any real hands-on experience in television news, yet everybody wants you to have hands-on experience.

A Really Bad Day

So your time has come; you get to step into the saddle; everyone will be able to watch your creation, scrutinize it for the rest of your career. Pressure, there's no pressure. Slap the reins, kick in your spurs, what could go wrong? The most disastrous day of my life. It was in the early 1980s, and I was an editor for less than a week when two photographers came up to me and said, "Here's your chance. We need a photographer, follow me." They took me to a locker, gave me a camera, showed me a car, and sent me on my way.

My assignment that day was with an RCA TK76 camera that didn't even have a shoulder brace, and I was carrying a thirty-pound recording deck tied to the camera. The TK76 was powered by a big belt I wore around my waist. My assignment was to cover a grand opening of

a historical museum. I got to the shoot, and I couldn't even get the camera turned on. I had to get someone from another station to come over and look at it. Basically, the contrast and brightness in the viewfinder were off. He went back, and I could see them all kind of giggling at me, the new guy. Same thing with the deck. I couldn't get it turned on and had to call them over. They came over and discovered I didn't have a battery in the deck. It was really embarrassing.

Then the shoot started. There were stagecoaches bringing dignitaries to do a press conference. I'm trying to shoot as the stagecoaches come in, and all the other guys pop their cameras off their tripods, go follow the people, running into the building, and I couldn't even get the camera off the tripod. I go inside, and all the media is on one side of the wall and I'm wondering why they are all crowded up next to each other. At that time I didn't realize that you don't shoot people in front of a window. So all I got out of the mayor's speech was a black silhouette against the window. That day went on, and at the end all they got out of my entire experience there was a freeze frame that appeared over the shoulder of the reporter. And it was green because I didn't hit the proper switch to set the white balance. I went home and I cried. My humble beginnings.

Life Goes On . . .

So you dust yourself off, and you hop right back on the horse. I remember a defining moment. There was this organization, the NPPA [*National Press Photographers Association*] that had quarterly video clip contests. I wasn't involved at that time, but someone at the station had gotten some regional quarterly winners. There was a story from San Francisco that was about messengers who rode bicycles through the town. The photography and the story were so amazing. I'd never seen anything like it. I watched the story maybe 500 times, frame by frame. It just intrigued me and inspired me, and that's where the road started to turn. That's where it sparked, and slowly through the next decade or so I built towards that kind of work and found my potential and who I was.

'Til this day, I'm still discovering who I am and what I can do. I'm always thinking, "God, I hope I don't screw this up." When I won National Press Photographer of the Year, I remember I didn't want anyone to see my reel because I was afraid anyone who watched would discover I was a fraud and know that I didn't deserve the award. There's a little insight into my sick mind.

Once I felt like I had reached my peak in Tucson, I sent out a lot of résumés, but really kept hitting the San Diego market hard. I wanted to be there so badly I actually accepted a camera assistant job from KFMB Channel 8, the CBS affiliate in San Diego, where my job was carrying the deck and microphone. But I knew I'd move my way up. I borrowed a camera on my days off. I'd open up the phone book and find something like a horse shoer and I'd go out and shoot the guy putting shoes on this horse. Then I'd take the images and use music to make a photo essay—I used to call these photo essays my "Maker" series. I would give them to the executive producer; he would air them, and next thing I knew I was promoted to news photographer.

A year or two later, I was courted by KNSD, the NBC affiliate in town. There I headed up the photography department, and my little photo essays turned into real stories told with natural sound. Eventually, I realized using my voice to fill in the blanks wasn't so hard. The real hard work was gathering the right pictures and piecing them together in story form. From there, it seemed a natural leap to become a reporter as well as a photographer. I kept moving up until they made me an executive producer.