TO SEE AND BE SEEN

THE ENVIRONMENTS,
INTERACTIONS AND IDENTITIES
BEHIND NEWS IMAGES

T. J. THOMSON

Advance Praise

"Visual communications enthusiasts rejoice! T.J. Thomson masterfully synthesizes various facets of the prism of the news visual, from its production, to the role of the visual in everyday life, and to the experiences of those visually depicted in the news. The fusion of well-established literature and newly-published research explored from myriad ontological perspectives makes To See and Be Seen an invaluable overview of the visual newsscape."

— **Tara Marie Mortensen**, *Associate Professor, College of Information and Communications, University of South Carolina*

"T.J. Thomson offers a rare look at the relationship between photojournalists and their subjects. Using a series of carefully crafted, grounded studies, To See and Be Seen covers terrain rich in theoretical and ethical significance. Brimming with detail and empathy, Thomson's research is valuable to anyone wishing to understand the human impact of visual journalism in the digital era."

— **Mary Angela Bock**, *Associate Professor, School of Journalism, University of Texas at Austin*

Advance Praise *(cont.)*

"Visual news has been part of our life arguably since the Stone Age. But until recently there has been relatively little empirical research into the production and consumption of visual journalism. To See and Be Seen: The Environments, Interactions and Identities Behind News Images by T.J. Thomson admirably fills a gap in exploring existing understanding of how journalists and audiences create images. As revealing and important in this era of instant "live-from-ground-zero" coverage, social media and reality-bending avatars is Thomson's study of emotional dynamics of personality and location in news, from the point of view of both the industrial professional and independent creator. To See and Be Seen is that rare book that will satisfy scholars, students, and practitioners alike."

— David D. Perlmutter,
Dean and Professor of the College of Media & Communication, Texas Tech University, and author of 'Blogwars: The New Political Battleground'

"T.J. Thomson writes a refreshing book about photography and how visual journalists' mediated visuals are made. He focuses on the historical context of images, while more importantly giving voice to image creators through both context and case studies. As a former photo editor turned visual scholar, Thomson is sensitive to the aesthetics of photojournalism while aiming to help readers and viewers go beyond simple picture making. This book is worth the read!"

— Gabriel Tate, *Assistant Professor, Department of Journalism, Ball State University*

To See and Be Seen

The Environments, Interactions and Identities behind News Images

T. J. Thomson

Contents

Figures

Preface

Despite being inundated in streams of visual data and letting such cues inform our perceptions and behavior, we know surprisingly little about how mediated visuals are made, especially in journalistic contexts where representations are long-lasting and where repercussions can be dramatic. Save for isolated and often retrospective analyses on "iconic" images (often many years after they were created), we rarely, if ever, grasp an as-it-unfolds understanding of the environment in which such everyday images are made, the exchange (if one occurred) between the camera-wielding observer and the observed,[1] the identities of both parties, and how they react to the representations that are created, even though such factors can markedly impact the depiction and subsequent reception, at both individual and collective levels.

Images are opaque and so we sometimes infer meaning where none exists or where none was intended. This polysemy makes them useful and relevant in a wide and diverse array of circumstances but it also is troubling, considering we often act on mediated information and let it inform our decision-making, influence our voting behavior, and alter the fabric of our social enterprise. In this age where billions of images are made each day and where manipulations both indirect and direct are increasingly possible, issues of provenance, production, and intent are more critical than ever and deserve further attention and systematic study.

Scholars of the visual argue that images are a product of time and place, the creator's literal and conceptual point of view, the agency of the observed, characteristics of the depiction device, and characteristics of light itself.[2] This book considers each of these facets as well as other relevant factors such as identity; intent and motivation (on both the part of the observer and observed); cultural, ideological, and institutional influences; and expectations, influenced through past experience with observing and being observed

(in both journalistic and more casual everyday contexts, such as how one represents oneself visually on social media).

This book privileges the visual as it is humanity's most dominant sense and it also focuses heavily, though not exclusively, on still images as they are the foundational components of other types of visual media, such as video and animation, and because of their ubiquity, relevance, and evocative potential. Each chapter opens with one or more case studies that are followed by a historicized account of the issues the chapter deals with. Such history is supplemented by insights from the scholarly literature and is often accompanied by empirical insights from my own fieldwork, observations, interviews, and analyses. More specifically, this book benefits from the synthesis of more than ten empirical or conceptual projects (several of which are published here for the first time) that were developed over six years. These projects include insights from 193 individuals (including 75 social media users and everyday individuals); 68 visual journalists and photo editors in more than 8 countries; 50 people who were visually documented by journalists for the news; analysis of more than 4,500 images (3,989 news images and 559 profile pictures and personal snapshots); and observations from more than 100 events covered by visual journalists.

Before progressing further, key concepts and definitions will be briefly unpacked, as follows:

- *Visual journalism* has been conceptualized as "the visual pursuit of objective reality as we now know it—the most accurate recording of life events a human being can make" situated within subjective experience and "often with a clear point of view."[3] Key motivations of those involved with it include (1) bearing witness to history, (2) promoting social reform, and (3) embracing humanism.[4]
- *Visual journalist* is operationalized as a person hired by an organization in an ongoing or freelance capacity, or one who is working speculatively, who uses lens-based equipment to document newsworthy topics for broader public viewing. Newsworthy topics include those with one or more news values, such as timeliness, prominence, proximity, conflict, impact, and novelty. Differentiating points between visual journalists and other types of visual media creators (including citizen journalists or bystanders) are the professional aspects of the work, including ethical obligations and journalistic routines and norms that are learned through organizational exposure and/or through formal training or schooling.
- *Identity* has been described as the role that humans play depending on the audience and other contextual factors and thus is a fluid and multifaceted concept. Identity can be defined in terms of the self and one's personal characteristics, life experiences, and so forth, or in terms of a broader collective.

These two types of identity are interpersonal and collective and are explored at the beginning of chapter 3: "Self and Society." Identity and (visual) self-representation are closely linked concepts and include performative elements as well as more stable or innate elements. Self-presentation is easier to manage in interpersonal situations but becomes increasingly difficult in virtual spaces where multiple and sometimes quite distinct audiences can exist on the same platform.

- A long history of empirical work in both social and more structured environments indicates that people change their behavior under observation. Such *reactivity* involves reputation, self-esteem, identity, freedom, and social order. Because of visual media's potential permanence, especially in a journalistic context, people are likely more reactive during journalistic encounters than they are during more casual imaging encounters where they have more freedom, autonomy, and control.

- *Interaction* refers to the encounter between the observer and the observed. It does not necessarily have to include dialogue or any sort of overt exchange (verbal or nonverbal) between the parties. Sometimes the interaction can include, for example, awareness by only a single party, such as a camera operator who captures another's likeness without the other party's awareness or consent.

- *Environment* includes not only the natural and built landscape but also the sociopolitical, cultural, and historical environments through which people observe and are observed. Thus, environment considers both the physical and the social landscapes of the scene where the interactions take place.

- *Image/imaged* primarily, though not exclusively, refers to camera-created visuals and the act of being visually documented whether by still or motion cameras. The image is the product of a semi-objective recording device operated by a subjective entity. Owing to the differences between cameras/lenses and human vision, images are sometimes more and sometimes less than that which can be observed through naked sight. Images that represent intrinsically carry risk, involve vulnerability, and can be contentious depending on who controls that which is depicted and how it is framed or presented.

This work focuses on the environments, interactions, and identities behind news images. As such, after providing in chapter 1 the context on how visual representation has evolved from a historical and technological perspective and our relationship to the visual, it considers in chapter 2 how space and place are defined and it unpacks the social and cultural dimensions of space, such as how they can be gendered, raced, classed, and sexualized, owned, modified, and controlled for reasons such as privacy, security, safety, accessibility, or political purposes. Each of these attributes, in addition to the

physical features of the environment itself, can have an impact on the interactions that occur in the space and the visuals that are produced in it.

Identity is highlighted first in chapter 3, and this chapter discusses the relationship between individual identity attributes and identity that is derived from larger cultural or affinity groups. It provides perspectives on how various identities, both individual and collective, have been visually represented over time and also provides perspectives from everyday individuals on their perceptions toward cameras and those who wield them casually and for more specific journalistic uses. This is important insight to have as about 85 percent of the 3.2 billion images created daily are made by smartphone- or tablet-wielding users. As production and distribution becomes increasingly democratized, integrating insights from everyday users about cameras and those who use them is important to understand the larger questions about visual representation in legacy media and how it might compare to more casual representation in new media contexts.

To this end, chapter 4 sheds light on how people represent themselves through their profile pictures across platforms. It continues the discussion of identity and autonomy started in chapter 3 and also provides insights on how people perform for those watching them and the tension this can cause in a journalistic context where accuracy and truth are prized. Phenomenology and the nature of perception are introduced here and guide the approach to understanding how people react to being visually documented for the news media that further chapters address. Emotional involvement and how it can affect perception and interactions is also addressed in this chapter.

Chapter 5 lays out the foundation for a deep dive into the experience of being in front of a journalist's lens by establishing the expectations that people have of visual journalists and illuminating how visual journalism is produced in the contemporary era in democratic contexts. These have marked impacts on the interactions that occur between journalists and those they cover, regardless of whether these interactions include dialogue or even awareness of all parties. Such influences include, on the side of journalists, the organizational or professional norms and ethical obligations that they are obligated to follow and, on the journalists' subjects' side, pop culture depictions of journalists or past personal experience and how these influence future interactions.

Chapter 6 details how long-form journalism compares to more casual encounters and reveals the results from an ethnographic observation of how more than forty people were visually documented for the news and what the experience meant to them. It not only provides context regarding what the experience was like and its positive and negative features but also compares such experience to the outcome of the interaction by having the subject react to the visual depictions that were made of them.

The final chapter, chapter 7, synthesizes the results from the previous chapters and discusses how everyday individuals' expectations compare to the realities of the industry and culture environment where the interaction has taken place. Following this, theorization is advanced regarding the nature of reality and how technological innovation is impacting this before recommendations are offered to journalism educators, journalists, and the broader public.

This book considers questions such as the following:

- How does the natural and built environment impact interactions and the visual depictions that result from those interactions? How do the social and cultural dimensions of space do the same?
- How do everyday individuals perceive cameras and those who operate them? What factors impact this perception?
- How are the increasing number of cameras and the democratization of production and distribution technologies affecting the social world?
- How do people represent themselves in dynamic circumstances, such as through online avatars, and how does this compare to more stable depictions such as those produced by journalists in visual form?
- What are the emotional investments and effects visual journalists experience during the production of their work?
- What expectations do everyday people have of visual journalists and how do their attitudes impact the subject-journalist interaction?
- How do everyday people who are visually documented by journalists in public, community events perceive the experience of being visually represented in the news?
- How do journalists' subjects (i.e., the observed) react to the visual depictions made of them and regard their accuracy?

These questions are addressed through a number of diverse methods, including in-depth interviews, field observations, word association exercises, photo elicitations, visual analyses, and psychological assessment. Whenever possible, multiple methods are combined together to increase the richness of the data and strengthen the findings through triangulating or crystalizing the results from multiple and disparate data sources. As an example, a number of the interviews have included visual artifacts (such as news images or profile pictures) that are relevant to the user and sharpened the user's memory and increased the richness of their accounts. Similarly, to better understand the experience of being visually documented for the news media, I endeavored to study both the visual journalists who create the depictions and the people who are the subjects of those depictions, and to consider the (social and physical) environments and interactions that shape those depictions.

   This book's main contribution is that it provides one of the first systematic glimpses into the production of visual journalism as experienced in real time by those who are depicted in the news. It also explores related and integral concepts such as (1) the role of the visual in our lives; (2) the importance of place and space; (3) the relationship between the self and the larger society; (4) the role of the visual as a sense-making and identity-exploration device; (5) the relationship between public and private; and (6) the expectations, experiences, and reactions of those depicted in visual journalism. It addresses these issues through the complementary streams of anthropology, cultural studies, human geography, journalism studies, social psychology, and visual sociology.

   It draws on a number of theories and key concepts, which will be briefly outlined, as follows:

- *Framing*. Framing is the subjective and purposeful or arbitrary com-bination of the angles, vantage points, elevations, distances, focal lengths, camera settings, juxtapositions, and other factors that affect what is included in the visual representation ("the frame") and what is not. Even with 360-degree imagery that provides a multitude of angles and perspectives, the framing choice is still impacted by the location(s) where the device records, its settings, and the environmental factors at play. The term *framing* was popularized by sociologist Erving Goff-man who applied it initially to how the social world is represented and interpreted, and media studies scholars have since applied his work to the study of content, whether visual or verbal. Reproducing a scene, that is, framing it, involves some level of multiplication, fragmentation, or distortion of meaning. The framing is a result of multiple social actors and factors, including the one observing, the observed (potentially), and the environment and any constraints or affordances encountered while operating in it.

- *Public, private, and other spheres*. Journalism and democracy are intimately linked with the public sphere, which, in a normative sense, is an open and equitable platform for debate, inquiry, and action. Images and other types of visual representations play a key role in catapulting private citizens or private activities into the public limelight for awareness, commentary, entertainment, accountability, criticism, and historical record. The development of photog-raphy at scale "corresponds precisely to the explosion of the private into the public, or rather, into the creation of a new social value, which is the public-ity of the private," French philosopher and photo aficionado Roland Barthes wrote in 1980, five years after the first digital camera was invented in 1975. This had manifested itself humbly in physical photo albums and prints that

decorated homes and offices but, in the new media age, it increasingly plays out on platforms where the private is celebrated publicly to a vast and often faceless audience.

- *Technological convergence*. This is an ongoing phenomenon that changes the information flow from a one-way dissemination model to a more interactive and bidirectional information and communication diffusion model. Convergent technology allows actions that previously required multiple devices to occur in a single device, making such technology inherently disruptive and innovative. Since the digital revolution started in the mid-twentieth century, the number of functions that the devices can accomplish has increased and has led to the democratization of, among other things, media production and distribution. This has profound implications for those who observe and are observed as such observances and representations in a media sphere are happening much more frequently as people are imaged for security purposes, entertainment purposes, and journalistic purposes much more frequently than was previously possible. Digital disclosure, too, is altering the fabric of social life and how interpersonal relationships operate, as well as relationships between time and space that are becoming more fluid.
- *News media production theory*. This work draws upon a modified version of Shoemaker and Reese's hierarchy of influences model to systematically draw attention to the various levels (individuals, routines, organizations, and ideologies) that shape and impact media content. It considers each of these levels and contrasts people's expectations of journalists with the realities of the organizational and economic realities that journalists must contend with. In this way, the book provides nuance by examining micro-, mezzo-, and macro-level influences on media production and how aware the observers/observed are of such forces and how this impacts the resulting interaction and visuals that are produced.

Much of this analysis and the empirical research it is built on are qualitative in nature, which provide significant insights based on in-depth study of phenomena in deep and rich ways. However, breadth is potentially lost with this approach and so the results might differ in more diverse contexts, such as if the research was conducted in nondemocratic countries or cultural contexts where convergent technology has not proliferated to the extent as it has in other places in the world. Still, an in-the-field exploration of visual journalism as it is produced in real time and understood from the perspectives of both the observer and the observed has not yet been attempted and so the findings of this work should lay a rich foundation upon which future work can continue to build in other contexts.

Chapter 1

The Role of the Visual in Everyday Life

CASE STUDY: JACOB RIIS AND THE EVERYDAY VISUAL

For the first fifty or so years after practical photography's birth in 1839, landscapes, portraits, and still lifes dominated the medium's subject matter. In contrast to the portraitists, landscape masters, and explorers who set out to document the "unknown," Jacob Riis and those like him transformed the medium in the late 1880s and beyond through their emphasis on social documentary photography and upending the ills of post-Industrial Revolution urban life. Armed with the latest technology of the time, Riis was able to document a unique slice of everyday life—overcrowded and unsafe tenement housing (see figure 1.1)—that was grotesque in its substance yet, to that point, had largely be ignored.

Riis's exposure to New York's tenement housing began when he was still a young adult and an immigrant himself. He arrived in the United States from Denmark in 1870 when he was twenty-one and joined a stream of other migrants who were seeking better lives in a more industrialized environment. During this time, the urban areas of New York City increased eightfold and the city's existing infrastructure could not support them. "In the 1880s, 334,000 people were crammed into a single square mile of the Lower East Side, making it the most densely populated place on earth," according to journalist, historian, and art critic Robert Hughes. "They were packed into filthy, disease-ridden tenements, 10 or 15 to a room, and the well-off knew nothing about them and cared less."[1]

Riis's early years in the United States were rough and often financially precarious but, eventually, he was able to achieve economic stability and, after a string of journalism jobs at various outlets, landed a position as a police reporter in an office across from New York City's infamous Mulberry Street, nicknamed

1

Figure 1.1. Cramped Sleeping Quarters. Residents sleep in a men's lodging room on West 47th Street in New York, New York, U.S.A., 1892. Photo by Jacob Riis (public domain).

"Death's Thoroughfare." In this position, he could observe the heart of the city's slums. Riis wrote in his 1890 book, *How the Other Half Lives*:

> The tenements . . . are the hot-beds of the epidemics that carry death to rich and poor alike; the nurseries of pauperism and crime that fill our jails and police courts; that throw off a scum of forty thousand human wrecks to the island asylums and workhouses year by year; that turned out in the last eight years a round half million beggars to prey upon our charities; that maintain a standing army of ten thousand tramps with all that implies."[2]

Searching for a medium more potent than words to illustrate the conditions in which the people in his neighborhoods lived, Riis initially tried drawing but found he lacked the skill. At this still nascent stage of its development, photography was initially impractical to document the dark interiors of the slums and the neighborhood's nightlife but, in 1887, Riis learned of flash powder's invention and, through it, the possibility to expose the conditions of those whose plight he wished to amplify. His techniques were not without their drawbacks, however. As Riis admits:

> It is not too much to say that our party carried terror wherever it went. The flashlight of those days was contained in cartridges fired from a revolver. The

spectacle of half a dozen strange men invading a house in the midnight hour armed with big pistols which they shot off recklessly was hardly reassuring, however sugary our speech, and it was not to be wondered at if the tenants bolted through windows and down fire-escapes wherever we went.[3]

For the next three years, Riis continued to document—often at night or in dim interiors—everyday life as it unfolded in the New York City slums. Photos of unlicensed saloons, "pauper barracks," alleys, tenements, lodging houses, "dives," "joints," "dumps," sweatshops, and cellars accumulated and formed the basis for Riis's *How the Other Half Lives* book, which he published in 1890. In it, he has painted a verbal picture of the problem, illustrated by his photos, to his audience and included in the book's opening chapter a challenge to his middle-class audience: "What are you going to do about it?" Riis also used the magic lantern technology—a predecessor of the modern projector—to evocatively present his visuals with accompanying narration in an early form of multimedia.

Riis's example is one of countless in the quest to preserve, make sense of, and transform the world through the visual. Though photography's invention occurred relatively recently in the grand narrative of recorded history, humans have found diverse ways to visually represent themselves and convey information over thousands of years. This chapter selectively traces that development from cave walls to selfies in order to highlight how the visual has always been an integral aspect of civilization and how, from appreciating our past, we can set the stage for our present exploration and can be better prepared to understand our future.

VISUAL REPRESENTATION MILESTONES THROUGH THE AGES

To see and be seen. To document and preserve. Such activities are primal and intrinsically related to time, memory, ego, and power. Former photojournalist and veteran photo editor–turned-academic Martin Smith-Rodden argues that vulnerability and risk are inherent propositions whenever representation is involved,[4] though some devices and representational approaches yield inherently more risk than others, as will be detailed through the various technologies and innovations that will be briefly and selectively traced in this chapter.

To varying degrees, each society and culture, armed with particular technologies and modes of expression, has produced in visual form renderings of various actors, settings, objects, processes, forces, feelings, beliefs, and events. The ability to create and share these renderings, however, has remained remarkably unequal throughout recorded history, save for the last 200 years, in particular, when the culmination of technological advances

radically transformed such processes and reforged humanity's relationship to the visual and to how its members produced, stored, shared, viewed, and interpreted them.

Physical traces of visual representation have existed since the dawn of human civilization[5] and have played an integral role in information dissemination, entertainment, beautification, education, and shared memory. Communication, whether verbal or nonverbal, is essential to the survival of a society and, since humans use their eyes as their dominant sensory organ, the historical record concerning visuals is especially rich and complex.

Toward the end of the Paleolithic Age, some 40,000 years ago, marks the first recorded expressions of visual culture incised or painted on whatever the natural landscape afforded. Such representations were often simple geometric shapes, including dots, circles, lines, spirals, or rectangles. About 10,000 years later, figural depictions emerged more widely and included stylized renderings of humans and animals. Petroglyphs, or rock carvings, originated about 10,000–12,000 years ago and were followed by pictograms, a form of proto-writing, as early as 9000 BCE. Pictograms formed the basis of both cuneiform and hieroglyphics, which evolved around 5000 BCE.

Many ancient languages, even if physical traces of them have survived, have been enigmatic in their meaning as such modes of communication are cultural constructions and require specialized knowledge to understand. Icons,[6] in contrast, as a particular form of visual communication, are imbued with a measure of universality that allows them to be appreciated and interpreted to various degrees across cultures, geographies, and time periods. It is because of this universality that we can appreciate a bison painted on a French cave wall some 17,000 years ago or a relatively much more recent bull depicted on Indus Valley objects from around 4,500 years ago (see figure 1.2). While languages die out and are forgotten, the mimetic visual often transcends other ways of communicating and can still provide meaning for ongoing generations.

Visual representation exists to store and communicate information and, potentially, a particular meaning. This is the case for tally marks, visual mnemonics, maps, property markers (beginning with simple animal brands and tattoos and continuing to more advanced crests and heraldry in the 1100s), and warning signs. The meaning of the representation is often dependent on numerous contextual factors, such as the environment and geographical location in which it is located, which will be discussed more fully in chapter 2: "An Exploration of Place and Space."

Where the meaning of art and creative expression are often kept more open-ended in order to increase audience engagement with the content, visual communication in other settings, such as business, trade, commerce, and accounting, is much more close-ended in order to relay a particular and consistent message in a systematic fashion. Similarly, the ability of a visual account

Figure 1.2. Two Bulls Separated by More than 10,000 Years. Left: A Paleolithic Painting of a bull decorates a cave at Lascaux, Southwestern France, and was created about 17,300 years before the present. Right: A seal from the Indus Valley Civilization, created about 4,500 years ago depicts a bull among other symbols. Photo at left by Wikimedia user "Prof saxx," CC BY-SA 3.0, Wikimedia Commons. Photo at right by Radhi Pandit, CC BY-SA 3.0.

to be stylized varies by technology, the affordances of the medium itself, and by the intents of the creators, which have experienced shifts over time. Such is the case with the invention and adoption of linear perspective in the 1400s. While humans, regardless of gender or ethnic background, have the same type of eyes and their vision is, barring anomalies or health impairments, roughly identical, our ability to "see" can be, to a degree, a by-product of our culture. Simply, we can see the same thing (a bull, e.g., based on the earlier example) but impart difference based on our culturally informed interpretation (bulls, in different societies and at different time periods, have symbolized, e.g., luxury, strong will, fertility, and energy). Such divergent interpretations are informed by our background, cultural context, and identity. The shifting nature of meaning over time is explored more fully in the fourth, fifth, and six chapters of this book, while cultural influences and the influences of identities are explored in the third and fourth chapters, respectively.

Through natural or artificial means, humans have been able to observe for millennia visual representations that were projected onto natural or constructed surfaces. The camera obscura (an early analog projector), for example, was initially facilitated in antiquity through holes in textiles or animal hides and later, in the 1500s, through mirrors and lenses. Such projections— though fleeting and transitory—were used for entertainment, education, and for pragmatic reasons, such as to help artists and architects trace scenes with a greater degree of accuracy. Through engraving and etching techniques,

humans could quickly reproduce depictions once the initial template had been rendered but such initial rendering required a considerable amount of time and skill. Such efforts were greatly boosted through early but primitive image-capturing processes, such as heliography, in 1822, which required hours if not days to develop an exposure.

A flurry of technological innovation and development by actors in several countries soon led to the invention of the daguerreotype process (see figure 1.3), which was publicly announced in 1839, leading commentators to label that year as the birth of practical photography (though the earliest known permanent photograph was achieved more than a decade earlier, in 1826 or 1827 by Joseph Nicéphore Niépce). With photography's invention, the massive burden of time and skill required to realistically and comprehensively render a scene had been suddenly and dramatically lightened. Depictions that required weeks and months through drawings, paintings, etchings, and renderings were, with photography, now possible in mere minutes and would later be available in mere seconds and even fractions of a second, toward the end of the 1800s. Though the results were not immediately visible and development was still a rather costly
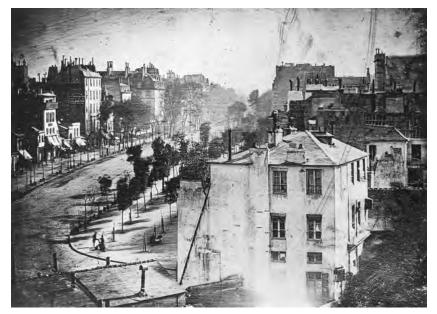
Figure 1.3. Boulevard du Temple. This image of the Boulevard du Temple, in Paris's 3rd arrondissement, was made in in 1838 by inventor Louis Daguerre and is believed to be the earliest photograph to show living people. Though the street was busy at the time of the capture, because the exposure lasted for several minutes, the moving traffic left no trace; only the two men near the bottom left corner—one apparently having his boots polished by the other—stayed in one place long enough to be visible. As with most daguerreotypes, the image is a mirror one. Public domain image.

and time-intensive process, the fidelity of the depiction and the skill required to create it had been transformatively reimagined and democratized.

The invention of stereoscopes in 1839 and their later refinement provided an early form of three-dimensional "virtual" reality[7] and allowed users to experience exotic locations that were too far away or impractical to visit in person. Consumers hungry for the novelty and exoticism of the foreign could experience the riches of Egypt from the comfort of their homes in England, for example.

The world's first illustrated weekly, the *Illustrated London News*, appeared in 1842 and used wood engravings to illustrate written reports and boost sales. The birth of photojournalism occurred a year later in 1843 when a French weekly, *L'Illustration*, became the first publication to feature photos alongside written news stories. (Worthy of note, however, is that although photographs have now been paired with news stories for more than 175 years, the term "photojournalism" was not coined until the 1940s by American academic and Missouri School of Journalism dean Frank Luther Mott.)

War provided the setting for what we now recognize as some of the earliest photojournalism; in Europe, Englishman Roger Fenton made some 360 photographs over four months as England's official photographer during the Crimean War of the mid-1850s. As a government representative, Fenton tried to portray a glorified, sanitized, and positive depiction of the war.[8] In the United States, American photographer Matthew Brady documented the country's civil war, which started in 1861, and supervised a team of around twenty photographers through various conflict zones. Photographs of the still-wild and untamed American West lured and titillated viewers and images of the Yellowstone region convinced the American Congress to declare the area a national park in 1872.

Though photography is still almost always a subjective endeavor, the subjectivities of the form are perhaps less compared to other forms of visual arts, such as the drawing and painting approaches that preceded it. For most of its 180 years, photography brought with it strong associations of authenticity and conviction.[9] Photography's evidentiary status, as will be discussed later, has enjoyed a rich and strong tradition but one that faces increasing challenges in technology's never-ending march.[10]

After practical photography's birth in 1839, moving picture images followed by the end of the century, debuting in cinematographic pictures by the 1890s. Like photography, cinema also features a complicated history with many devices contributing to what we now understand as film. One of the first of these was the phénakisticope, developed in 1833, for showing short loops of (hand-drawn or painted) motion. Pioneering English photographer Eadweard Muybridge invented his zoopraxiscope—an early motion projector—in 1879 and this was said to have inspired U.S. inventor Thomas Edison to design the Kinetoscope—the world's first commercial film exhibition system—in 1889. The Kinetoscope was designed to present motion for a

single viewer at a time who would watch through a peephole in a device; later technologies in the coming years allowed the audience to be much larger.

These technologies contributed massively to scientific breakthroughs, political shakeups, and long-lasting effects that still echo to this day. Muybridge's groundbreaking 1878 photos of a horse galloping (see figure 1.4), for example, allowed humans to observe—for the first time—action that happened faster than human perception could previously appreciate.[11]

The year 1895 brought with it the discovery of X-rays by German engineer and physicist Wilhelm Conrad Röntgen, who was able to reveal, in the first X-ray ever created, the bones of his wife's hand. His discovery led to the bestowal of the first Nobel Prize in Physics, given to Röntgen in 1901. (Other technologies that allow seeing beyond the limits of sight include night vision and thermal imaging, the former of which traces its origins to Hungarian physicist Kálmán Tihanyi's work. He invented, in 1929, an infrared-sensitive electronic television camera for anti-aircraft defense in the United Kingdom, and the United States, in concert with Texas Instruments, created the first thermographic camera in 1947.)

Within about fifty years of its invention, Riis, as mentioned earlier, pioneered socially conscious photography to expose the substandard conditions of New York City's slums in the late 1880s. His work brought awareness to a wide swath of America the hardships confronting poor people; this awareness eventually led to housing and safety reforms.[12] Similarly, depictions of
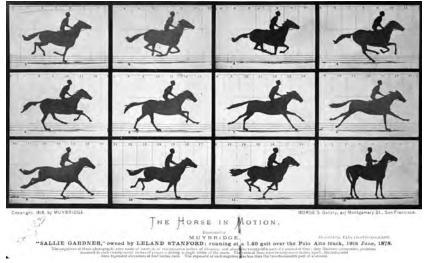
Figure 1.4. The Horse in Motion. Not until 1878 did humanity know whether all hour of a horse's hooves left the ground at the same time. Through photography, pioneering image-maker Eadweard Muybridge answered this question in June of that year as part of his efforts to create an encyclopedia of motion. Public domain image.

child workers (see figure 1.5) slaving away in mines and mills in twentieth-century America led to legislative reforms, thanks, in part, to the photographs of sociological photographer Lewis Hine.[13] Hine often worked incognito and subjected himself to physical danger and abuse because of his photographic advocacy. (See chapter 4 for a more in-depth exploration of the emotional work and labor involved in photographic interactions.) Around this same time, photography as an art form was also beginning to be appreciated and the first fine art photographic exhibitions were staged in 1891 and 1910 in Europe and North America, respectively.

Such instances of "social documentation" characteristic of the time were typified by the dual purposes of record-keeping and arousing emotion—for the purpose of either fundraising or mobilizing legislative support. The first required a mechanism perceived as objective for rendering information and the second required a medium that could elicit sympathies in its viewers. Photography satisfied both.

By the 1920s, the debut of German cameras, such as Ermanox and Leica, had progressed sufficiently from a technical perspective to facilitate indoor, highly portable, handheld photography with available light, drastically boosting cameras' applicability, usefulness, and evocative potential.[14] Where once long exposure times and tripods were required to create exposures that resulted in formal and stiff poses with stoic expressions, the new affordances

Figure 1.5. The Cotton-Picking Eleven-Year-Old. Callie Campbell, 11 years old, picks 75 to 125 pounds of cotton a day, and totes 50 pounds of it when the sack gets full. "No, I don't like it very much," she said. Photograph created by Lewis W. Hine in 1916 in Potawotami County, Oklahoma. Public domain image.

of the relatively lightweight and mobile technology now allowed a more spontaneous, energetic, and dynamic rendering of life as it unfolded in real time.

Color photography started as early as 1848, but early results were volatile and impractical. While the first durable color photograph appeared in 1861 and commercial color photographs were available in 1907 through the autochrome process, it was not until the mid-1930s, however, with the introduction of Kodachrome film, that the process became cheap and fast enough for more widespread use.

Germany advanced documentary photography first with camera technology and, subsequently, with picture magazines, such as *Münchner Illustrierte Presse* and *Berliner Illustrirte Zeitung* that provided a platform for the viewing of such work and was later copied in Paris, for instance, with *Vu* in 1928 and in the United States with *Life* and *Look* in 1936.

That same year—1936—brought about Dorothea Lange's now-iconic "Migrant Mother" image that she created while under the employ of the U.S. federal government through its Resettlement Administration (see chapter 5, for a case study on Lange's approach and how a ten-minute interaction led to one of the most famous images of the twentieth century). Lange worked alongside almost a dozen photographers under the supervision of Roy Stryker to document the effects of the Great Depression and contributed to the more than 270,000 photographs that the team made during its mission. For thirty-six years of its lifespan, especially, from 1936 to 1972, *Life* elevated some of photojournalism's most notable practitioners, including Margaret Bourke-White, Alfred Eisenstaedt, and W. Eugene Smith, through its image-driven approach.

Mobile cameras received a massive boost—literally—in the 1940s with the development of satellite imagery that allowed more precise, controlled, and long-range photography compared to what was possible in the 1900s and earlier when cameras were strapped to rockets, kites, and birds. The 1940s also gave rise to the rapatronic camera that expanded Muybridge's early experiments with capturing motion and could now offer exposures as brief as one hundred-millionth of a second.

The political repercussions of still and moving images that began in the 1800s continued into the next century and beyond. The world's first televised presidential debate in 1960 between Americans John F. Kennedy and Richard M. Nixon had a major impact on the election's outcome; some scholars regarded it as ushering in a new era in which every political candidate needed to craft a public image.[15] *The New York Times* coverage of the debate noted that "the two men were more concerned about 'image projection' to their huge television audience than about scoring debating points."[16] Nixon himself admitted:

> I spent too much time in the last campaign [1960] on substance and too little on appearance: I paid too much attention to what I was going to say and too little

to how I would look. . . . The fact remains one bad camera angle on television can have far more effect on the election outcome than a major mistake in writing a speech.[17]

Images not only represent, but they also serve a catalytic function, American curator Marvin Heiferman argues: "They engage us optically, neurologically, intellectually, emotionally, viscerally, physically. They demand our scrutiny and interpretation. Photographs seduce and motivate us; they promote ideas, embed values, and shape public opinion."[18]

TIMELINE OF VISUAL REPRESENTATION MILESTONES

The following is a brief overview of visual representation milestones alongside the evolution of technology:

- 40000 BCE (first recorded expressions of visual culture)
- 30000 BCE (widespread emergence of figural representations)
- 10000–12000 BCE (emergence of petroglyphs)
- 9000 BCE (emergence of pictograms)
- 5000 BCE (emergence of cuneiform and hieroglyphics)
- 1100s (development of crests and heraldry [an evolution of earlier brands and tattoos])
- 1400s (invention of linear perspective)
- 1500s (camera obscura facilitated through mirrors and lenses)
- 1822 (birth of heliography)
- 1826 or 1827 (earliest surviving camera photograph is created)
- 1839 (birth of practical photography)
- 1839 (invention of stereoscopes)
- 1842 (first illustrated weekly)
- 1843 (birth of photojournalism [though this term was not coined until the 1940s])
- 1850s/1860s (first war photography occurs [of the Crimean War and American Civil War, respectively])
- 1858 (the first aerial photograph is captured from a hot air balloon near Paris)
- 1861 (the first durable color photograph is created this year)
- 1872 (photos convinced U.S. Congress to declare Yellowstone a national park)
- 1878 (Muybridge's photo of a horse galloping advances scientific knowledge)

- 1880s (housing reforms in New York City are brought about due to documentary photography)
- 1890s (birth of cinematographic pictures is witnessed)
- 1891 (first fine art photographic exhibition occurs in Europe; the first one in America follows in 1910)
- 1895 (the first medical X-ray image is created this year and subsequently leads to the bestowal of the first Nobel Prize in Physics, several years later, in 1901)
- 1900 (Kodak Brownie, a simple and inexpensive camera, brings snapshots to the masses)
- 1900s (child labor law reform is achieved due to documentary photography)
- 1920s (introduction of lightweight, portable German cameras that allow handheld photography in natural light)
- 1929 (the first night-vision camera is invented)
- Late 1920s/1930s (birth of picture magazines occurs)
- 1935 (Kodachrome film is introduced and color photography becomes more widespread)
- 1936 (the famous "Migrant Mother" photograph is made during the Great Depression)
- 1940s (development of the rapatronic camera)
- 1946 (first satellite photo is taken from space)
- 1947 (the first thermographic camera is invented)
- 1960 (first televised presidential debate occurs)
- 1962 (invention of the "Sensorama," an early virtual reality machine. A head-mounted version is later developed in 1968)
- 1965 (photography is regarded as essential in advancing the work of the U.S. civil rights movement)
- 1975 (Eastman Kodak engineer Steven Sasson invents the world's first portable digital camera)
- 1986 (Nikon introduces first digital single-lens reflex [DSLR] cameras)
- Late 1980s (the first camera-equipped drones are developed by Israeli engineers)
- 1988 (the first version of Photoshop is developed and then sold to Adobe in 1989)
- 1992 (the first photo is uploaded to the World Wide Web)
- 2000 (the first camera phones are released in the market)
- 2005 (Canon releases the 5D, the first consumer DSLR camera to offer a full-frame sensor)
- 2008 (Nikon releases the D90, the first DSLR camera to be able to shoot video)
- 2011 (U.S. politician Anthony Weiner resigns due to sexually explicit image he sent online)

• 2022 (experts predict that, by this time, 45 billion cameras will exist, leading to an average of 5.625 cameras for each of earth's projected 8 billion inhabitants)

In the mid-twentieth century, visuals were regarded as essential for advancing the work of the civil rights movement. Following the passage of the Voting Rights Act of 1965, Martin Luther King, Jr., reflected: "We could have marched, we could have protested forever, but if it weren't for guys like you [photographers], it would have been for nothing. The whole world saw your pictures. That's why the Voting Rights Act passed."[19]

The 1970s bore witness to the first all-digital, commercially available camera, used primarily for military, scientific, and medical uses. Then, in 1986, Japan-based Nikon created the world's first DSLR camera, the Still Video Camera (SVC). This decade also witnessed the debut of camera-equipped drones, developed by Israeli engineers for surveillance and reconnaissance and soon copied by their U.S. counterparts for the same purposes. DSLR cameras became more popular in the following decade, the 1990s, and by the early 2000s had largely replaced film cameras.

In 1992, English engineer and computer scientist Tim Berners-Lee uploaded the first photo to the web, a system he invented. Then, in 1997, French developer Philippe Kahn connected his flip-top phone to a digital camera and synched the two devices through some code he had written on his laptop. He was able to instantly transmit a photo of his newborn child, Sophie, to more than 2,000 people from the hospital where his wife had given birth and, by doing so, created the first cell phone image. Three years later, Japanese electronics company Sharp, using Kahn's technology, released the first commercially available, integrated camera phone in Japan. The United States followed suit and soon camera phones had become ubiquitous.

More recently, an image in the form of an explicit selfie led to the downfall of former U.S. congressman Anthony Weiner, a Democrat from New York who had served in office from 1999 to 2011. The image Weiner sent in a private message was later publicly distributed and linked to him, sparking his resignation and replacement by a Republican.[20] As Heiferman eloquently notes: "Photography does more than document what we've done; it shapes much of what we decide to do. . . . Photography often supplies us with the information we need to determine what needs to happen next."[21]

The too small, too distant, too dangerous, too dark, or too rapid can now all be appreciated through advances in optics and photography. Various types of photography help us map and understand the earth's surface, predict the weather, study the cosmos, navigate driverless cars, study the insides of bodies, and verify identity. Even features invisible to the naked eye can be revealed through various technologies that expand our sight beyond the

visible spectrum. In addition to these technological achievements, vision has unique physiological and social-psychological features that the next part of this chapter addresses.

UNPACKING THE POWER AND UNIQUE NATURE OF VISUALS

Vision is, for many reasons, a unique sense. First, our eyes, in a nod to their complexity, are the last to develop *in utero* and are the most complex of the body's sensory systems.[22] Second, unlike culturally constructed written and spoken languages, vision is a "universal language of nature,"[23] central to how we perceive, process, and respond to the world. We use 75 percent of the neurons in our brains to process visuals.[24] "The mind is influenced more by inputs through the visual channel than the combined effects of inputs delivered through the other four sensory senses."[25] Third, it is not only the most dominant sense from a cognitive perspective but is also humans' most relied-upon mode of communication and expression. More than 60 percent of all human communication is nonverbal,[26] and while not all nonverbal communication is visual, sight and touch are so closely linked that some scholars regard seeing as "a form of extended, highly flexible touch."[27] Humans are optically driven not only from a physiological perspective but also from a social and culture perspective. "Our sense of self, both individually and collectively, is made and remade in and through the visual."[28]

The power of images is recognized in both secular and religious contexts. For the Aboriginal and Torres Strait Islander peoples of Australia, for example, cultural protocols govern how the dead can be visually referenced. "In some communities . . . showing photographs of that [deceased] person is restricted during the "mourning period,"[29] which can last from weeks to years or even indefinitely. Such concerns transcend figural representations and can extend to objects and the physical landscape, too. Visual representations can be a contentious issue for Muslims, also, depending on interpretation and denomination. More conservative interpretations, such as those found in Sunni Islam, frown upon or outright ban depictions of figures, especially of sacred subjects; for this reason, Islamic art is dominated by geometric patterns and calligraphy rather than figural representations.[30]

Ours is a visual culture with endless opportunities to produce, curate, disseminate, and consume visual media. The demand for and production of images has been markedly increasing in the past decades[31] and is not expected to slow in the foreseeable future. As Heiferman notes: "Our love of and need for photographs and the breadth of photography's reach, authority, and power are, with no exaggeration, awesome."[32] People took more than one

trillion photos in 2017, thanks, in large part, to smartphones.[33] This number is expected to grow. Experts predict that, by 2022, the number of cameras globally will more than triple from the current levels and reach 45 billion units,[34] leading to ever more streams of visual data. This has profound implications for how visuals are produced, disseminated, and consumed.

> The increase in the numbers of images made by us, and the enthusiasm with which we share them through social media, underscore the fact that we are forging a new relationship to photography. So do the unsettling quantities of photographic images that are continually being made of us. . . . As photography is being transformed, so too is the implicit (but often unexamined) contract between images, reality, and viewers.[35]

According to Heiferman,[36] visuals change (1) what we want, (2) what we see, (3) who we are, (4) what we do, (5) where we go, and (6) what we remember. Photography helps teach citizenship[37] and is used for creating personal and group memory, relationship maintenance, self-representation, and self-expression.[38] As will be discussed in the third and fourth chapters, it is also integral to identify formation and affirmation.[39]

MAKING THE CASE FOR STUDYING VISUALS AND THEIR PRODUCTION

Scholars have written extensively about the power of visual media to topple governments, force resignations, change standards, promote justice, and form social bonds.[40–44] Images motivate cultural change, define the significance of struggle, arouse public opinion, and inform social consciousness.[45] The considerable research and attention on dissemination and interpretation of images come, however, at the expense of other, though no less relevant, areas; discussion often starts and stops within the borders of the image's frame.[46] Without understanding how visuals are produced (e.g., by whom, under what circumstances, and for what intent), we severely limit our ability to be thoughtful, critical, and literate media creators and consumers.

Mediated reality presents more opportunities for filtering, framing, and styling that affects how that reality is perceived and interpreted.[47] This is important as people vote and make decisions based rarely on first-person experience but rather on mediated realities that are constructed through media, including journalism and popular culture.

It is within news media contexts where we learn about issues of public importance and where we can observe trends, patterns, and themes about life and those who live it. These depiction- and representation-rich domains are

worthy of analysis because through them we understand events and subse-
quently make decisions. As the Metropolitan Museum of Art's first curator of
its prints department, William M. Ivins, Jr., said: "At any given moment the
accepted report [or, in this case, image] of an event is of greater importance
than the event, for what we think about and act upon is the symbolic report
[image] and not the concrete event itself."[48] Journalism is the great mediator
that grants awareness of and context for the unending stream of court cases,
legislative sessions, political rallies, protests, speeches, and public events that
span the globe and are often impractical for the everyday person to experi-
ence personally.

   This chapter selectively traced the development of visual media technolo-
gies through the centuries and illustrated the integral role that visuals play in
everyday life. The following chapter begins our exploration of the behind-
the-scenes factors that impact how visual media come to be by examining the
place and space features where exchanges between camera-equipped observ-
ers and the observed occur and how such features shape those interactions
and subsequent depictions that take place in them.

About the Author

T. J. Thomson, PhD, is an award-winning visual communication scholar and educator. His research focuses on visual production, organization, representation, and meaning—in journalistic and digital media contexts—and has been published in top peer-reviewed journals including *Journalism*, *Journalism Practice*, and *Journalism Studies*. He has taught and guest lectured on, among other topics, mobile multimedia, multimedia planning and design, visual editing, and context-specific photography. He has served as the associate editor of *Visual Communication Quarterly* since 2017 and is on the advisory board of the Society for Phenomenology and Media. Professionally, Thomson has worked as the photo editor for an international wire service; produced visuals for the Associated Press, *The Washington Post*, *The Omaha World-Herald*, and *The Huffington Post*; and has provided design production and consulting for dozens of companies and clients, including a California start-up that was acquired in 2015 by Facebook.