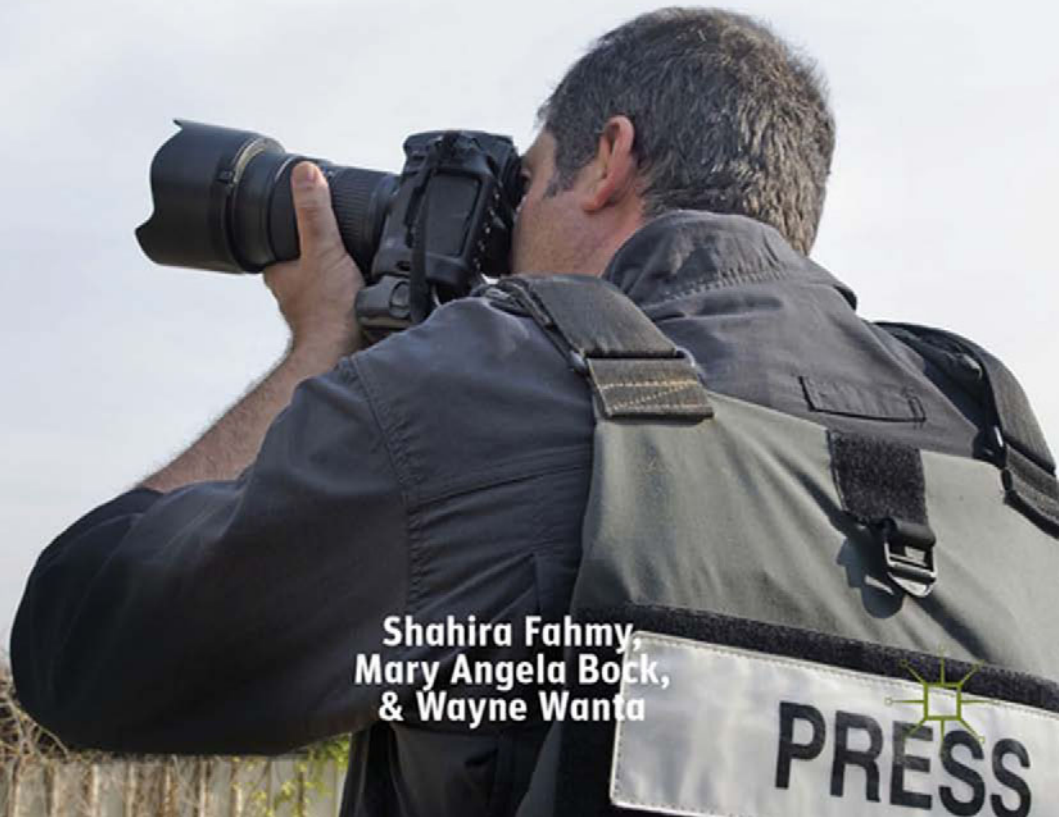
VISUAL COMMUNICATION THEORY AND RESEARCH

A Mass Communication Perspective



Shahira Fahmy,
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& Wayne Wanta

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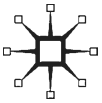

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We dedicate this book to all visual journalists
who died trying to communicate the news to the world,
serving as watchdogs and offering a voice to the voiceless.

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Foreword

*By David Perlmutter**

In 2008, I was asked to give a talk to the Visual Communication Division of one of the major mass communication academic organizations. It was intended to be a summing up of visual communication as an area or subfield. At the time, I made two observations.[1]

First, we had definitely "arrived" in the academy. Whereas even in communication research, the close study of visual images was either uncommon, an afterthought, or not sufficiently or rigorously discussed, it seemed as if there had been since the 1990s an explosion of studying the visual in almost every area or subarea of mass communication research from news to sports to race and gender. Second, as a corollary, we had lost our center—that is, where visual communication research had once had coherent bodies of scholars who were often familiar with each other's work, now we have a plethora of different groups, often conducting their studies unaware of parallel research in other subfields of mass communication and certainly across the disciplines of the academy.

I believe that Fahmy, Bock, and Wanta's new book, *Visual Communication Theory and Research: A Mass Communication Perspective*, will reinforce the first trend by showing how the quest to understand the creation, deployment, effects, and argumentation about visual images has a rich and deep history and application. Rather than an ornamentation along with the study of words or speech, visual communication (viscomm) has all the structure and utility of a meta-discipline that can and should be utilized by

researchers throughout the humanities and social sciences, Now, as well, the field has great connectivity to new advances in STEM fields such as neuroscience.

At the same time, Visual Communication Theory and Research makes a strong case that we are one. Viscomm cannot be balkanized or cut into snippets that assist one group of scholars in answering one question. Visual images were humanity's first artificial medium. We are visual animals. Everything we do and have done has a visual component, and through this book a new generation of scholars—as well as practitioners and general readers—will see that, whatever new and emerging technology comes along, the systematic study of visual images is vital to understanding our world and ourselves. I hope readers, then, will find this book not only an inexhaustible compendium of what we know but also an invitation to an exciting future.

Chapter 1

Linking Theory to Visual Communication

Our lives are filled with visual information. Some visuals are obvious—such as a Calvin Klein magazine advertisement, where the visual dominates our senses. Other visuals are so common that we take them for granted—the octagonal shape and red background of a stop sign, for example, where the shape communicates importance and the red color communicates danger. Indeed, even printed text can be considered visual: we visually process the shapes of letters collectively to understand a textual message.

While visuals constantly bombard us, the study of visuals employed in mass communication has grown in importance through the years. *Visual Communication Quarterly*, a journal published through the Association for Education in Journalism & Mass Communication (AEJMC) that was created in 1992, is now a popular and well-respected publication. AEJMC and the International Communication Association both have divisions devoted to visual communication. Many universities have now developed visual communication literacy courses. Photojournalism and Design academic tracks are common at universities around the world.

Several factors have led to the expansion of visual communication research.

The emergence of new technologies has made visual information more accessible than some traditional media such as newspapers and radio. Internet content is highly visual.

The development of complex software such as Photoshop and InDesign has created new areas of research dealing with both the use and the effects of software.

The visual communication field, long the purview of individuals with Masters of Fine Arts degrees, now has several scholars with PhDs conducting research.

The influx of researchers with PhDs has increased both the quantity and quality of visual communication research. While much research continues to be descriptive, many new scholars are conducting studies involving rigorous research methods.

Conducting Research in Visual Communication

The keys to successful visual communication research lie in two broad areas: A rigorous methodology and a compelling theoretical framework. Subsequent chapters will detail research methods utilized in visual communication. Briefly, social science methods of survey, content analysis and experiments have been used. Qualitative methods, such as historical and critical/cultural analyses, have also been employed.

Theoretically, visual communication researchers have borrowed many of the traditional theories of mass communication, including the theoretical frameworks given below.

Framing

An obvious theoretical framework for visual communication is framing, which is actually based on the idea of a photograph. When photographers take pictures, they cannot capture the entire world in the frame of the photograph. Photographers must select only part of the real work to appear within the photo frame, while eliminating everything else. Thus, the idea of framing looks at the selection of what content is included in the photograph, why a photographer chose this content over other content, and what effect the content has on views of the content.

Framing research goes back decades. Gitlin (1980), for instance, examined how the news media framed protests during the Vietnam War. He argues that the news media framed the protesters as radical students, ignoring the antiwar messages espoused by the protesters. This coverage trivialized the reasons behind the protest.

Several researchers have utilized the notion of framing in their studies. Goffman (1974) referred to "frame analysis," defined as how individuals organize events in everyday life.

Agenda Setting

Agenda-setting research traces its beginnings to Walter Lippmann (1922) whose first chapter was titled "The World Outside and the Pictures in Our Heads." The "pictures" in this case involved issues covered in the news. The news media select which stories to run and which to ignore. The issues covered in the news media have a strong impact on the public, in which the public learns which issues are important from the amount of coverage the issues receive. McCombs and Shaw (1972) found a strong correlation between the media agenda (issues receiving extensive coverage) and the public agenda (issues that individuals believed were important).

Coleman and Banning (2006) examined attributes linked to political candidates in the 2000 presidential campaign based on visual framing. Their content analysis found that television news coverage depicted the nonverbal behavior of Al Gore more positively than the nonverbal behavior of George Bush.

Fahmy, Cho, Wanta, and Song (2006) examined how emotional responses to the 9/11 attacks would influence individuals' visual recall of 9/11 images. Their study found that if individuals reacted to the attacks with sorrow or shock, they stored several images in their long-term memory, especially the emotional images of people jumping from buildings and depictions of dead bodies.

Wanta (1988) conducted an experiment testing the influence of photographs on individuals' perceptions of the importance of issues.

He found that large photographs attracted readers to accompanying stories, increasing the salience of issues in the stories.

Cultivation

The origins of cultivation research can be traced to George Gerbner and colleagues and their research involving the effects of television violence (see, for example, Gerbner, Gross, Morgan, and Signorielli, 1980). Gerbner argued that individuals who watched a lot of television eventually believed that the content of television is like the real world. Since television routinely showed a great deal of violence, Gerbner believed that the violent content on television would make individuals believe that the world was a scary place. In other words, television cultivated people's view of the world in such a way that individuals who watched a lot of television (and thus a lot of violence) were more likely to think the world was violent. Viewing depictions of violence led people to believe violence was prevalent in society.

While cultivation research has been roundly criticized (see Hirsch, 1980), researchers have continued to conduct studies testing its validity. Levine and Smolak (1996) argue that television and fashion magazines contain powerful visual images that can lead to eating disorders.

Bissell (2006) examined whether media literacy programs could moderate the potential negative influences leading to eating disorders. She found media literacy programs did not reduce the desire of participants to look like the thin models seen in the media.

Semiotics

As with framing analysis, semiotics is ideally suited for research in visual communication. Indeed, semiotics is defined by visual information. As Moriarty (2002) notes, semiotics is the study of signs as conveyed through codes. "Meaning is derived only to the degree that the receiver of the message understands the code" (p. 21).

Codes, of course, can be information contained in visuals.

Signs have been classified as being iconic, indexical, and symbolic (Peirce, 1931–1935). An iconic sign is based on resemblance, such as

a photograph of a dog. The dog in the photograph is perceived as a dog because it resembles a dog. An indexic sign is based on some actual proximal or physical contact with a referent, such as a wind sock that tells wind speed and direction. A symbolic sign implies a referent through convention; its meaning is arbitrary and based upon agreement or habit, such as the American flag. Visual communication often uses all three categories of signs.

Much of the research dealing with visual semiotics is interpretive. Harrison (2003), for example, laid out a framework for studying visual social semiotics, or how photographs make meaning.

Kruk (2008) examined visual semiotics employed by the Soviets. Under Stalin, visual signs in art, monuments, and architecture portrayed an idealized vision of the future of Communism. Sculptures and paintings were displayed throughout the Soviet Union. Under Lenin, monuments "perpetuated the neoplatonic artistic tradition of the Russian Orthodox Church, which meant there was no clear distinction between the iconic sign and its referent" (p. 27).

Overall

The model of communication study by Harold Lasswell (1948) is the categorizing method employed in this book. Lasswell wrote that the study of communication involves "Who, Says What, To Whom, In Which Channel, With What Effect?"

Chapter 2

History

To cover the history of visual communication since its inception would require multiple books, since its story is nearly as long as the story of humanity itself. The story of mechanized visual communication, which begins in the early stages of industrialization, is a bit more manageable subject, spanning centuries rather than millennia, though that too constitutes considerable territory. Histories of mechanized visual communication have tended to be organized around technology and biographies, with approaches ranging from the traditional chronology to cultural criticism.

The Reproducible Image

A useful starting point for understanding the evolution of visual communication comes from a book not about photography but about the printing press. Elizabeth Eisenstein's (1979) two-volume analysis of the early days of mechanical reproduction provides helpful context for the study of the image, with detailed, carefully cited accounts of how illustrations were added to early books, the development of typography, and the carelessness with which images were printed, reprinted and incorporated into printed works:

> Printed illustrations drew upon the talents of goldsmiths, woodcarvers and armorers. Such workers did not necessarily have their

> hands on the pages of texts at all; nor were they always informed about the destination of their products. A middleman—the printer publisher—frequently intervened. The frugal custom . . . of re-using a small assortment of blocks and plates to illustrate a wide variety of textual passages also helped to set picture and words at odds with each other. (p. 259)

The tension between word and image pre-dates the focus of Eisenstein's work, of course, and might be better traced to the writings of Plato and his emphasis on the life of mind and spirit over matter. This philosophical emphasis on thought (and therefore words) over earthly existence (and its tangible images) still courses through debates about the nature of the image in society.

It was Walter Benjamin (1936), however, who threw the gauntlet down in an intellectual confrontation with photography. His famous essay, "The Work of Art in the Age of Mechanical Reproduction," was prescient in its description of the way a film is not contemplated by the audience but instead subsumes it and the way the boundaries between writers and readers was about to erode. He wrote that "the distinction between author and public is about to lose its basic character." Benjamin saw danger in these blurred lines, as do many news critics in today's age of the YouTube citizen journalism. Benjamin's main concern was with a loss of "aura" for unique works of art in the age of photography and film. This loss of art's unique, ritualistic function in culture, he argued, allows it to essentially be hijacked by politics. Given the popularity of so-called reality TV, the appropriation of images for propaganda on the web, and the ubiquity of the iPhone lunch photo, Benjamin's critique was frightening for its clairvoyance.

In *Picture Theory* (1994), cultural scholar W. J. T. Mitchell, whose prediction that the twenty-first century would represent a cultural turn from the linguistic to the pictorial, suggested that "the tensions between visual and verbal representations are inseparable from the struggles in cultural politics and political culture" (p. 3). That is, the tensions between word and image echo other dialectics, such as those between positivism and postmodernism; functionalism and Marxism; patriarchy and feminism. Mitchell's observation is useful for thinking not only about images, given that they often operate via emotional or subconscious processing, but also with the practice

of photography itself—artistic, body-centered, and material. The word-image dialectic tends to be hierarchal. Western modernity rests on rationalism, valuing thinking over feeling; intellectual work is valued over the physical; Christian tradition glorifies the triumph of spirit over earthly life.

These themes often run through histories of images and their creators, through narratives of professional legitimation, alarmist accounts of image-encroachment on cultural landscape, or analyses of image epistemology. Other historic approaches are largely biographical (though these too are often legitimation narratives) or technological, focusing on the evolution of equipment or technique as a means of scientific investigation.

Cameras and Chemicals

One of the earliest published histories of photography (Joy, 1876) uses the technological approach. Published in Leslie's *Popular Monthly*, a publication made popular in part for its use of images, Joy's article summarizes the various discoveries that contributed to photography's development. Joy traced the effort to use light-sensitive chemicals back to 1802, by Sir Humphrey Davy, explained the role of Nicéphore Niépce, and detailed the introduction of a developing agent by Fox Talbot and Daguerre's use of mercury vapor as a means of bringing out images on a silver plate.

A more contemporary technological history focuses on Daguerre's process as it developed in the United States (Newhall, 1968). Rich with compelling reproductions of daguerreotypes, Newhall details the way the Frenchman's process took Americans by storm. For much of the second half of the 1800s, Daguerre's process dominated the popular imagination. A person interested in photography could buy a kit and set up a studio as a hobby or business. As Americans pushed westward, new towns were often visited by portrait photographers. So popular was the daguerreotype process that the word "photography" was not part of popular lexicon. As Newhall explains, that term was reserved for the English wet-plate collodion process. Even though Fox Talbot's system had the advantage of making multiple prints possible, the daguerreotype was more popular. Its unique images—usually portraits—were so crisp, deep, and lifelike that

even today they seem to some observers to be almost holographic. Newhall writes that the wet-plate system was not a serious competitor to daguerreotypes until glass-based ambrotypes were invented (Newhall, 1968). In his historic study of the business and its creative product, Rudisill (1971) argued that the daguerreotype helped to form America's identity in the nineteenth century.

> Americans were searching for ways in which to define themselves as cultural nationals. In their search they utilized the abstract means of language—as in nationally oriented literature or natively developed philosophical systems—but they needed objects, or better, symbolic representations of objects, to respond to in order to be able to attain adequate insight for self-definition. The daguerreotype ideally answered their need. (p. 31)

While daguerreotypes and other types of photographs were incredibly popular and influential during this era, their incorporation into mass media was complicated. As Hudson (2009) points out, it really took another 40 years after the halftone process for photojournalism to take root in print. Quality paper, ink, and more sophisticated presses provided the technological support; a literate, more urban industrial audience provided the demand.

The Form of News, a history of images as used in journalism by Kevin Barnhurst and John Nerone (2001), blends its chronology of technical developments with an eye on institutional practice and the historic discourse surrounding the epistemology of photographs. As Barnhurst and Nerone explain, it took years for photographs to supplant engraved illustrations in printed news. Part of this was technological: the halftone process was not invented until 1882, and even then it was years before the process was truly affordable. During this transition, illustrators created engravings based on photographs, sometimes blending multiple photographs into one illustration that editors defended as "more true" than a mere single photograph for the involvement of a thoughtful artist. In her study of women and magazine covers, Kitch (2001) argues that this faith in illustration as the ideal helped to launch a number of feminine stereotypes, including the classic "Gibson Girl" from Collier's magazine. Indeed, she writes, "Some commentators have credited Gibson with visually

defining not only the ideal American woman, but an entire era" (p. 39).

Another significant photographic historian uses technological evolution as a unifying theme while examining the evolution of institutions surrounding photography. Naomi Rosenblum's (1997) *A World History of Photography* provides a substantial foundation for students at the start of their inquiry. Rosenblum describes the earliest moments of photography and provides rich accounts of the subsequent strands of activity (art, portraits, social activism, and so on) that grew out of its birth in 1839. Her account of the photo-secession movement of the early twentieth century describes the efforts by Alfred Stieglitz and other early practitioners to establish photography as a serious art form. She also carefully presents the history of images in print media, not only from a technological perspective but also with an eye toward the use of photographs in propaganda.

A collection of primary texts from photography's early years edited by Trachtenberg (1980) brings to life the arguments from those early years, such as classic essays by Joseph Nicéphore Niepce, Lady Eastlake, and Peter Henry Emerson, who promoted the notion that photography need not be only a servant to science and commerce, but could, and should, be appreciated and cultivated as art. In an essay reminiscent of many modern indictments of the visual press, Emerson condemned those he considered to be fly-by-night photographers making money on cheap portraits, neglecting the aesthetics of their craft. "No one," wrote Emerson, "should take up photography who is not content to work hard and study so that he can take pictures for his own eye only. The artist works to record the beauties of nature, the bagman works to please the public, or for filthy lucre, or for metal medals" (1890, p. 256).

Another technological history traces the evolution of the 35-millimeter camera, arguably the invention upon which twentieth-century photojournalism is based (Hicks, 1984). As Hicks writes, the 35-millimeter is the "nearest thing we have to a universal camera" (p. 1). The 35mm camera is credited with advancing Cartier-Bresson's (1952) notion of the "decisive moment." Freed from the rigid two-sided film packs of a *Speed-Graphic*, photographers carried the most popular 35mm brand, the *Leica*, to cover the wars, protests, and human drama of the second half of the twentieth century.

The 35mm camera, with its small size, portability, and quick film advancement, is often considered the tool that gave rise to photo magazines, the photo essay, and modern conceptualizations of photojournalism.

Histories of Photojournalism

Michael Carlebach's (1992, 1997) two books detail the origins and development of photojournalism in the United States, starting with the very origins of photography itself to the emergence of *Life* magazine, which cemented the form in American culture. *The Origins of Photojournalism in America* and *American Photojournalism Comes of Age* are rich with first-hand accounts by pioneering photojournalists, giving illustrations and explanations of the relationship between technology and storytelling. Carlebach's work is arguably central to the canon of photojournalistic history. The two volumes trace the technological evolution of the vocation, emphasizing the critical quality that separates it from snapshots, art, and portraiture; namely its contextualization in the discourse of news. Channeling former *Life* magazine editor Wilson Hicks, Carlebach opens *Origins* by arguing that "the combination of text and photographs is, indeed, the guiding principle and single most important characteristic of photojournalism."

Howard Chapnick (1994), who authored a book for would-be photojournalists, *Truth Needs No Ally*, favored the phrase "concerned photographer." This term was coined by photographer and curator Cornell Capa (Robert Capa's brother) in the course of planning an exhibition at the Riverside Museum in New York and its eponymous companion book. Referring to the traditions of the photographers whose work was being displayed, Cornell Capa (1968, p. 3) wrote: "...the concerned photographer finds much in the present unacceptable which he (*sic*) tries to alter."

A parallel strain is the push for professional legitimation. NPPA historian Claude Cookman (1985) describes the early years of photojournalism as especially unflattering. Without a professional organization or code of ethics to guide them, photographers of the era that inspired the musical *Anything Goes* exemplified the sentiment. Anything did, indeed, go, with cameras snuck into executions,

socialites ambushed en route to divorce court, and tabloids printing corpse photos from accidents and murders. Becker's (2003) examination of this era notes that photos were relegated to the populist press, special illustrated publications, and the tabloids.

The early twentieth century was a time for both testing the limits of taste and behavior for news photographers (who did not call themselves photojournalists at the time) and for the beginnings of a professionalizing impulse. Photographers roamed the halls of courthouses for images of society's divorcees, snuck cameras into executions, and portrayed suicides with fanfare (Cookman, 1985; Zelizer, 2010). Ascher (Usher) Fellig, better known as "Weegee," because his ability to show up to crime scenes first embodied the prescience of an Ouija board, epitomized the era of bloody, pathos-laden images (Cotter, 2006). The lowest point, perhaps, is marked by the murder trial of Bruno Hauptman, charged with killing the baby son of Charles Lindbergh in 1932. Photographers were said to have chased witnesses and created chaos in the courtroom, accusations that caused the American Bar Association to call for cameras to be banned from criminal courtrooms (Cookman, 2009). So entrenched is this belief that photographers were to blame that it is repeated and reprinted without question—though photographers at the time, including the first president of the soon-to-form National Press Photographers Association, pointed to evidence that photographers behaved no differently than writers, and that moments of frenzied activity took place during court recesses, not during the trial itself (Cookman, 2009; *Sunshine in the Courtroom Act of 2007 H.R. 2128*, 2007). Costa lobbied for decades to fight Article 35, and made some progress with individual state courts such as Florida, but federal courts largely remain uncovered by cameras (Cookman, 1985). To this day, the US Supreme Court continues to ban all photographic coverage.

No account of photojournalism's history in the United States is complete outside the context of the National Press Photographers Association (NPPA). Established in 1946 as the professional organization for news photographers, NPPA continues to maintain ethical boundaries; police standards of behavior and advocate on behalf of visual journalists of all types: still and video; large and small markets; newspaper and television; staff and freelance. Claude Cookman's

(1985) official history of the NPPA, *A Voice is Born,* brings life and detail to the early years of photojournalism's struggle for professional legitimacy. After World War II ended, a number of prominent photojournalists saw a need for a professional organization much like the Society of Professional Journalists, which serves reporters, or the Public Relations Society of America. Much of the credit for NPPA's formation is given to Joe Costa, at the time, a photographer with the *New York Daily News.*

Costa was a tireless defender of the group who liked to call themselves "gentlemen of the press" but worked just as much to help them polish their public images. The first Code of Ethics approved by the board remained intact until the 1990s when digital technologies forced some adjustments. Costa urged NPPA leaders to set a good example with their appearance, suggesting that they be clean shaven and not converse with the public with a cigarette in their mouths (Fulton and Winslow, 2006). Hagaman (1996) describes her personal experience with the professionalization effort in the 1970s, when the prominent University of Missouri helped to popularize the idea of photo*journalism* as opposed to press photography.

With *American Photojournalism: Motivations and Meanings*, Cookman (2009) writes a historical account in a professional and institutional context. Cookman identifies four forces that have influenced the development of photojournalism as a profession, namely technology and three aspects of practice: bearing witness, social reform, and humanism. With an eye on what motivates photojournalists to this day, Cookman brings to life the people and organizations that fostered the identity of today's visual journalists.

What does the digital future hold for photography and visual meaning? In *After Photography* (2009) and *Bending the Frame* (2013), Fred Ritchin explores the nature of digital truth and how visual journalism might continue its humanist project. These works are not historical projects per se, they are more futurist projects. In *After Photography*, Ritchin suggests that digital platforms can be used for multi-perspective, interactive, or even proactive projects, which would allow for greater collaboration with subjects or even allow concerned viewers to click on an upsetting image and find out immediately what they might be able to do to help. His subsequent book, *Bending the Frame: Photojournalism, Documentary and*

the Citizen, continues the conversation about making photographs meaningful in an age when the camera's output is completely malleable. Extending the humanistic motivation of photojournalism, he proposes ways in which photojournalists might portray peacemaking, instead of the "glamour" of war, by changing the documentary's institutions, practices, and production.

Histories of Images

Some scholars have examined the role of images in history, as a way to better understand ideology and culture. Why, for instance, is Migrant Mother the face of the depression for so many Americans? What is it about Nick Ut's photograph of children fleeing their Napalmed village that resonated so forcefully with the audience when it was first published—and today? Robert Hariman and John Louis Lucaites (Hariman and Lucaites, 2007) use critical and historic methods to study these and other iconic images of the twentieth century demonstrate how iconic images reproduce modern liberal democracy. Through their careful and detailed examination of certain key images and the discourse surrounding those images over time, Hariman and Lucaites optimistically make a case for photojournalism as a vehicle for public understanding and debate.

Perlmutter (1998) focused on images of war for his exploration of iconicity, and identified two strains, what he called discrete, which describe a specific image such as the flag raising over Iwo Jima, or generic, such as Pietà trope used by war photographers. Photos of conflict that impact public policy, he suggests, rise to the iconic status based on a number of dimensions such as aesthetics (i.e. composition), the frequency with which an image appears, and how prominently an image is displayed in media.

With *Believing is Seeing: Observations on the Mysteries of Photography*, Errol Morris (2011) similarly takes careful, detailed, and exhausting aim at a few key images from history to explore photojournalism's epistemology. Taking issue with a small passage from Susan Sontag's last book, *Regarding the Pain of Others* (2003), in which she asserted that war photographer Roger Fenton staged his famous photograph from the Crimean War called "The Valley of the Shadow of Death," Morris examined historic records, traveled

to Crimea, and interviewed curators to determine what really happened. His evidence points to something more mundane than photo manipulation, and he concludes that Fenton was not, as Sontag accused him, a manipulator. Other famous images receive similar treatment in this project: torture photos from the Abu Ghraib prison; Farm Security Administration (FSA) photographer Arthur Rothstein's photo of a steer's skull; an image from a bomb attack in Lebanon that included a Mickey Mouse doll, and so on. In each chapter, Morris describes, with painstaking detail, the connection between photographer, camera, publication, and meaning.

Key Figures

Scholars have filled a considerable number of pages describing journalists, their professionalism, their ideology, and their demographic characteristics. Far less scholarly attention has been focused on the people who make and take photographs. When does a photographer become a photojournalist? How about a graphic artist who works for a newspaper—is he or she a journalist too? Lines are sometimes drawn between those who have editorial control and those who merely take direction; or between those who work for a cause and those who ascribe to journalistic objectivity. The various dichotomies echo the split between the art and science of photography: what aspect of the work is mechanical, and what is aesthetic?

Alan Trachtenberg (1989) sought to capture this connection between the creator and the creation with *Reading American Photographs.* By connecting the lives of Mathew Brady, Lewis Hine, and other key figures to the work they produced, Trachtenberg brings home the distinction of the photographic image: it is always a unique representation from a human being working in a place and time that will never be repeated. Understanding the work of social documentary greats such as Lewis Hine, Dorothea Lange, Walker Evans, and other FSA photographers is essential to understanding what Cookman (2009) calls the humanistic vision of photojournalism (Evans, 1971; Hine, 1989; Lange, 1994). Biographies and autobiographies of Ansel Adams, Henri Cartier-Bresson, and Robert Capa bring home the materiality and corporeal nature of

photojournalism: waiting for the sun to rise, for the decisive moment, or seeking a safe spot to capture the drama of the battlefield (Adams, 1972; Capa, 1947; Cartier-Bresson, 1952, 1976).

Photojournalists are not the only people to have influenced visual news, of course. Vinson's (1967) biography of the postbellum cartoonist Thomas Nast, for instance, provides context for understanding the nature and power of political cartooning in the United States, as well as documenting Nast's enduring icons: the Democrat Donkey, Republican Elephant and classic Santa Claus. Similarly, students of visual culture need also be acquainted with the lives of Edweard Muybridge, Sergei Eisenstein, and D. W. Griffith in order to appreciate today's motion pictures (Barry and Bowser, 1985; Haas, 1976; Seton, 1952).

Documentary Photography

As photography became the medium of the "real," advocates for a variety of progressive causes used it to advance their agenda. Here again, technology influenced narrative. Jacob Riis, a journalist and immigrant, picked up a camera to record the poverty of tenements in New York. He was one of the first adopters of flash powder, and with it was able to capture memorable scenes of misery in the darkest of alleys, or as he put it, "let in the light where it was so much needed" (Meltzer and Cole, 1974, p. 36). Riis lectured about his work, and eventually created a book, *How the Other Half Lives*, in 1980 (Meltzer and Cole, 1974). Here, though, technology got in the way, for as Meltzer and Cole note, the halftone process of the time was still inadequate. It was not until the 1970s, when the book was republished with better reproductions of his glass plate images of abject poverty, homelessness, and despair, that attention was called to Riis's photographic talent. Another early activist-photographer was Lewis Hine, who managed to do undercover work in mills and factories that employed children, in spite of the lack of advanced technology. That he was able to hide a large format Graflix in a bucket for his first undercover shoot, pull it to his face, and make extraordinary, emotional and aesthetically powerful images is testament to his bravery and, perhaps a bit of luck (Meltzer and Cole, 1974).

Figure 2.1 Dorothea Lange working from atop a car. Lange's FSA photo of Florence Owens Thompson, also known as Migrant Mother, has become the best known icon of the Depression.

Source: Library of Congress.

The nature of documentary work, and the way one cause can motivate an individual for a lifetime, is reflected in the often-biographical emphasis of books on the documentary's history. Meltzer and Cole (1974), for instance, divide *The Eye of Conscience* according to the work of individual documentary stars, from Timothy O'Sullivan (who worked for Mathew Brady), to Lewis Hine and Dorothea Lange in the early twentieth century, to Michael Abramson and Ira Nowinski of the latter twentieth century. "Behind the lens,"

they write of their subjects, "was a personal vision of what life is and what it could be" (p. 11–12).

War Photography

War was perhaps not the first subject of photography, but it might well be considered the first subject for the practice of photojournalism. Though one of the very first photographs of war was taken during the Mexican-American War in 1847, Robert Fenton, who was commissioned to cover the Crimean War in 1855, might well be considered the world's first war photojournalist (Cookman, 2009; Morris, 2011). In the United States, the Civil War not only received ongoing photographic coverage, but might rightly be considered the first war to be seen by a mass audience through illustrated news. Borchard, Mullen, and Bates (2013) explored the dynamics of this coverage and the use of engravings based on photographs. With this detailed textual analysis, in which they compare illustrations and photographs from similar moments in the Civil War, Borchard and colleagues were able to capture the dramatic change wrought by photography—the way it was able to capture reality in ways illustrations simply could not. It is true, as they acknowledge, that a photograph only represents "one reality" and often an "incomplete one" (p. 100), yet the shift from art to mechanical accuracy signified a dramatic epistemological shift.

Photojournalism took the form that most of us recognize during World War II. The invention of wirephoto spread the images more quickly and widely than ever before. Smaller cameras made it possible for photographers to work more closely on the battlefield and bring home dramatic images.

Photographs of conflict are important not only to communication scholars but also to those who seek to understand conflict, globalism, and the human condition. "War is extremely photogenic," explains Moeller (1989, p. 4) in her book on how photojournalistic practice affected cultural messages during key conflicts in American history. Moeller's book is somewhat unusual in the genre, in that her research focuses on the process of the war photographer more than the product. *Shooting War* (1989) examines the photography of conflicts from the Spanish-American War to Vietnam according to

three dimensions: the photographers, the historic context, and the photographs.

Perlmutter (1999) reached back to the stone age for his history of war images, tracing the way images of war fulfill political and cultural needs to see horrors as somehow just, and sacrifice as noble. Similarly, Griffin (1999) found that over time, the function of war photography shifted from documentation to ritualized symbols. That is, they function less as conveyors of information than as symbolic artifacts that bind American culture to a patriotic narrative: "The published photographs of war have a ritual quality, like the monuments and commemorative displays constructed as markers of collective memory. Do they offer a picture of history? Yes, but only when history is understood as national mythology" (Griffin, 1999, p. 152).

Figure 2.2 Images credited to Mathew Brady were usually shot by members of his organization. Covering the Civil War required rough travel with chemicals and equipment carried in wagons pulled by horses. Because of these technological challenges, photographers were generally able to capture not the fighting but its preparation, anticipation, and horrific results.

Source: Library of Congress.

Atrocity and Horror

Just as the Civil War represents the birth of America's war photography, it also provided some of the earliest instances of atrocity portrayals. The savagery of Andersonville Prison could be viewed in portraits of survivors, converted to engravings for *Harpers Illustrated*. When an escaped slave by the name of Gordon enlisted in the Union Army, staff photographers were called upon to document the tangle of scars on his back from a whip (Goodyear, n.d.). The image was mass produced and distributed as a carte d'visite, replicated as an engraving in *Harpers*, and became a rallying icon for abolitionists.

While the image of Private Gordon fueled the cause of freedom for slaves, a more horrifying photographic practice perpetuated the dehumanization of African Americans after the Civil War and into the twentieth century. Picture postcards of lynchings, created by onlookers as though the occasions were family picnics, were commonly traded among whites. The practice entered public consciousness in 2000 with an exhibition in New York's Roth Horowitz Gallery. A book based on those images, *Without Sanctuary: Lynching Photography in America*, was published that same year, forcing contemporary Americans to contend with this sadistic chapter of history (Apel, 2004).

Barbie Zelizer's (1998) work on Holocaust imagery sets the gold standard for studies of atrocity images. Based on the careful examination of hundreds upon hundreds of photographs and documents from the liberation of Nazi concentration camps, Zelizer traced the way the images shaped collective memory then and now. *Remembering to Forget* (1998) argues that such images serve to allow society to compartmentalize and negate the lessons of the holocaust. The way Holocaust images have been continuously recontextualized, in books, films, museums, and art, Zelizer (1998) concluded that "the media's use of images is inadvertently creating a breach between representation and responsibility, in that the less grounded an image's original use, the more misused it can become in memory" (p. 239). As Sontag predicted in *Regarding the Pain of Others* (2003), Zelizer concludes that "the act of attending through memories has come to stand in for real action" (p. 239).

Similarly, John Taylor (1998) examines the ethical use and viewing of gruesome images in press accounts. With *Body Horror* (1998), he similarly takes on Sontag's notion that photography provides an analgesic to war. With attention to the both image contextualization in news and the various gazes through which audiences consume such images, Taylor concludes that it may be more helpful to consider the way such photography nourishes state interests in times of war (1998). In his examination of war imagery, Perlmutter (1999) found the pattern of war horror imagery to work unevenly, resting responsibility with the good and evil that exists within human hearts. As he put it, "the horrors we see or do not see are determined by our flags and our sympathies" (p. 173).

Zelizer's critique could be ultimately discouraging for those who believe in the power of photojournalism to transform hearts. The fragmentation of mass media and the proliferation of decontextualized images on the Internet only exacerbate the problem she identifies. If there is hope for photojournalism's future, it is rooted in the way the Internet creates opportunities for global exposure to photojournalists, citizen journalists, bloggers, and those who, through chance and fate, commit spontaneous "acts of journalism" as they work to document the human condition around them.

Varieties of the Visual

It would be a mistake to consider the history of the reproducible image only in terms of still photography. Two other forms of visual communication demand attention: the moving image and the artistic one.

Motion Pictures

The relationship between stills and motion pictures was not a clean parallel division and remains constantly intertwining and mutually referential. Like the histories of photography and photojournalism, cinema histories usually emphasize technological, biographical, or functional chronologies. Persistence of vision allowed humans to

enjoy novelties like hand-cranked peep shows (which were not necessarily pornographic; that connotation came later) and magic lantern shows in the nineteenth century. American Edweard Muybridge, a photographer/artist/self-promoter conducted motion studies of humans and animals that helped inspire motion pictures. Just as with photography, the development of motion pictures was also a group effort, with American artist Thomas Eakins, Etienne Jules Marey of France, and Ottomar Anschutz of Germany among its leaders (Rosenblum, 1997). Motion studies proved fruitful for artists, scientists, and, notably, for the once-governor of California, Leland Stanford, who collaborated with Muybridge to settle his curiosity about whether a horse pulls all its feet off the ground in a full gallop. Muybride put up a set of still cameras around a track with trip wires, and the resulting series answered the question affirmatively (Rosenblum, 1997).

Once technology in the form of celluloid film caught up with the idea of motion pictures, the first movie cameras appeared. The very first was introduced in France in 1895 by the Lumiere brothers, quickly followed in the United States by Thomas Edison (Barsam, 1973). The earliest films were actualities, small clips of reality (not much unlike a typical YouTube video). Interestingly, different camera technologies yielded different narratives. The Lumiere's cinematograph used perforated film and was relatively portable, making it well-suited for documentary work, and was used extensively for that purpose throughout Europe (Barnouw, 1974; Barsam, 1973). The Lumiere's first 50-second film shows workers leaving their factory; it was among a set of films depicting daily life unveiled to the public later that year (Dixon and Foster, 2008). Edison's cameras, such as the Vitascope, were larger and better suited for studio work, giving rise to the earliest entertainment movies, which mimicked vaudeville theater (Barsam, 1973)

As film historians point out, one cannot understand cinema's development only as a march of camera patents (Koszarski, 2009). The phonograph, for instance, contributed to early ideas about how film narrative should be constructed (Feaster and Smith, 2009). Political and economic forces caused documentaries to thrive in some areas and entertainment in another (Barsam, 1973). Individual filmmakers like Sergei Eisenstein, D. W. Griffith, and George Méliès

innovated to develop what is today understood as the "language of film." The thread that weaves through these early film histories is relevant to today's research on smartphones and new media: each iteration yielded a different type of narrative, but often relying on previous forms for inspiration at first. As McLuhan (1964) argued, new media tend to start as containers for the old. As today's cameras break away from old ideas about news production, the truly new media age is probably still years away.

Documentary and TV News

Students of documentary often start with Erik Barnouw's (1974) history, still considered central to the film canon. Barnouw not only traces the technological and biographic chronologies of the form, he also foreshadows the critique of image-based news when he describes the speed with which those in power seized upon the newsreel as a way to build and enhance their image (Barnouw, 1974). John Ellis (2012) tackled the impact of digital technology on documentary by suggesting that the form is in a new phase. Prior to 1950, he writes, documentary relied heavily on reconstructed scenes; in a second phase, he explains, the truth of the image became paramount, and in the third phase, ongoing, truthfulness of photography is under question. Because viewers are more likely to consider alternative perspectives while watching a film, Ellis argues that contemporary documentary filmmakers have adopted a more reflexive style.

In keeping with McLuhan's principle that new media start out as containers for the old, early television news used newsreels and emulated their brief, staccato style to cover events. The networks produced longer-form documentaries as well, even socially conscious documentaries, until sponsors started to lose interest (Barsam, 1973).

Paper, Posters, and Printing

The evolution of photography and camera technologies meant that artists no longer had a monopoly on the recording of visual reality. Impressionism, a style of painting that sought to capture ocular

perception rather than documentary reality, was only the first of many controversial movements among artists who sought to redefine their purpose and the cultural significance of their work. The twentieth century brought with it traumatic social change: urbanization, diaspora, mechanized warfare, and the creative class response was revolutionary (Zelanski and Fisher, 2011). Rather than aspire for their work to meet a higher cultural ideal, the notion of "art for art's sake" took hold, as did a rejection of expectations that art be orderly, representational, or even beautiful. Paintings might or might not depict something recognizable, or they might distort the visual in order to create a mood or a sense of movement, as with Duchamp's *Nude Descending a Staircase*. These ideas took hold in many creative endeavors in different ways. Modern architecture, for instance, celebrated urban space with geometric steel patterns and elegant skyscrapers. But the Dadaist artists, horrified by the ferocity of industrial warfare, turned away from the rational and beautiful, instead offering up art that was at once humorous and confusing.

The decades that straddled 1900 also brought improved printing technology and, with it, a burgeoning poster art movement. Color lithography, refined and mechanized by Jules Chéret in Paris in the 1860s, made possible the posters of Henri Toulouse-Lautrec and Edward Mayfield in the United States (Moore, 2010). The new printing method added color and complexity to a genre that is iconic of its era. This popular art, its accessibility and its combination of image, text, and design principles also became a tool for propagandists. The US Committee on Public Information used posters to recruit soldiers, sell war bonds, and encourage public support for the war, with bold colors, emotional illustrations, and well-placed symbolism. Such techniques were used by propagandists of all political perspectives, of course, and have been effectively harnessed by modern advertising, album covers, T-shirts, and today's online memes.

Typography

Perhaps nowhere is the theoretical tension between word and image more problematic than in typography. Here words are the images, letters have style, their arrangement constitutes design. Eisenstein's

(1979) work is unparalleled for its contextualization of typography's history. A much older work, published by the precursor of the Printing Industries of America (Hamilton, 1918), provides a brief and entertaining introduction to the history of the alphabet *before* moveable type was invented. Simon's (1953) instructional text is considered one of the stars of the Canon, but focuses on book formatting. Barnhurst's *Seeing the Newspaper* (1994) contextualizes typography as another facet of visual communication in print, noting that "although readers do not usually know typographic history, they still may grasp typographic connotations because they are exposed daily to type that reiterates historical ties and traditional ideas" (p. 131). Today, digital media have made it possible for anyone to play with fonts and easily integrate design into personal web pages and blogs, underscoring the importance of this nonphotographic visual form.

Illustrated Magazines

Any history of visual communication would be incomplete without an examination of the ways photographs were brought to public attention. Before the halftone process, of course, the work of Mathew Brady and his staff were presented in galleries. In Europe, many people got their first glimpse of celebrity culture through the *Galerie Contemporaine*, which displayed daguerreotypes of artistic, literary, and political elites in Paris between 1876 and 1894 (Rosenblum, 1997). Key exhibits during the modern age include *The Family of Man*, curated by Edward Steichen (1955); *Without Sanctuary* (2000), mentioned above; and Cornell Capa's *The Concerned Photographer*, which led to the establishment of the International Center of Photography in New York City.

The way that most people came to appreciate photojournalism, however, was through magazines like *National Geographic* and *Life.* While the National Geographic Society existed before its magazine, as Lutz and Collins (1993) put it, the publication became America's "Lens on the World" in the twentieth century. Using a combination of content analysis, archival digging, and ethnographic research, Lutz and Collins's work shows that while *National Geographic* has a

reputation as a vehicle for scientific information, it has historically presented a stylized and specific form of American hegemony (Lutz and Collins, 1993).

Life magazine, established in 1936, was the world's premier showcase for photojournalism, cementing, if not inventing, the idea of the photo essay, and providing a platform for some of the greatest photographers of the era.[1] Kozol's analysis finds that like *National Geographic*, *Life* also presented a very specific ideological perspective of the world and the ideal American family. The autobiography of former editor John Morris (1998) details the way *Life* covered World War II and the Cold War. With a career that spanned from the Leica's arrival to the digital revolution, Morris was involved with *Life's* coverage of D-Day, the advancement of the Magnum photo agency, and the photo desks of *The New York Times* and the *Washington Post*. His account of the way Robert Capa's film from the Normandy invasion was ruined is a haunting lesson of the days when negatives were unique and fragile.

Cameras and Context

While changes in technology provide a convenient timeline for tracing the evolution of the modern image, historical research demonstrates that machinery is only a small part of the story. Studies of the role of photography in culture, the way powerful institutions have used images to impart their agendas, and the growth of institutions around visual communication all offer a rich context for understanding the significance of pictures from the past. Concerns about irrational, entertaining images and their competition with rational argument grow even fiercer as industrialized society spends more and more waking hours with screens. Questions about the epistemology of photography are only more critical today, when elementary school children are able to use tools like Photoshop, and, broken free of paper and ink, images are recontextualized more carelessly than ever before. As the ensuing chapters of this book will show, the important historic questions are a thing of the present.

Conclusions

- Histories of images can be traced technologically, through biography, or by their representations of events over time.
- Biographical and autobiographical accounts of key photographers convey the artistic and corporeal nature of photojournalism.
- War photography is especially significant as a practice operating at the intersection of mortality, history, technology, and journalism.
- Cameras are not the only technologies worthy of historic studies; paper, printing, and publishing advancements have also changed the way visuals communicate.

Chapter 3

Who: Research on the Sources of Visual Communication

Who could do that? One of the most polarizing moments in photojournalistic history, and misunderstandings surrounding that moment, inspire many people to wonder how Kevin Carter could take a photo of a famished girl crouched down to rest on her way to a feeding station and being watched by a vulture. The image is a lightning rod for critics who see news photographers as their own sort of vulture, profiting from human suffering. Kevin Carter, who won a Pulitzer Prize for the image in 1994, committed suicide a few months later (Keller, 1994). The photograph, the public's response, and Carter's life provide a rich, if tragic, intersection for considering just "who" photojournalists are, why they do what they do, and how they go about it.

"Picture People"

Photographers worked for newspapers for decades before the idea that they comprised, or should comprise, a professional group. One long-standing foil for the photographer is the writer. The tension between word and image identified by philosophers for millennia has a very real-world example in the rivalry between "word people" and "picture people" in news organizations. One of photojournalism's

leading educators, Ken Kobré, explains that this is partly rooted in the usual organizational rivalry for resources (pitting writers against photographers for space in a newspaper) but that this rivalry is deeply rooted in the educations and backgrounds of the two groups. Historically, reporters have come from university writing and/or English programs, and photographers may or may not have a university degree, having learned their craft from an art or technical school. This difference creates not only a schism, but also a hierarchy that puts words first. As Kobré (1996) writes in a section aptly named "When Clickers Meet Scribblers," this detrimentally affects the visual product:

> On some publications, unfortunately, the photographer never meets with the reporter and assigning editor. Rather, the shooter receives the information from an intermediary editor, or is briefed by notes on the assignment sheet. In these circumstances, the photographer plays a reduced role in determining the story's final outcome. Located at the end of the assigning chain, the photographer has little say in determining the best approach to the story. (p. 6)

The hierarchy persisted into the twenty-first century. Lowrey (2002) observed and interviewed journalists in newspaper settings, and found that tensions between the literary-based professionals continued to hold more power in the battle between "word" and "picture" people. When she studied television-print cooperative newsrooms, Singer (2004) found newspaper employees dismissive of television's visuality (and its brevity, too, it must be noted). Given that newspapers have run photos for more than a hundred years, however, her observation that "few print people have been socialized to see images as driving a story" (p. 848), is significant. Zelizer (1995) found hostility toward images surrounding an event deeper in the past, in the invention of the *wirephoto* system, which allowed for the transmission of visual information through phone lines. News photographers have often been marginalized in the journalistic community as a result of this assumed hierarchy. In her autobiographical documentary collection, Hagaman (1996) recounts the way she and a colleague resented being introduced by reporters as "'my photographer,' which implied that we were inferior to them. We said 'I'm not *your* photographer!' whenever reporters said that on assignment"

(p. 4). As if to underscore the status of photojournalists as newsroom misfits, a textbook on editing suggests that editors may need to offer advice on clothing and hygiene (Ang, 1996). "Sometimes the problem is not with the photographer but with the person," writes Ang:

> Brutal frankness may be the best favour one does for the photographer. It may be a question of personal hygiene or of dress and appearance: a gentle "Look, would you mind if I gave you a piece of advice…?" may turn a talented but terminally scruffy photographer into a halfway presentable talented photographer. (p. 59)

Television ushered in an additional duality and source of tension, that between still photographers who worked for newspapers, perceiving their work as more culturally valuable than that of their video-shooting colleagues (Bock, 2012a). The new media environment may change this perspective. Fahmy (2008) surveyed 245 online journalists in 2006, and found that while traditional skills such as editing, reporting, and writing remained the highest priority, the ability to shoot photos and video was increasingly valued. The rise in video use by newspaper organizations may also lead to greater appreciation for the role of visual communication, though it seems that many journalists feel they are being asked to do more without added appreciation, resources, or remuneration (Bock, 2012a).

Ethnographies of Visual Journalists

Ethnographies of photojournalists specifically are relatively rare. Many scholars have included photojournalists and video journalists in their larger ethnographies of newsrooms.

Gaye Tuchman (1978), for instance, included a full chapter on news film in the canonic *Making News*. Tuchman described the narrative conventions used by television film photographers (who today might be called videographers) and reporters, and how "news film casts an aura or representation by its explicit refusal to give the appearance of manipulating time and space" (p. 109). Based on her observational research, Tuchman noticed that television images are generally shot at eye level, not from extreme vertical angles, and

generally employ a set of standard shots of people and events for the production of an easily followed filmic narrative.

Another important contributor to the newsroom ethnography genre, Herbert Gans, incorporated photographic concerns and behaviors into each chapter of *Deciding What's News* (1979). Other scholars have similarly included the concerns of photographers and videographers into their critiques of news-making. Timothy Crouse's (1972) rollicking account of the journalists who covered the 1972 presidential campaign included the impact of the visual press, as did Gitlin's (1980) account of journalism's treatment of the counterculture movement.

Several scholars have devoted entire projects to photojournalists specifically. Barbara Rosenblum (1973) included photojournalists in her examination of three photographic specialties, comparing artists and commercial photographers. Her observations and interviews led her to conclude that the still journalists she had studied were the happiest with their work because they had the most professional latitude. Barbara Rosenblum (1973) observed that some of her subjects felt robbed of their artistic autonomy by institutional demands.

For his project *Shooters*, D. M. Lindekugel (1994) studied the ENG (electronic news gathering) video photographers of local television news stations. Lindekugel captured the resentments and the work routines of this subgroup. Based on sociological theories of professionalism, he concluded that the work of ENG photographers comprised an occupation more than a profession. More recently, Bock (2012b) conducted an ethnography of a newly emerged news specialist, the VJs, or "video journalists," who shoot, write, and edit entire stories while working alone. Some VJs once shot only stills for newspapers and were encouraged (if not forced) to learn how to produce video stories. Some are aspiring television journalists starting at the bottom rung of the profession, while others are well-established national-level journalists who prefer to operate their own cameras. Bock's research suggests that VJs working solo with daily deadlines are more likely to rely on the help of savvy public relations professionals who know how to provide "one-stop-shopping" stories, thereby shifting more power over the resulting narrative to powerful interests, and out of the hands of journalists. Like Barbara Rosenblum, Bock found that the narratives produced by VJs did

not vary according to camera size or technological affordances, but varied according to institutional demands to "feed" whatever publication beast employed them.

Portraits of the Profession

Studies of photo editors, those decision makers who work as the liaison between a publication and a photographer, offer insight on how news events are visually framed, and how public perception influences such decisions. In a study that combined content analysis and newsroom observation, Bissell (2000) found that photographic choices were often highly subjective, in contrast with the traditional notion of journalism as an "objective" activity.

Photo editing requires a different, though overlapping, set of skills in contrast with photojournalism. Editors need a sense of art, design, and ethics, but they are more likely to have to consider a story's larger context and narrative (Bock, 2009b).

The University of Missouri, where the notion of photojournalism as a profession grew in force, is also the source of two classic works on photo editing. *Visual Impact in Print* (1971) by Gerald Hurley and Angus McDougall remains a go-to resource for those hoping to use effectively choose, arrange, and display images. McDougall was the Missouri professor who took over for Edom and was a longtime director for NPPA's photo competitions ("Passages," 2009). His work was preceded by *Picture Editing* by Stan Kalish and Cliff Edom (1951). Kalish, a picture editor at the Milwaukee Journal from 1937 to 1950, lives on through a visual storytelling workshop established in his name for today's visual editors (The Kalish). Edom ran the newly established photojournalism sequence at the University of Missouri starting in 1943 (The Missouri Photo Workshop). Edom's credo remains at the heart of a workshop that continues to be directed by the University of Missouri to this day: "*Show truth with a camera. Ideally truth is a matter of personal integrity. In no circumstances will a posed or faked photograph be tolerated*." As much of the scholarship presented in this book shows, this central principle of photojournalistic ethics is under considerable pressure in the contemporary digital environment.

One specialization of photojournalism, celebrity coverage, has attracted scholarship in part because the paparazzi work at the margins of what is considered legitimate (McNamara 2011; Murray 2011; Smolla 2009). Blamed by some for the death of Princess Diana of Wales, the paparazzi are criticized as aggressive and greedy. Yet, as Mendelson (2007) points out, while paparazzi are often framed as exploitative and invasive, they are merely one part of a larger power struggle with celebrities wishing to control their image.

Finally, while they do not constitute a photographic specialty, female photojournalists represent a constituency that was historically marginalized. As Naomi Rosenblum (1994) writes, women are often barely covered in other mainstream histories and "seem nearly invisible" in photographic criticism and theory (p. 8). Rosenblum's history is a hefty corrective, covering not only women in photojournalism (beyond the contributions of Margaret Bourke-White and Dorothea Lange) but those who made a mark in art, fashion, and editorial photography, and those whose inventions improved photographic technology. The NPPA has also made an effort to highlight the work of female photographers, through workshops and coverage in its member magazine.

Today's Professionals

The term "photojournalism" was first used by Alfred Eisenstadt in the 1930s and institutionalized by the dean of the Journalism School at the University of Missouri in (Edom 1976; Hudson 2009; Paris 2007). The title was intended to imbue the work with a sense of seriousness and ethics. Hudson (2009) writes that photojournalists "distill the essence of the news into visual form, and their images work in concert with captions and stories" (p. 1060). The US Department of Labor (Bureau of Labor Statistics, 2012) identifies photojournalism as one of a range of specialties for the category of "photographers," who are technically defined as people who "use their technical expertise, creativity, and composition skills to produce and preserve images that visually tell a story or record an event." The bureau identifies a range of specialties, including portrait,

commercial, aerial, fine art, and news photographers (the latter comprised about 6 percent of the total). Research from the Bureau of Labor Statistics estimated that there were about 140 thousand photographers in the United States in 2010, and that their earnings were on the lower end of the national pay scale, averaging 14 dollars an hour in 2010, when the average wage for all occupations was 16 dollars an hour. Federal labor statisticians keep separate records for the estimated 58 thousand video and film photographers in the United States, whose 2010 statistics indicated a higher than average wage (nearly 22 dollars an hour). Another measure—the membership rolls of the National Press Photographers' Association may be misleading, for membership has been down since, even though federal statisticians expect the job category to grow. This apparent contradiction might be due in part to the growing number of journalists who are expected to be photographers in addition to their regular reporting job.

The long-standing debate over whether a photographer who shoots news is a journalist outright or a supervised camera-holder is evident in research on the news workers. David H. Weaver and his team have compiled data on journalists generally since 1971, but started to consider still photographers as journalists only since 1992. Video photographers are excluded from the reports by Weaver et al. because "most of them are directed by reporters and editors (or assist them) and therefore do not have direct editorial control over the information that is communicated to general audiences" (Weaver et al., 2007, p. 5). The dawn of citizen journalism and the rise of smartphone "acts" (Lasica, 2003) of journalism complicates the matter even more, for it becomes less and less clear when a person with a camera becomes a journalist of any kind, and when that person ought to be considered a visual journalist.

Dark Times

On May 30, 2013, the managers at the *Chicago Sun Times* dealt a dramatic blow to the notion of photojournalism as a specialization, by laying off its entire photo staff. *Sun Times* managers met briefly with the 30-person staff and dismissed them en masse. In a news release, the company explained that the move was part of

a multimedia staffing restructure, and that the audience was seeking more video content (Associated Press, 2013). The decision was quickly denounced by the *Chicago Newspaper Guild* and the NPPA as well as by several bloggers who proceeded to document the results of a newspaper relying on smartphone images from reporters and citizen journalists.

While the move horrified longtime newspaper photographers, it's not clear whether the layoff changed readership of the *Sun Times*. One critic created a blog to regularly compare the front pages of the *Chicago Tribune* and *Sun Times.* The blog, a *Tumblr* called *Sun Times, Dark Times*, calls attention to such practices as the use of stock-images rather than locally produced ones; an unflattering video freeze-frame that emphasized a grandmother's cleavage; or poor lighting on a protest photo. Professional photographers might seize upon these details as egregious variations from their standards. But one former Chicago media executive, Alan Mutter (2013), issued an explanation on his blog:

> "How can they do that?" asked a number of journalists, friends and readers who called or wrote to express their outrage. "Yes, it's awful," I agreed. "But, actually, it's easy." Here's why: Notwithstanding my profound personal respect for photojournalism and photojournalists, the fact is that relatively cheap, reliable and easy-to-use technologies like smartphones, Photoshop and Instagram make it possible for anyone, anywhere, anytime to shoot, sweeten and share a picture whenever the impulse strikes.

Mutter identifies the critical issue, which is not necessarily "Who is a photojournalist," but rather, whether or not images are "fungible," using the phrase "one bushel of wheat is as good as another." Photojournalist Alex Garcia (2013) of the *Chicago Tribune* shot back in his online column:

> First, real people have real lives. They have better things to do than to take time out to take, upload, caption and help vet a picture for a daily newspaper. And copy editors have better things to do than track down a Flickr user at a party who is not answering voice mail. Second, consumers equipped with smartphones don't anticipate news and don't have the visual sense and experience to capture a newsworthy picture.

What Garcia is unable to address, however, is whether or not institutions like the *Sun Times* care whether the images they use are "newsworthy." The notion that images are fungible goes back at least to the Renaissance, when printers found it cheaper to recycle plates, even in inappropriate contexts, rather than produce a new illustration (Eisenstein, 1979). Zelizer (2006) has noted that journalistic institutions often play fast and loose with images, moving them from context to context without appropriate attention to their origins. Research on pool feeds, which send one camera signal to multiple news organizations, shows that institutions have long considered images to be just another bushel of wheat, one as good as any other (Bock 2009a). And while citizens do not necessarily have time to regularly use their cameras to cover stories, some of the most newsworthy images of recent history have come from nonprofessionals, such as the tsunami of 2004, the Virginia Tech gun massacre of 2007, and the video of Neda Agha-Soltan dying of her injuries during Iran's so-called Green Revolution of 2009.

Citizens and Professionals

The day after the Iranian presidential elections when Ahmadinejad got the majority of the votes (supposedly 62%), public protests erupted across Iran. Following the disputed election, the Iranian government unleashed a widespread crackdown, where protestors, prominent opposition figures, journalists, editors, and bloggers were detained without trial and subjected to mistreatment and abuse (Baird, 2010). The so-called Green Revolution in Iran widely used social networking sites for documenting the struggle of protestors. Regarding the media, the Iranian government increased restrictions on domestic and foreign news outlets, making it extremely difficult to get uncensored news (Corn, 2009; Human Rights Watch, 2010). Meanwhile, a group of disconnected digital activists in Iran realized that they had the technical ability to get textual and visual information out. These individuals, or so-called citizen journalists began distributing content—including visuals—to members of the international press and the general public via blogs and twitter, and the idea of "citizen journalism" took the global stage (Human Rights Watch, 2010).

The visual strand of citizen journalism has its roots in activism and organizations that teach people how to shoot and upload video to the Internet. In the United States, the IMC (Independent Media Centers) started after the "Battle of Seattle" riots in 1999 with the slogan "Don't hate the media, be the media." Local TV News in the United States has long used what stations once called "viewer video," the precursor to J. D. Lasica's "random acts of journalism" (2003), and many news organizations still encourage viewers to send in their own pictures and clips. In fact, if not for viewer video, the visual coverage of certain stories such as the Virginia Tech massacre (captured by a witness with a smartphone) or the 2005 subway bombings in London, captured by numerous bystanders, would not be available.

The difference between these two basic paths of citizen journalism is a matter of routine. While "random acts" citizen video journalism operate outside the so-called news factory (Lasica, 2003; Bantz, McCorkle, and Baade 1980), IMC-style organizations may offer some support, usually in terms of social capital, for institutional routinization (Ananny and Stohecker, 2002).

There is no doubt that those who consider themselves to be citizen photojournalists rather than accidental witnesses, do commit acts of journalism without professional photojournalism training and use the tools of the camera and the Internet to visually document news and accordingly alter the view of traditional photojournalists. In fact, critics view citizen photojournalism with much skepticism: lacking in quality, content, and ethics. In trying to distinguish between professional photojournalism and citizen photojournalism, critics claim that because of the current ability to publish on the Internet, the true distinction between the two groups is vanishing. They explain that in the past, traditional journalists had a desirable social function of acting as gatekeepers to the journalism profession (see Mendoza, 2008). Overall, while some might agree that citizen journalism has in some way positively contributed to the field, many question its professionalism, gatekeeping role, and its lack of quality and financial resources to make it sustainable over time.

Supporters, on the other hand, cite its potential benefits in documenting news events, explaining "Sushi is still fish, just presented in a different way" (Baird, 2010). This has been specifically relevant

in the coverage of the Arab uprising and the banning of traditional media in many countries in the region such as Syria and Libya. Most of these countries have experienced major media restrictions from their authoritarian governments. Indeed in many of these cases the information posted by citizen journalists from the Arab world (e.g. by bloggers) were picked up by traditional media sources and then seen by a larger number of people. Clearly this is because citizen journalists were living their stories, and thus they were better equipped to give first-hand accounts of the turmoil. In these cases, the source became the storyteller, thereby lending a more authentic voice to the struggle. Domingo and Heinonen (2008) examined the relationship between citizens and traditional journalists through an analysis of weblogs. They found that although webloggers do not pretend to be journalists, much of their work does approach that arena.

The 2010 State of the News Media report confirmed that citizen journalism indeed has continued to play a new role. However the report also clarified that citizen journalists are still not in a position to replace or to provide the same quality of reporting as traditional news outlets. They cited the lack of resources as a huge drawback explaining that top citizen journalism sites produce an average of one new story per day. Trying to increase offerings and to join forces, some have suggested that citizen photojournalism partner with traditional news outlets to help fill in the gaps where news outlets no longer report from (i.e. dangerous and/or faraway places such as war zones in Iraq and Afghanistan).

Mort Rosenblum,[1] a professor of practice at the University of Arizona School of Journalism, however, raises a more important question. Mort Rosenblum (2010) explains today, as newspapers may fade away, we have gone far beyond the printed style of reporting. And even though news delivery might come at the speed of light, journalism as a process is still the same. He suggests that while it is wonderful that citizen journalism is no longer restricted to those who have press freedom, this does not mean they are equipped to act as true journalists. He used the analogy that owning a scalpel does not equip anyone to do a surgical procedure. But then it is also true—as discussed earlier—that international reporting is both expensive and dangerous. So, in this vacuum of lack of good global professional reporting, numerous editors have turned to well-intentioned

amateurs (or citizen journalists) who often miss the point and/or skilled manipulators (i.e. some local stringers) who twist the news to suit their own purpose.

By omitting context information (and providing sound bites) in the new media environment that lacks the necessary resources, the conventional way to depict wars invites untruthfulness and half-truths coverage that is limited in scope, and at times even deliberately misleading information in an effort to polarize the public, demonize the opponent, and glorify ones own side or favored party. Propaganda then might become the principal means of the news channels of mass communication, disseminating misinformation and steering public opinion as conflicts in a faraway location progress (Arsenault and Castells, 2006).

As a case in point, Morris (2010) from *The New York Times* explains that during the 2006 Lebanon War, newswires released many similar photographs showing an assortment of Disney and non-Disney toys in destruction scenes. The high number of toys

Figure 3.1 At any major event, professionals are likely to be joined by camera-wielding citizen journalists. Everyone's coverage can be made available worldwide on the Internet. (Photo by Mary Angela Bock)

photographed suggested that some of these images could have been staged. He explains the juxtaposition of innocence and destruction in a single frame raises issues regarding whether these photos represented disguised propaganda with a definite bias toward one side. These photos were taken by *Reuters* photographers (Sharif Karim, Issam Kobeisi, Mohamed Azakir, among others), and one photograph with a Mickey Mouse in Tyre, Lebanon, by an *AP* photographer (Ben Curtis) (Morris, 2010). In other words, the suggestion of citizen journalists and local stringers partnering with traditional news might turn out to be more problematic than otherwise.

What Makes a Professional?

What separates the professionals from the citizen journalists? One of the annoyances shared by professionals is a common remark from an amateur that camera the photojournalist is holding "must take great pictures." Their chafed response is that the camera doesn't do the work—just as having a great piano doesn't make one a great pianist.

If it's not the camera, what is it? Professionals, activist-photographers, citizen journalists and accidental witnesses all share a desire to bear witness and document the reality around them. Professionals have experience and training intended to help them create more compelling images, a point the "Dark Times" blog tries to convey. Professional photojournalists are trained to be ready for critical moments and are more likely to be able to react to breaking news but also to make compelling images, as Garcia (2013) argued was the case during the Boston Bombings of 2013. But sometimes an image is newsworthy even when it is not properly framed or lit; if the moment is captured, as with Agha-Soltan's death, or the sound of bullets at Virginia Tech, or the drama captured from apartment balconies during the 2011 tsunami in Japan.

The Distinction: Ethics

It may be, therefore, that the distinction of the professional lies not in their artistry but in their journalistic ideology. Ethics, and ethical

training, seem more essential for the public's need to know and see. Gross, Katz, and Ruby (1988) identified the rights of human subjects as critical with their collection of essays on photojournalistic ethics. Paul Martin Lester's *Photojournalism: An Ethical Approach* (1991) identified three primary ethical concerns: the rights of victims of violence (similar to the concerns of Gross et al.), privacy (and invasions thereof), and fakery. Julianne Newton (2001) approached ethics with a holistic proposal for an "ecology of the visual" that considers not only the public's interest in an image, but also the interests of the subject, the photographer, the location, and the context of the moment. Lester followed up by editing a book related to another ethical concern, visual stereotyping, with *Images that Injure* (Lester and Ross, 2003). The impact of digital media and the ease of photo manipulation have further kindled attention on photojournalistic decision making and behavior (Abrams, 1995; Huang, 2001; Tomlinson 1992).

The hallmark of photojournalistic ethics remains the code first put into effect in the 1940s, updated to reflect the digital age, by the National Press Photographers Association (NPPA). The code of ethics was intended to promote the highest quality in all forms of visual journalism and to strengthen public confidence in the profession and serve as an educational tool both for those who practice and for those who appreciate photojournalism:

NPPA Code of Ethics[2]

Visual journalists and those who manage visual news productions are accountable for upholding the following standards in their daily work:

- Be accurate and comprehensive in the representation of subjects.
- Resist being manipulated by staged photo opportunities.
- Be complete and provide context when photographing or recording subjects. Avoid stereotyping individuals and groups. Recognize and work to avoid presenting one's own biases in the work.
- Treat all subjects with respect and dignity. Give special consideration to vulnerable subjects and compassion to victims of crime or tragedy. Intrude on private moments of grief only when the public has an overriding and justifiable need to see.

- While photographing subjects do not intentionally contribute to, alter, or seek to alter or influence events.
- Editing should maintain the integrity of the photographic images' content and context. Do not manipulate images or add or alter sound in any way that can mislead viewers or misrepresent subjects.
- Do not pay sources or subjects or reward them materially for information or participation.
- Do not accept gifts, favors, or compensation from those who might seek to influence coverage.
- Do not intentionally sabotage the efforts of other journalists.

NPPA adds that ideally, photojournalists should:

- Strive to ensure that the public's business is conducted in public. Defend the rights of access for all journalists.
- Think proactively, as a student of psychology, sociology, politics, and art to develop a unique vision and presentation. Work with a voracious appetite for current events and contemporary visual media.
- Strive for total and unrestricted access to subjects, recommend alternatives to shallow or rushed opportunities, seek a diversity of viewpoints, and work to show unpopular or unnoticed points of view.
- Avoid political, civic and business involvements or other employment that compromise or give the appearance of compromising one's own journalistic independence.
- Strive to be unobtrusive and humble in dealing with subjects.
- Respect the integrity of the photographic moment.
- Strive by example and influence to maintain the spirit and high standards expressed in this code. When confronted with situations in which the proper action is not clear, seek the counsel of those who exhibit the highest standards of the profession. Visual journalists should continuously study their craft and the ethics that guide it.

Even though this set of principles has guided NPPA members for more than 50 years (with few changes since their original

adoption), some scholars advocate a universal ethics code for the journalistic profession that can be applied under all circumstances. Indeed, Limor and Himelboim (2006) found significant differences between 242 press codes that they examined across 94 countries. For instance, only a third even included a general reference to freedom of the press. Cultural differences can explain at least some of the differences in media ethics between various countries. Indeed, the line becomes blurred during graphic telecasts of armed conflicts; when running graphic and war-related imagery turns into incitement and when their omission becomes censorship.

In general however, critics contend there is a creeping conservatism among US media (Robertson, 2004; Fahmy 2010, 2005a, 2005b). The media are less likely to show graphic images today than they were decades ago. They are much more governed by what they believe the audience wants and needs (Robertson, 2004; Fahmy 2005a, 2007). The reluctance of US media organizations to feature graphic images because of a concern that it might offend audiences has merit. A recent study found that Americans disapprove of the display of graphic war-related images (Fallows and Rainie, 2004). Results also showed that once they have seen the most graphic visuals, respondents reported mixed feelings about the wisdom of viewing them. In the United States, Dayan and Katz (1994) explain that in times of war, disaster, and national mourning, the media usually suspend their quest for objectivity and role as a watchdog and do what they believe is required. In the case of the Iraq War for example, American networks (ABC, CBS, NBC, CNN, and Fox News Channel) showed a war devoid of blood, dissent, and diplomacy, focusing instead on a sanitized version of combat (Aday, Livingston, and Hebert, 2005).

For US news organizations, which refrained from showing all but glimpses of the casualties of the Iraq War, it was far from a simple issue. Philip Kennicott (2003) in a *Washington Post* article explains it was a matter of "taste, ethics, professional standards and responsibility to a complex web of constituents: viewers, families of the soldiers, the government and news organizations often vaguely defined sense of journalistic mission and responsibility" (p. C1). On the other hand, for an Arab news outlet, the decision to run graphic visuals of the Iraq War, for instance, was a basic question of journalistic objectivity (Kennicott, 2003). The coverage laid before the public the issues of the day and set the agenda for debate and discussion

in the Arab world. Hafez al-Mirzi, Washington bureau chief for Al-Jazeera, explained that if the Al-Jazeera network did not show graphic imagery of the Iraq War, it would not be realistic journalism (Donnelly and Bernard, 2003). In a study of Al-Jazeera network broadcasting graphic visuals of war by Fahmy and Johnson (2007b), one survey respondent noted:

> The least journalism should do is bring the naked truth straight to the viewers without adding or deducting from it . . . and if any government objects to this coverage then it should stop making bad news, which means stop causing those unpleasant scenes and not criticizing the media for broadcasting it. (p. 256)

Variations in presentational context have been found to be key, and should also be taken into account. The literature indicates what counts as standard practice and what counts as manipulation depends on the presentational context.

Interviewing magazine editors, Reaves (1991) concluded that digital alteration depends largely on the editorial profile of the magazine. Magazine editors reported that feature and cover photographs are more justifiably manipulated than news photographs (Reaves, 1991).

In a later study, Reaves (1995) surveyed visual editors and found that while they were more tolerant of altering soft-news photographs, they were intolerant of digitally altering spot-news photographs. She found a continuum emerged showing editors being the least tolerant of a particular computer alteration in a "spot-news photo," more tolerant of the same alteration in a "feature photo," and the most tolerant of the same alteration in a "photo illustration." Reaves concluded that the categorization of photo types could predict when newspaper editors are more willing to allow digital manipulation of a photograph.

Similarly, Davis (1992) found that some newspapers have separate rules for different types of photographs, for example allowing manipulation of only feature photographs that make no claim to represent reality. The rationale is that news professionals, unlike artists, perceive that news photographs have a goal of mirroring reality (Gladney and Ehrlich, 1996). While digitally altering an image could be morally wrong for the news professional, it may not be for the artist (Martin, 1991). In sum, past literature suggests that

what counts as standard practice and what counts as manipulation depends on the presentational context (Martin, 1991).

Fahmy, Fosdick, and Johnson (2005) examined current practices and attitudes of magazine professionals involving the ethics of photographic enhancement or alteration and also confirmed the importance of context in digital alteration. They surveyed more than 200 members of The American Society of Magazine Editors and found that respondents appeared keenly aware of the effects of digitally altering photos on the credibility of their publications. Less than 4 in 10 would alter or enhance an image to improve its readability and clarity. Two respondents commented:

> We will alter photos only when it is necessary to make better sense. I have never worked at a magazine or with a colleague that I feel have gone beyond the realm of appropriate editing (p. 11).
>
> If an image competes with the words on the page we'll lighten the image. We aren't putting horns on people's heads. Just cleaning up what we have to work with. Often we do this for readability (p. 11).

Overall, results of their study suggest that respondents only favored changing photos to alter color. Other photo alternations typically performed during the darkroom days were only moderately supported: dodging photos and removing blemishes.[3] Few of the respondents supported altering the skin tones of subjects and even fewer support combining images. These findings are in line with past literature that media professionals find nothing ethically wrong with digitally manipulating colors to achieve a desired hue (Gladney and Ehrlich, 1996). One respondent explained enhancing an image as simply a continuation of the photographic process. The magazine professional wrote:

> Photographers take artistic liberties as they shoot images, adding filters, changing lenses, and angles, etc. and this is considered part of the artistic process of getting a wonderful picture. Working on the image once it gets into the lab or magazine office could be considered an extension of that creative process (p. 11).

Further, media professionals might see the subtle manipulations they routinely perform as purely a technical matter that would be of

little concern to the reader. Based on past studies it could be that perception of what counts as standard practice and what counts as manipulation depends on the context (i.e. soft news versus spot news) in which these photos appear (Martin, 1991; Reaves, 1995; Davis, 1992). In other words, it is possible that the use of photographs in different types of magazines, such as newsmagazines and fashion magazines, dictate not only the degree of photo-alteration that professionals are willing to perform, but also the degree to which they feel their readers need to be informed about those alterations. In the study by Fahmy, Fosdick, and Johnson (2005) one respondent further explained:

> How we use photos depends on the subject matter. If it were a news photo we would not alter it. If it's a photo of a beautiful glass of wine set up by our photographer and taken to be an abstract representation of an idea, we might crop or adjust the color or do whatever to make it a beautiful representation of that idea. A photo of a war scene is very different from a photo of a fashion model (p. 13).

However, there is evidence that misuse of digital capabilities by some has eroded the power of photography everywhere. The central question in the literature today has been: Where to draw the line? In other words, where does enhancement end and deception begin? As described earlier, the images of toys in destruction scenes during the 2006 Lebanon War is only an illustration that raise serious ethical questions about the state of photojournalism today. Unfortunately, however, this case is not unique to the industry.

The *Chicago Sun Times*' dismissal of all its professional photographers is an extreme example, but many news organizations are suffering financially and responding by cutting back on staff and depending more on news wires and local stringers to supply visual coverage. Staff photographers are also given less time to produce more pictures, leading to added pressure and a temptation to manipulate the photographic situation. Further, with the widespread availability of digital imaging technology, it is inevitable that distorted news photos will appear in the media across all channels. Although manipulation of photographs is not new (Griffin, 1999), the ease and speed in which alterations can be performed are. Electronic digital darkrooms have made manipulated images easier to create and harder to

detect and have challenged the fundamental veracity of news visuals. This is mainly due to the absence of a film negative to document the existence of an original photograph (Pavlik, 1996). It is the potential for misuse that spurred most of the academic literature on the subject in the past decade. Studies suggest that news professionals are concerned that while photojournalism seeks to represent reality, photojournalists are increasingly working with a technology that effortlessly accommodates the distortion of reality (Reaves, 1987). In other words, with photo manipulation becoming easier, faster, and traceless, some fear that media professionals will become increasingly tempted to manipulate images and that alterations are more likely to transgress bounds of ethical behavior (Gladney and Ehrlich, 1996).

Finally, what about the concern piqued so dramatically by Kevin Carter's photograph—that photojournalists in crisis should put down the camera and give aid? Kim and Kelly (2010) conducted an experiment that asked subjects to put themselves into the place of photojournalists facing such a quandary, and found that everyday people rely on situational ethics to decide between helping and photographing. That is, factors that influenced real-life photographer decisions, namely whether other helpers were present, the intent of a victim to make a political statement (by self-immolation, for example) and the possibility of intervention influenced the experiment subjects as they worked their way through deciding what was right. As Kim and Kelly put it, "The seemingly easy answers of 'take the picture' or 'save the victim,' in fact, involve complex analyses." (p. 33–34). Such complexities, sadly, were not conveyed in the original caption for Carter's image. Only *after* readers responded with concern did *The New York Times* explain to readers in a subsequent issue that the little girl did not die; she got up and continued walking to the feeding station (Keller 1994). In later interviews, Carter explained that after shooting the image, he shooed away the vulture, sat against a tree, and wept (Moeller, 1999).

Shared Responsibility

Academics are not the only ones concerned with the digital enhancement of news photographs across news channels. Educators,

editors, and photojournalists most certainly are, suggesting that we need to do better across the board on every level. Audiences should get the visual coverage they deserve. Our debate is not about photojournalism but rather its audience: all of us. Demand better photojournalism and pay the cost through its delivery channels in various platforms. From the educational perspective, we need a system that teaches, photojournalists-to-be why it matters not to manipulate photographs and to learn the real essence of photojournalism: ethics, truth, fairness, and balance and cultural contexts and understandings. As technology influences the way images are now channeled and consumed, the need for editorial control, judgment, and curation is greater than ever. Simply put, photojournalists can't do the right thing if they don't know what it is. Meanwhile, we need more professional photojournalists out there documenting the world across all channels and all media platforms.

Has photojournalism lost its power to make a difference? The work of Lewis Hine and the FSA documentarians continues to inspire those who hope to use their camera to better the world. The surreptitious work of animal rights and environmental activists (which may or may not be classified as photojournalism) has disturbed powerful interests enough to prompt calls for legal prohibitions against it. But war continues, and so, decades after the fateful moment captured by Kevin Carter, does famine. How does one balance the journalistic demand for objectivity with the humanitarian ethic? The nature of their job, whether they're covering war, tragedy, or local government, demands that photojournalists walk this tightrope quickly, nimbly, and very publicly. It may be that digitization has wounded the public's faith in the camera; all the more reason, therefore, that their faith in the people using the camera must not be wasted.

Conclusions

- Western culture has traditionally favored words over pictures, and this has influenced the way visual journalists have worked within news institutions.

- Because photojournalism combines art, documentary, and technology, biographies and ethnographies offer valuable insight about the profession, beyond what can be learned through traditional occupational studies.
- New technologies are blurring the lines between amateur and professional journalists.
- The NPPA has created a code of ethics to promote the highest quality in all forms of visual journalism and to strengthen public confidence in the profession and serve as an educational tool both for those who practice and for those who appreciate photojournalism.
- Visual editors are more tolerant of altering soft-news photographs but are intolerant of digitally altering spot-news photographs.

Chapter 4

Says What: Research on the Content in Visual Communication

The literature suggests that audiences prefer stories of celebrities, political gossip, and human drama (Shoemaker and Reese, 1996). McQuail (2005) explained that this is why the media tend to personalize complicated events in an effort to make them both more understandable and attractive to the target audience.

In photojournalism, human interest is emphasized as one of the most important elements of a news photograph. Joe Elbert, *Washington Post*'s assistant managing editor for photography, has described a hierarchy that classifies photographs into four categories: informational, graphically appealing, emotionally appealing, and intimate (See Kobré, 1999). The more news photographs manifest emotional and intimate human elements, the higher they are located in this hierarchy. Elbert argues that photo editors should select photographs from the upper end of the hierarchy as often as possible. For example, while informational photos, such as photographs of news conferences, can be important for readers, editors prefer emotional images and, especially, shots of tragedy.

Thus, it comes as no surprise that most studies on visual content have similarly focused on the coverage of massacres, disasters, conflict, or terrorist attacks.

Several studies examined photographic news coverage of wars and conflict. Moeller's book *Shooting War* (1989), for example, examined

images of America at conflicts. According to Moeller, photography has created a unique history that has in turn had a major influence on the public's perception of wars.

Moriarty and Shaw (1995) conducted a systematic analysis of visuals depicting the first Gulf War in three US newsmagazines—*Newsweek*, *Time*, and *U.S. News & World Report.* More than one-third of the images they examined focused on war technology such as smart bombs and new combat airplanes. They argued that the Gulf War was framed as a "mini-drama" because the media's fascination for technology made news photographs connect easily with science-fiction imagery. They concluded that such science-fiction-like images hindered the public's ability to understand the actual cost of the war. Griffin and Lee (1995) also examined images in the three major newsmagazines and found that photographs framed the first Gulf War in a way that was congruent with "traditional depictions of the enemy, and presumably compatible with US government and military agendas for characterizing Saddam and the opposing forces, but is at odds with the claims made by American media that they were providing unprecedented, comprehensive coverage of the war" (p. 850).

Visual Coverage of Conflicts and Disasters

More recently, Fahmy and Kim (2008) conducted a comparative visual analysis of the recent Iraq War in *The New York Times* and *The Guardian* and found that the two newspapers visually portrayed the war differently. Overall, results showed the more spontaneous or direct coverage of ongoing events were rare at best, and were exclusively found in photographs that ran in the British newspaper, *The Guardian*. Griffin (2004a) discussed the nature of US newsmagazine photo coverage of the "War on Terrorism" in Afghanistan and the military invasion of Iraq. His analysis suggested that newsmagazine photographs primarily serve to establish narrative themes within official discourse. In other words, published photographs most often offer prompts for prevailing government versions of events and rarely contribute independent, new, or unique visual information.

Visual Framing, Different Levels of Analyses

Theoretically, many of the former studies mentioned used framing analysis. However, most of these studies failed to acknowledge that visual framing needs to be examined across levels of analyses (See Scheufele, 1999, 2000). This different levels approach could be used in analyzing the deep-level structure of framing such as examining the visual message in terms of macro-level frames (i.e. the human-interest versus technical frame and the antiwar versus the pro-war frame) versus microlevel framing devices (i.e. graphic portrayal and emphasis). It also could be used to conduct multilevel visual analyses in terms of media frames versus audience frames. Few scholars have indeed analyzed the content of visual coverage at different levels of analyses. But before delving into this issue, it may help to outline briefly what we mean by framing in general and visual framing more specifically.

A review of the literature on framing suggests that scholars from differing theoretical and methodological perspectives indicate that media content plays a particularly important role in constructing, shaping, and reinforcing perceptions of news events. However, because of this very interdisciplinary nature of the communication field, Reese (2007) explains that while theoretical diversity has been beneficial in developing and understanding the framing process, framing still lacks a common shared theoretical model and suffers operational problems (see also Scheufele, 1999). Reese (2007) explains that for many scholars. framing has represented more of a research program than a unified paradigm.

Indeed, a review of the literature confirms an overall vague conceptualization of framing as several scholars have tried to define what constitutes a media frame. Tankard and colleagues (1991), for example, describe a frame as "the central organizing idea for news content that supplies a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration" (p. 277). Gamson (1992) writes that a frame is a story line or an organizing idea. And according to Entman's (1993) renowned definition of framing, to frame is to "select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation" (p. 52).

In an effort to clearly define the process, Reese (2001) offered the following definition: "Frames are organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (p. 11). With this definition, he captured the dynamic process of negotiating meaning that occurs in the process, while highlighting the relationships within discourse that may undergo changes over time.

In terms of visual framing studies, the lack of a shared theoretical model and the need for visual frames to be explored across various levels of analyses, has not hindered researchers from conducting numerous quantitative framing analyses evaluating photographic coverage. As Huang and Fahmy (2013) explain:

> While a review of the literature shows no explicit definition of visual framing, the process itself involves the selective prioritization of some images to promote a specific interpretation of events conducted either consciously or subconsciously. It is therefore instructive to reflect on how media apply visual framing to contribute to our understanding of the world we see in the news. (p. 195)

Geise and Grimms (2013) tried to unfold the theoretical complexity of analyzing visual frames by presenting a three-level typology that broadly includes the surface structure, the meso structure and the deep structure. On the the surface structure, images are viewed by their manifest characteristics. These include stylistic characteristics such as whether the shot size was an aerial, full, long, mid, or close up. The meso structure views images from their quasi manifest characteristics. This entails symbolic frames such as the image of the American flag as a symbol of patriotism and/or stereotypical frames that focus on the ways the person or persons are depicted in the image. An example of this level would be women wearing the veil being stereotyped as submissive. And finally the deep structure focuses on the latent characteristics of the image. This category includes perspective frames that provide the viewer a general perspective of the image such the Abu Ghraib torture photos that, despite being a series of still images, shaped American public policy. The authors then suggest "The frame potentials on each level finally constitute an overarching meta-frame than encompasses the pattern of interpretation communicated by the visual image, thereby

being more than the simple addition of the frame potentials on each single level" (p. 2).

Despite the theoretical challenges, over the recent decades, many researchers have used the general framework of framing as a research program to understand news photographs and their relation to interpretation of news events. These studies included presenting and analyzing a "holistic" *approach* to visual frames such as peace/war frames, as well as analysis of visual content, camera angle, caption, frequency, prominence, and use of news sources / affiliations in different media platforms. For example, Neumann and Fahmy (2012) illustrate how the frequency of visual coverage during the last weeks of the Sri Lankan Civil War varied over time in newswires (see also Huang and Fahmy, 2011; Fahmy, 2004, 2010; Fahmy and Neumann, 2012; Neumann and Fahmy, 2012; Schwalbe, 2006).

Further it is important to note that the literature indicates that not all framing processes in the news function similarly. For example, scholars have suggested that the framing process that occurs in visuals differs from the framing process that occurs in texts of news stories. The prominent visual communication scholars Paul Messaris and Linus Abraham (2001) explain that the process of visual framing is less obtrusive than framing that occurs in written parts of print news, and in written and spoken parts of broadcast news. This is due to the realistic nature of photographs, their ability to imitate the appearance of the real world, and their ability to convey the impression that they are actual physical imprints of visual reality. They argue that visuals have become very effective tools for framing and articulating ideological messages. For example, the presence (or lack of) an image and the content of a news photograph help determine the interpretation of a news event (Entman, 1993).

Contrary to common belief, photographs are not neutral (Hulteng, 1985; Tagg, 1988). Even if images are not staged, they still need to be selected in a frame that cannot be wide enough to capture the complex reality (Messaris and Abraham, 2001), suggesting that visual journalists inevitably initiate the framing process. They may follow guidelines for objective reporting, but they may yet convey a dominant frame of news events to their target audience (Entman, 1993).

Frames versus Framing Device

In the firm belief that framing needs to be examined across levels of analyses, Fahmy (2010) operationalized visual framing in terms of the human-interest versus technical frame and the antiwar versus the pro-war frame, and explored the use of two sets of framing devices: graphic portrayal and emphasis.

In her analysis of nearly 1400 photographs, she examined contrasting visual narratives employed by English- and Arabic-language transnational press in covering the 9/11 attacks and the Afghan War. She found both newspapers mostly selected to run images from the same Western newswires (See Fahmy, 2005a).

Results showed that for the English-language newspaper the *International Herald Tribune*, the frames emphasized the human suffering of 9/11 and de-emphasized the civilian casualties and moral guilt of implementing military force in Afghanistan by focusing more on a pro-war frame that showed the complex military high technology operations and patriotic pictures.

For the Arabic-language newspaper *Al-Hayat*, the frames emphasized less on the victims and more on the material destruction of 9/11, and humanized the victims of the Afghan War. Further, it focused more on visuals of antiwar protests and emphasized graphic visuals portraying the humanitarian crisis in the Muslim country of Afghanistan.

Now for the sake of clarity, the following describes how she used four indicators operating at two different levels to conduct the study.

At the first level lay the framing devices. The first and in some ways the most critical framing device involved the overall salience and prominence of the events under study. The literature indicates one of the most powerful framing devices is the frequency with which a topic is mentioned in the news media. Entman (1993), for example, explains that by repeating and reinforcing visual messages that reference some ideas and not others, frames convey constant meanings, rendering some ideas more salient and memorable than others.

Aside from the images used to depict an event, how prominent an event is displayed also indicates the importance of that event (Entman, 1991; Fahmy, 2007; Fahmy et al., 2007). Garcia (1987)

found that readers normally look at the largest photograph on a news page, then the second largest, and the third largest, and so on. Wanta (1988) also found that larger photographs rather than smaller ones can cause accompanying stories to be more salient to the readers. Therefore, the more redundant the visual theme and the more prominent, the clearer the indication we get about the presence of visual frames.

Attention has also been paid to the use of graphic device in photographs (see also below the discussion of the Virginia Tech massacre). Scholars support the notion that graphic visuals capture viewers' attention and bring viewers closer to the action, making events more real and shocking (Fahmy et al., 2006; Fahmy and Johnson, 2007b; Pfau et al., 2006; Potter and Smith, 2000; Zelizer, 2004). For example, a close-up image of a violent act is more graphic than a long shot of that same act; seeing the image of a dead body from far away is not as graphic as seeing a close-up of the dead person's face lying in a pool of blood. Overall, then, the literature indicates that the more graphic the photograph, the easier it is to employ visual frames in developing a congruent interpretation of news events.

The second level of analysis dealt specifically with the use of visual frames. The first visual frame Fahmy (2010) examined was the human-interest versus technical frame. Few studies have looked at coverage of victims of tragic events to examine whether they were humanized, encouraging identification with them, or whether they were made less visible with the information, less centered on the humanity they shared with the audience members and thus less likely to evoke sympathy (e.g., Entman, 1991).

By and large, the literature suggests that media from different cultural and political perspectives create different images of conflict. For example, while the US media failed to report human agony and death of Iraqis in the Gulf War (Herman, 1992), the Arab media showed graphic images of suffering to gain public support for the Iraqi people (Ayish, 2001).

Griffin and Lee (1995) found that only 2 percent of the total images used to depict the Gulf War showed images of wounded or killed US soldiers. Instead, news coverage emphasized material damage, such as bridges blowing up, property damage, and other forms of non-human destruction (Prince, 1993). Further, the news media

over-depicted the use and efficiency of smart bombs (Perlmutter, 1998). It was only after the war that it was revealed that 70 percent of the bombs dropped in the Gulf missed their targets (Frank, 1992; Hachten and Hachten, 1999). More recently, King and Lester (2005) concluded that although journalists in the recent Iraq War were allowed safer and better access through the embed program (See Fahmy and Johnson, 2005, 2007a), the images published in US newspapers were overwhelmingly pro-military, showing very few pictures of civilian casualties from either side (See also Fahmy and Kim, 2008).

According to Herman and Chomsky (1988), the framing of suffering occurs in a dichotomy that makes distinctions between the unworthy victims depicted as enemies and the worthy victims who suffer. Consider the difference between emphasizing graphic images of human suffering and death of civilians versus emphasizing pictures of military arsenal and material destruction that could most likely numb the moral revulsion that leads societies to see war as a last resort. The difference offers a powerful demonstration of how the visual dimension of reporting news events could potentially create a humanizing frame versus a material one, specifically in reporting violent events.

The second visual frame was the antiwar versus the pro-war frame. This frame also belongs to the selection of visuals of conflict in a way that could potentially place a war in categories that conventionally elicit either support or opposition for a conflict. Past studies indicate that an important part of the framing process is the omission of news (Entman, 1991; Gamson, 1985). Examples of widely publicized omissions include antiwar demonstrations of the first Gulf War. The war had been widely opposed in Japan, Spain, and North African cities. However, no adequate recognition of the massive public opposition, huge rallies, and governmental resignations were present in US media. The news media failed to provide an adequate sense of the massive worldwide opposition. Instead, they focused on the support by the United Nations and most of the world for the war efforts (Schiller, 1992).

Thus in her study, Fahmy (2010) considered the difference between de-emphasizing (or omitting) images representing antiwar demonstrations versus emphasizing graphic images of US patriotism, along

with pictures of US aid efforts for the Afghan people. In emphasizing patriotic and aid efforts visuals lay a compelling demonstration of how the visual dimension of reporting the Afghan conflict could have potentially created a pro-war frame of coverage, specifically in reporting a war that followed the 9/11 attacks—one that the majority, at least in the United States, believed was morally justified.

In addition to classifying the four indicators described above, operating at two different levels of analyses, for visual communication scholars a multilevel analysis can also be systemized by examining the interplay between two additional levels.

Media versus Audience Frames

Visual communication studies can be conducted in which frames serve as media frames and audience frames. Audience frames refer to perceptions of those audiences who have been most closely touched by a specific event and thus by its coverage and the subsequent frames related to it.

Building on the concept of media frames versus audience frames, a recent study by Fahmy and Roedl (2010) examined visual frames used in covering the Virginia Tech (VT) massacre—the event that was considered the deadliest shooting rampage in American history (Hauser and O'Conor, 2007)[1]—and compared these frames to the perceptions of those directly affected by it. Trying to link media frames[2] to audience frames, they analyzed more than 2000 photographs of the shootings in US newspapers and conducted interviews with a few members of the victims' families to explore their perception of the coverage.

In terms of media coverage, results showed that the visual coverage changed as the event progressed to the third day. The most notable trend was the transition from the first two days' of coverage of photographs focusing on the victims and their injuries, students and families, rescue workers, police and university / public officials, emotional suffering and mourning, to photographs focusing more on the killer and his weapons by the third day.[3] Further, graphic depictions—although least present—were most salient on the first day. By the second and third day, however,

images showing physical injury and graphic portrayals were least likely to get published in the front pages of newspapers. The number of images showing physical injury decreased from 238 on the first day of the coverage to only two on the second day and one on the third day.

What is noteworthy is that the visual coverage of front-page photographs in southern newspapers was not less likely to show graphic depictions than those in front-page photographs in newspapers in the west, the northeast and the midwest.[4] In fact, when newspapers in Virginia were compared with other regional and national newspapers, Virginia papers showed significantly more graphic photos than other newspapers in the country. Editors in Virginia might have felt that publishing close-up photographs of the wounded was helpful in communicating the extent of the tragedy to its target audience. This was compounded by the fact that, overall, southern newspapers focused more than other newspapers on images showing emotional suffering. Thus southern editors chose to emphasize images of suffering and compassion, allowing these papers to function as a means for the local southern communities to recover from the traumatic event.

A review of the literature also suggests that a moral basis might have been a dominant justification for such a controversial media practice, especially when the line becomes blurred during visual coverage of tragic events, when publishing graphic visuals turns into frustration/threat and when omission becomes censorship. While we expect photojournalists' work to have expressed sincere empathy to the families of this tragedy and the loss they felt, photojournalists still have a responsibility to weigh the news value of photographs versus the standard of good taste and to decide whether news value is more important. In this case, the focus on news value of the VT photos probably formed the moral foundation for their choices to gather and disseminate such visuals. These visuals were not much appreciated by the audience, however.

Family members were not generally satisfied by the media's response to the event. They condemned visual coverage that tended to focus on dramatic, tragic, and violent images rather than celebrating and commemorating the lives of those who died.

Members of these families explained that although some of the visuals accurately depicted the VT tragedy, some of the initial images were extremely inappropriate and insensitive. One of them explained, "Showing an iconic image in a situation like that to show emotion of people going through trauma is one thing, but to show bodies and faces before families have time to be notified is inappropriate" (Fahmy and Roedl, 2010, p. 103). This premature release of photos was devastating because the families were seeing pictures of loved ones before receiving any official notification of death or injury.

Further, the parents felt the media did not focus enough on the lives of the promising young people and professors who were killed. They needed to see more humanized coverage of the victims. They explained that while some reporters were quite empathetic, few made that effort. For the most part, the families became distrustful. One of them explained, "I wanted to use the media to tell what a wonderful person my daughter was and they [the media] wanted to write a front page story" (p. 101–2). Family members specifically complained there were more photos of the shooter, pulling focus from the victims of the attack. One parent explained:

> The family needed to be able to speak their heart, thoughts, emotions, but the media denied them that and instead focused on Cho. It [visual coverage of Seung-Hui Cho] overshadowed coverage of victims and families and really there should have been no coverage of Cho because the event was preventable. (Fahmy and Roedl, 2010, p. 102)

Family members also expressed disappointment because the media did not cover all sides of the news event. The coverage did little to investigate all angles of the tragedy. As one parent explained:

> My daughter was killed on Monday, but we were not able to leave with her body until Thursday . . . one day later they held a memorial. I hadn't even taken my daughter's body home yet and they were having a memorial? How could we heal? We hadn't even had time to mourn. The reporters didn't cover that. (Fahmy and Roedl, 2010, p. 102)

Overall, victims' families were most frustrated with the excessive coverage of Cho. This frustration may have grown from the disproportionate amount of coverage the shooter received—as was also evident from the content analysis portion of the study.[5] Members of the victims' families indicated these repetitive images of Cho in menacing poses altered his photographs from *iconic* to inappropriate, transforming him into a celebrity. These images were particularly troubling to them and they suggested additional coverage of solutions to replace what in their view was "sensational" coverage.

In sum, the presentation of this data collected by Fahmy and Roedl (2010) allowed them to explore the outcome of the difficult ethical decisions that visual journalists must make while covering traumatic events and the perceptions of those directly affected by these events. Such studies would certainly be of interest for news practitioners and academia. The most logical outcome would be the increased appreciation of the importance of visual communication, especially once they realize the link between the visual content that appear in the media and the delicate perceptions of those most closely touched by it (see also Photography and Audience Understanding in chapter 5).

A New Perspective: Peace versus War Frames

For decades, conflict reporting has been the predominant way of framing wars and conflicts worldwide. As a normative response and challenge to traditional beliefs, a groundbreaking journalistic concept entered the discourse in the 1970s: peace journalism (Galtung, 1986).

According to Galtung (1986), a peace journalism frame would be one that highlights peace initiatives and tones down differences by promoting conflict resolution. A war journalism frame on the other hand would be one that highlights differences between opposing parties, urging violence as means to a resolution. Most recently, Lynch and Galtung (2010) referred to the distinction between war and peace journalism as one that either follows the low road (focusing on violence, war, and who wins it) or the high road (focusing on conflict and its peaceful transformation).

While Galtung's concept of peace journalism has received a surplus of normative attention, it has certainly received very little empirical research consideration (e.g. Lee, 2010; Lee and Maslog, 2005). Further, studies that have examined war and peace journalism focused mainly on coverage involving text (without visuals) (e.g. Chung et al., 2007, 2008; Lee and Maslog, 2005; Lee, 2010). Thus, investigating war and peace journalism by operationalizing these two competing frames in concrete pictorial patterns offered a new direction in visual communication research.

Theoretically, the concept of peace journalism has been linked to framing theory. As explained earlier, on a macro level, framing refers to "modes of presentation that journalists and other communicators use to present information in a way that resonates with existing underlying schemas among their audience" (Scheufele and Tewksbury, 2007, p. 12). This mode of presentation has been dominated by conflict reporting. On a micro level, media frames interact with existing cognitive and interpretive schemas, such as "how people use information and presentation features regarding issues as they form impressions" (p. 12) and interpret news events in a meaningful way (Goffman, 1974; Shoemaker and Reese, 1996). Therefore, war and peace journalism can be seen as two competing frames in covering wars.

Fahmy and Neumann (2012) put forward a way to operationalize war and peace journalism with particular emphasis on visuals available from elite newswires. They analyzed the visual coverage of the 2008/2009 conflict in Gaza in elite newswires and concluded that war frames (images showing suffering victims) outweighed peace frames (images showing antiwar protests). Because peace and war frames needed to be operationalized in a pictorial context, the following specifies how the researchers constituted a war frame versus a peace frame.

In terms of a war frame, past literature suggests this frame could highlight two different roles: the people-oriented image of the "victim" and the elite-oriented image of the "belligerent." For example, the coding categories applied by Lee and Maslog (2005) identified a possible war frame as one that "reports mainly on visible effects of war (such as) casualties, dead and wounded, damage to property" (p. 517). Likewise, they used this operationalization for visuals

depicting victims (war casualties, dead and wounded, refugees, displaced persons) or images of destruction (damaged buildings, roads, abandoned battlefields). In contrast, another war frame can avoid the issue of victimization but instead focus on "leaders and elites as actors and sources of information" (p. 517).

Several indicators characterized this frame. Much like written news content, photojournalists and photo editors might dichotomize between good and evil by using a partisan approach, which creates bias for one side in the conflict. Traditional war journalism might also portray one side as losing and the other as winning. For instance, the depiction of political (or military) leaders dominating the end of a conflict characterizes the war frame. Likewise, the portrayal of soldiers (or government troops) also illustrates this frame. Finally, frames emphasizing war journalism are reactive (the conflict starts before the actual reporting takes place). Similarly, war journalism stops reporting with signing the peace treaty and announcing the cease-fire (Lee and Maslog, 2005). Journalists eventually leave for another war or returns if the old conflict flares up again (McGoldrick and Lynch, 2000, p. 29; see also Galtung, 1999). For example, a typical war journalism frame categorized by Fahmy and Neumann, 2012 was an image depicting Palestinians carrying the body of a relative of Hamas interior minister Saeed Seyyam during his funeral in Gaza City.

Regarding the peace frame, it can also highlight two different roles: the people-oriented image of the "demonstrator" and the elite-oriented image of the "negotiator." For instance, visuals with a focus on "people-peacemakers" (McGoldrick and Lynch, 2000, p. 29), or citizens protesting for peace and promoting cease-fire and reconciliation, fall into the first category, whereas images focusing on international actors dealing with a conflict solution fall into the latter category.

Similar to the criteria used by Lee and Maslog (2005), Fahmy and Neumann (2012) argued that peace frames are characterized by a nonpartisan approach and instead emphasize a multiparty orientation in that it "gives voice to many parties involved in the conflict" (p. 517). By doing so, it stays away from categorizing strictly between good and evil. Lastly, in contrast to war journalism, peace journalism places emphasis on the aftermath of war focusing on acts of resolution, reconciliation, rehabilitation, and reconstruction (Galtung, 1998; McGoldrick and Lynch, 2000). Peace initiatives,

which are typically portrayed by international summit meetings, are highlighted to prevent another conflict. Specifically the implementation of a peace treaty is an ongoing process. To illustrate a typical peace journalism frame, Fahmy and Neumann (2012) showed an image of Palestinian President Mahmoud Abbas during a joint press conference with UN secretary general Ban Ki-moon in Ramallah, to step up diplomatic efforts to get Israel and Hamas to adhere to a UN cease-fire resolution in the Gaza Strip and allow humanitarian aid into the devastated Palestinian territory.

Thus, based on these recent operationalizations, it is hoped that the expansion of the definition of war versus peace frames in a visual context would be helpful in leading to new research directions, guiding similar projects, and generating future hypotheses to investigate visual framing with regard to different media outlets (such as television and the Internet), to examine interactions between media frames and audience frames, and finally to assess policy making and public perceptions of war versus peace journalism. More importantly, it is hoped that this type of research would encourage wider acceptance among news professionals (including photojournalists) and more attention among visual communication scholars regarding the overall promotion of peace journalism.

Visual Stereotyping

Stereotyping in the media has been an important research topic for decades. Stereotyping by definition is an oversimplification of an opinion that can be identified by examining the way a particular group of people is being depicted.

Regarding the portrayal of women for example, Goffman (1976) conducted a textual study of gender stereotypes in magazine advertisements, categorizing the relationships between men and women in terms of expected roles and the underlying perpetuation of gender stereotypes.

Over time, several visual communication scholars have examined the role news photographs have played in forming societal images. Researchers mainly focused on the portrayal of different minorities. Specifically, racial stereotyping has been a deep-rooted complaint by

researchers. Critics and scholars have long argued that the image of African Americans in the news media has been distorted (Enteman, 2003; Smith and Price, 2005). For example, in a content analysis of photographs in daily US newspapers over a 40-year period, Lester (1994) found that African Americans were more likely to be portrayed stereotypically, as involved disproportionately in crime, sports, and entertainment. This finding has been consistent with results from other studies that have examined the visual coverage of African Americans in newspapers and magazines (Lester and Ron, 1990; Smith and Price, 2005). In an examination of race portrayal in Hurricane Katrina coverage, Kahle, Yu, and Whiteside (2007) looked at photographs in four large newspapers and found that photographic coverage of the storm, while ostensibly sympathetic, reinforced negative stereotypes about African Americans while conversely depicting Caucasians in power roles. Their findings agree with previous research on stereotyping and modern racism in news coverage that portrays blacks as helpless victims in times of catastrophe. Thus, it is quite plausible that editors focused on the plight of African Americans in their coverage of Hurricane Katrina, reinforcing the stereotypical depiction of black people as always on the edge, helpless, and in need of assistance.

The visual portrayal of minorities outside the United States has also caught attention of few scholars. Fahmy (2004), For example, examined how Afghan women in *AP* wire photographs were portrayed during the Taliban regime and after the fall of the Taliban regime. The focus on Afghan women was very timely, considering the assumed liberation of Afghan women. Early anecdotal evidence suggested that once the Taliban regime was toppled, the situation of women would change and thus the visual media would portray them accordingly. Results of the visual content analysis however showed that the majority of women in Afghanistan did not get rid of their burqas. However, despite complete body coverage, *AP* wire photographs showed women after the fall of the Taliban regime as more involved, interactive, more socially intimate, and symbolically equal to the viewer.

Overall stereotyping studies conducted over the years have identified the visual stereotyping process in the media. Results of these studies have served as a basis to understand judgments about a particular group, making it an important venue to process information.

Visual Discourse

Visual meaning is shaped through the way images are structured and qualitative methods used to interpret visual material have been widely used by scholars over the years, especially in a number of anthropological studies. The literature suggests that in cases where the emphasis is in meaning and significance, the qualitative method is the most appropriate (see Rose 2007, 2001).

Qualitative scholars have mainly focused on approaching photographs as signs. In their visual communication book, Kress and Leeuwen (1996) discussed "('signifiers') such as color, perspective and line, as well as the way in which these forms are used to realize meanings ('signifieds')" (p. 5) (see Semiotics and Eye Movement, chapter 8 in this book). Hall (1973) explained that news photos have both denoted and connoted meanings. Denoted meanings in a photo are what a viewer can directly see in it, and connoted meanings are what is evoked by the subject present in a photo and what that subject symbolizes (Moriarty, 2005). For example, an image of the Dalai Lama represents the Dalai Lama himself (the denoted meaning), while the same photo is also evocative of human rights issues in Western countries (the connoted meaning) (see Huang and Fahmy, 2011). Connoted meanings are generally created through commonly held values, conventions and common experiences (Scott, 1994).

Moreover, it is important to note that much of the power of visuals draws on the collective memory of the past (Helmers and Hill, 2004). For example by presenting contemporary events through image framing, images can tap into the collective memory. Schwartz (1998) explains that these images then become "pictorial representations that organize understandings of present events by aligning them with well understood and effecting events of the past" (p. 6).

To qualitatively place content in a larger cultural context is referred to as semiotic analysis (see Hall, 1973). The process requires "taking an image apart and tracing how it works in relation to broader systems of meaning" (Rose, 2001, p. 69). Using the semiotic analysis as a tool for investigation, Popp and Mendelson (2010) did a close examination of patterns of visual display and historically traced the use of a specific icon in the cover of *Time* magazine. They analyzed *Time* magazine's visual discourse in covering the Iraq War and

traced the historical development of the use of the red "X" to cross out heads of US enemy leaders. Their study found that *Time* used the iconic "X" overlay to represent evil. They argued the symbol was used to draw a close association between Hitler and Hussein, and between Hitler and al-Zarqawi.

By examining the image framing and tracing the development of this visual icon, the study by Popp and Mendelson (2010) contributed to understanding how newsmagazines use visual discourse and collective memory to interpret contemporary events. The case of al-Zarqawi's death and the fall of the Saddam Hussein regime presented opportunities to show how *Time* magazine drew upon its institutional history and the society's collective and past memory to frame both leaders in a way it had previously applied to Adolf Hitler in May 1945. In so doing—confirming earlier studies—the visual coverage reinforced the framing of past and current conflicts within discourses provided by US government elites: The WWII was the "Good" War to save humanity; and the Iraq War was to free the Iraqi people and to fight the "War on Terror."

Summary

Each of the methods discussed in this chapter has been applied successfully to evaluate visual coverage. Using different ways of looking at content—either quantitatively or qualitatively—raises questions regarding the benefits of mixing methods to explore more fully the range of meanings in visually presenting issues and events. The research and new perspectives detailed above suggest that using more than one method that include various levels of analyses would allow for a more detailed evaluation of visual content and potentially a very productive research strategy for the future.

Conclusions

Overall, research dealing with content in photojournalism concludes:

- Photographs can be categorized into four categories: informational, graphically appealing, emotionally appealing, and intimate.
- Visuals almost always support the prevailing government version of news events and seldom contribute exclusive information.
- Media from different cultural and political perspectives create different images of conflict.
- The more graphic the image the easier it is to employ visual frames in developing a congruent interpretation of news events.
- Research shows African Americans are more likely to be represented stereotypically, as involved excessively in sports and crime.
- In studies in which the emphasis is on meaning and significance, the qualitative method is the most appropriate.

Chapter 5

To Whom: Research on the Audiences in Visual Communication

In 1997, James Cameron's movie *Titanic* introduced an entire generation to the tragedy of the ill-fated ocean liner. His blockbuster provides a useful example for thinking about the way people receive and use visual messages. For, while this disaster was very real, and photography did exist in its time, the mental image for anyone born in the late twentieth century will be from the movie, not the event itself. In fact, some young members of the audience had no idea that the movie was based on a real event; Hollywood's version was their first exposure to the disaster (Romenesko, 2012).

While their confusion no doubt discouraged multitudes of high-school history professors, it is not all that surprising. Few images of the actual 1912 disaster exist. News photographers did cover its send-off, but there was no film crew on board the Titanic or the rescuing ship, the Carpathia (though there was at least one person with a still camera on the latter). Images of the actual sinking that were printed in most of the newspapers of the time were illustrations. Unlike photos from the depression, the Vietnam War, or the terrorist attacks on 9/11, the true Titanic disaster is not part of our photo iconography. Most of the story from that fateful night is contained in written accounts, coverage of salvage efforts, and other "based on a true story" style movies. Cameron's blockbuster provides inspiration for thinking about how the audience consumes, remembers with, and is informed by visual messages.

Popular Photography

Long before the Fox Talbot and Daguerre announcements of 1939, human beings had longed for something that would help them capture the visual world. Until that moment, artists had the role of creating the visual record of the world, and much of the narrative of art history—until the nineteenth century—is a story of advancements in techniques for imposing reality onto a two-dimensional plane. It should not be surprising then, that artists were among those who most longed for technology to assist them, employing, for instance, the *camera obscura* for help in accurately recording the environment. But once the techniques for calotypes and daguerreotypes became known, *everyone*, not just artists, recognized what the new technology represented. Scientists embraced it as a new tool for investigation, police understood what it could do for social control, and ordinary people finally saw a chance to hold a lasting picture of the people they loved.

Earliest Adopters

For the mass audience, nothing was more exciting about the invention of photography, (or daguerreotypes, to be precise) than its ability to capture portraits. Almost as soon as Daguerre's process became available to users in the United States, daguerreotypists travelled from town to town taking portraits of men, women, children, families, slaves, Native Americans, people with disabilities, even pets. In these early decades, the craft was relatively accessible to the middle class, though it still required significant financial investment, time, and some scientific knowledge. Upper middle–class men and women had access to the equipment and formed photography clubs around the United States and Europe.

As the daguerreotype process spread, its users produced an explosion of portraits, of the rich and famous, ordinary but interesting, and even the dead (Rosenblum, 1997). In his cultural analysis of the daguerreotype in the United States, Rudisill (1971) argued that the form helped give rise to national identity:

> The function of pictures as symbols representing national characteristics and spiritual impulses was better served with the help of machines than by human skill alone. As a result, the picture-making machine was easily invested by the public with symbolic and spiritual significance. (p. 31)

The new technology also afforded everyday people a chance to see the world, through snapshots and by way of stereoscope cards, a sort of Victorian precursor to both travel television and 3D movies. The cards were made with a dual lens system and viewed through goggles that created a sense of dimension, and they became extraordinarily popular with the middle class. Reviewed in a British magazine (*The Stereoscope*, 1858) as the perfect gift, more than "merely a curious and amusing toy," *the stereoscope* was said to be "eminently utilitarian; for more information on certain points can be gained by it than by any other means with an equal outlay of time and money" (p. 245).

By the end of the nineteenth century, members of the middle class could afford a basic camera, they could start documenting their own world and produce volumes of images as they traveled and created family albums. As Osborne (2000) and other scholars have pointed out, these images cannot be seen solely as objective documents of the era; they represent the cultural perspective and priorities of an industrializing society. Even the way photography was marketed to the mass audience has implications for its cultural evolution. Olivier's study of the discourse surrounding the popular "Brownie" camera was marketed primarily to women and children in a "campaign to portray snapshot photography as a phenomenon both modern and magic" (p. 2).

By the late nineteenth century, flexible film made it possible to produce motion pictures, creating another audience: that of the movie fan. In the United States, the invention coincided with the progressive era's dramatic wave of immigration. It wasn't necessary to understand English to enjoy silent movies in a Nickelodeon. Small wonder it took only a few years for the cinema to spread from the first Nickelodeon in 1905 to more than 8,000 a few years later (Fuller, 1996).

Photography Goes Mainstream

By the mid-twentieth century, everyday Americans used their own still cameras and had access to home movie cameras. One of the most significant studies of how nonprofessionals use cameras to communicate began in the New Mexico desert, when anthropologists Sol Worth and John Adair set out to see what would happen when they gave film cameras to young members of a Navajo tribe. The project is the source of a legendary conversation between Worth and tribal elder Sam Yazzie:

> Sam was very interested and Adair explained exactly what we intended to do. After some thought, Sam turned to Worth and through the interpreter asked, "Will making movies do the sheep any harm?" Worth was happy to explain that as far as he knew no harm would befall the sheep if movies were made in the community. Sam thought for a few seconds, and looking straight at Worth asked, "Will it do them any good?" Worth was forced to reply that as far as he knew it wouldn't do the sheep any good. Same looked at us both and said "Then why make movies?" (p. 13).

The students on the reservation who participated did see value in making their short documentaries with Wroth and Adair. Interestingly, the project found that making movies was more intuitive than one might have expected. In fact, the short films, which were later displayed at in a museum exhibit called "Through Navajo Eyes" (for which Worth also authored a book by the same name) are not all that different than similar efforts from novice film students. The unique nature of Navajo culture did reveal itself, though, through the process of teaching and working with the students; concerns about fairness and equality, for example, and respect for those who did not wish to be filmed.

The photographic activities of everyday people can give visual scholars a useful foil for images in the public sphere. Further, researchers of home movies and snapshots have written extensively on the way home photo activities offer insight into family dynamics and relationships. Anthropologist Richard Chalfen (1987, 2002) spent time with families as they took, viewed, and archived their snapshots

and home movies, people he called members of "Kodak culture" and "Polaroid people." He found that family photographers tend to be less philosophical about their snapshots and take for granted their photos' evidentiary value.

Photographs continue to be an important part of family histories. Just as digital photography was taking off, an old-fashioned craft—scrapbooking—burgeoned in popularity. In the United States, national sales from scrapbooking supplies went from 500 million dollars in 2000 to 2.5 billion dollars in 2003 (Fram, 2005). Women would hold parties, even rent hotel space, to gather with friends and relatives for weekend scrapbooking getaways. Goodsell and Seiter (2011) note that scrapbooks are more than collections of photographs; they are material representations of family narratives that can define a family's collective identity. Scrapbooking is a highly gendered activity, one that could be characterized as a form of "kin work"—those unpaid tasks, such as organizing family dinners, writing holiday cards, or, in this case, narrativizing the family photo archive (Downs, 2006).

Selfies and Pins

Social Media Sites (SMS) provide, in many ways, a new form of scrapbooking. Research on how users share photos on sites like Facebook and Twitter has found that such activities reflect larger sociological patterns. For instance, Mendelson and Papacharissi (2011) conducted a content analysis of Facebook fan pages created by athletes and found gendered differences in profile photos. As though using Berger's (1972) observation that men do things and women are looked at as an edict, Emmons and Mocarski (2012) found, using content analysis, that female athletes were more likely than men to pose and to look directly at the camera for their Facebook profile pictures. Lee (2009) used qualitative methods to study personal smartphone use, finding that such ritualized activities blur the lines between public and private space, and personal and public displays.

Traditional enjoyment of images for aesthetic pleasure continues to draw millions of people to art museums, cinema, and galleries.

Pinterest, a website that allows users to share images on pages like personal bulletin boards, exploded in popularity in 2010, and as of 2013 the site was adding more than three million users a month worldwide (Slegg, 2013). The site's founder, as well as its fans, see *Pinterest* appeal as a sort of scrapbook for their collections of things like recipes, craft projects, or shopping wish lists (Wortham, 2012). Unlike Facebook or Twitter, which deliver new information in a vertical scroll, Pinterest's page looks something like a bulletin board or photo editor's lightbox, with images spread vertically and horizontally, adding to its ambience as a visual buffet.

If communication is a two-way process, then in addition to asking what images do to viewers, it might be useful to know what viewers do with images. Uses and Gratification Theory (Blumler and Katz, 1974) provides such a lens for researching how people watch television, why they go to the movies, and what they enjoy on the web. Active audience theories go a bit further, with research that investigates how viewers might also create their own messages based on mass mediated products (Livingstone, 1990, 2004). The video "mash-up," for instance, is a way for fans to playfully engage with music, just as user-generated news video allows for a fuller participation in the public sphere. Journalism knows the active audience as citizen journalists or viewer-contributors (Bivens, 2008; Wardle and Williams, 2010). Wardle and Williams found no fewer than five different types of audience participation in their study of the BBC, including collaborative journalism, video contributions, and comments. Even movies are not off-limits in today's digital age. An African filmmaker, for example, made a unique version of the *Titanic* story using pirated scenes from Cameron's movie: editing out images of white, European passengers while blinding in slave-ship allusions and recreating the love story using African actors (Behrend, 2009).

Collective Memory

Research on collective memory, a concept crystallized by, if not originating with, the work of Maurice Halbwachs (1992) has made heavy use of visual artifacts. Collective memory's sociological investigation

of the malleable way history is perceived through a lens of the present, through discourse and material objects, has dispensed a rich body of work. Edgerton and Rolins (2001) explain that this is, in part, the reason for the popularity of the History Channel on cable, and other forms of television history because of its "affinity and ability to embody current concerns and priorities within the stories it telecasts about the past" (p. 3).

Zelizer's work on Holocaust photographs and on images of impending death draws from collective memory theory (1998, 2010). By tracing the patterns of discourse surrounding images from traumatic events, Zelizer concluded, "The media's use of images is inadvertently creating a breach between representation and responsibility, in that the less grounded an image's original use, the more

Figure 5.1 After the concentration camps were liberated in Europe at the end of World War II, the Allies used photos from the camps not only as proof of crimes against humanity, but also with displays of forced confrontation for German soldiers and civilians.

Source: Courtesy the United States Holocaust Memorial Museum.

misused it can become in memory. The act of attending through memories has come to stand in for real action" (1998, p. 239). Dekel (2009) also applied the concept of collective memory to analyze observations of visitors to the memorial in Berlin as they walked through the field of abstract grey stone slabs, taking in the monuments' meaning through conversation, embodied interaction with the space, and photography. Collective memory also provided a lens for Griffin's (1999) discussion of the evolution of war photography's cultural function.

Internet users are also able to understand and then shape their own memorializing artifacts online with the vast and growing number of images available online. Timothy Recuber (2012) proposed borrowing Toffler's (1980) word "prosumption" to describe what takes place as individuals both view, and then create, their own digitized mnemonic discourse (p. 256).

Photography and Audience Understanding

While the mass audience used images largely to learn more about the world, to be entertained, and to remember, professionals outside the portrait studio were quick to apply it to their own work. Science, surveillance, and politicians seized upon its evidentiary usefulness early on, and continue to do so today.

Science

Modern readers may not appreciate the degree to which science relied on careful human illustration as a mode of inquiry. Before the camera ushered in its brand of mechanical objectivity, scientists drew their own diagrams, maps, and specimens. At the start of their book on the history of scientific objectivity, Daston and Galison (2010) tell a story of a devastating epiphany. British physicist Arthur Worthington, who was studying fluid dynamics, had spent years carefully drawing thousands of droplet splashes hit by a burst of light. Worthington aimed for exactitude, and sketched droplet after droplet, finding himself inspired by their beauty and consistent symmetry, until he was able

to photograph the droplets. The photographs proved him wrong. He was forced to confront not only his own fallibility, but also the way the brain imposes itself on perception:

> I have to confess that in looking over my original drawing I find records of many irregular or unsymmetrical figures, yet in compiling the history it has been inevitable that these should be rejected, if only because identical irregularities never recur. Thus the mind of the observer is filled with an ideal splash—an Auto-Splash—whose perfection may never be actually realized. (Daston and Galison, 2010, p. 13)

The role of visual communication in the general public's understanding of science (and the way journalists mediate that relationship) is only beginning to be investigated. Kelly Wilder (2009) carefully traced the history of photography within the scientific community. In *Photography and Science*, she details the way science has used photography to observe, measure, archive, and investigate natural phenomena. Along the way, she explains how even in the scientific context, photography retains an aura of artistry, with a culturally significant function: "Artists engage concepts important to science in order to engage in a critical dialogue about the modern world and its scientific concerns" (p. 104).

As Trumbo (2000) pointed out in one of two essays on the subject in *Science Communication*, "One of the science communicator's roles is to clarify both the words and the images produced by the scientist to make the message more readily understood by a nonexpert audience. *This process is not simple, neutral or necessarily intuitive*" (italics added for emphasis, p. 381). Even more than news, science is colloquially understood as an objective, positivist enterprise, so the idea that the images it produces are neither simple nor neutral may seem counterintuitive. Subjectivity might be expected with regard to controversies in science. Bloomfield and Doolin (2012) studied the use of symbolic imagery by opponents of genetically modified foods, for instance, and found that mock-ups that blended the bodies of human women and cows were dismissed as "emotional" and "irrational" in ways that prevented useful dialogue about the controversy. But images about science in news seem to enjoy a double aura of

"truthfulness," thereby occluding the fact that illustrations, graphs, and even photographs, are human constructions.

A photo from space, for example, is credited with inspiring the ecology movement of the 1970s. Henry and Taylor (2009) note that "space historians have observed that the Apollo photos of Earth afforded humankind the opportunity to see our planet in context, to see just how fragile our world, and all life on Earth, really is" (p. 195). NASA continues to issue images from space on its popular website. From aboard the International Space Station, Commander Chris Hadfield released his own YouTube hit with a cover of David Bowie's "Major Tom," in 2012. In less than a year it garnered more than 18 million views. Another image, a set of images really, that continues to have an impact on audience understandings of science was published by *Life* in 1965. A set of photographs of fetuses, photographed with special equipment by Lennart Nilsson (1993), provoked a flood of letters to the magazine, both positive and negative. The editor summed up the response weeks later:

> Many of the admirers found a new awareness of God's handiwork and expressed a feeling of awe—the word appears again and again, and so does "miracle." Expectant mothers were especially thrilled by the pictures, and some, we are told, were children. One writer, Mr. Virgil Caselli of San Francisco, expressed the new reaction vest: "Seldom as the layman had the opportunity to appreciate the wonder and beauty of God's most precious gift, the formation of a human life," he wrote. "Mr. Nilsson's photos surmount all barriers of hate, prejudice and bigotry and reduce all men to a common denominator—the 'stuff of which men are made.'" (*Life*, May 21, 1965, p. 3)

These images of the preborn babies continue to influence the American debate about abortion laws. The photos, and photos like them, are often used by antiabortion activists as evidence of the life of preborn persons even though many of the original images by Nilsson depict posed, specially lit, aborted fetuses (Duden, 1993; Young, 2008).

The public's understanding of science takes on even greater importance in this era of climate change and climate denial. Consider the way a graph's scale became a political issue after Al

Gore pointed to a "hockey stick" line on a chart in *An Inconvenient Truth* (Guggenheim, 2006) and how the pathos-ridden image of a lone polar bear on an ice floe tugged at the hearts of many a web surfer. The image that settles the minds of climate change doubters has yet to be produced. O'Neill and Nicholson-Cole (2009) used a Q-sort of photographs to investigate people's understanding of the issue, and concluded that images that employed fear appeals made an impact but were not necessarily instructive. A number of agencies continue to release images as "proof" that the earth is heating up, but given the world's current political climate it's not at all clear whether the public epiphany that's needed will be accomplished.

Surveillance

While most of the images in mass media are the result of journalistic or advertising activities, it is important to consider other ways that images enter the public sphere. Police and governmental surveillance are one such source, and as Tagg (1999) has pointed out, one that has considerable impact on social control. The use of photography by police and governmental authorities began very early. After a student uprising in Paris with the communards, the French government published photographs of the dead as a warning message to anyone who might consider similar revolt and took what would today be called mug shots of those taken into custody (Pellicer, 2009). Today, mug shots are part of everyday news coverage of crimes. The Internet has even spawned a business model considered to be a form of extortion by some observers, by charging individuals high prices to remove their police mug shots from cyberspace (Segal, 2013).

Cameras have returned to some courtrooms, giving rise to cable TV programming that provides nonstop coverage of sensational court cases in some states. The O. J. Simpson Trial in California introduced many members of the audience to the criminal court process, made careers for some pundits on cable TV, and became, in some ways, the reality show of its decade. The use of images by defense counsel in the Florida trial of George Zimmerman, accused of murder in the shooting death of Trayvon Martin, shows how mug shots and school photos can be used to imply character simply through implication and context.

A media ritual known colloquially as the "perp walk" provides yet another way that visual communication contributes to the public's understanding of criminal justice. While regulated in some parts of the world, the First Amendment protects the ritual of photographing people under arrest while walking through publicly visible areas. Historically, such walks of shame have been dangerous for photojournalists (Cookman, 1985) and experimental research by Barnett (2003) showed that such images may unfairly influence potential jurors. Qualitative research by Bock (2013) suggests that this practice requires assistance from police agencies and can be particularly traumatic for arrestees who are later exonerated in court.

Counterhegemony

Broadband Internet has made the use of images by activists as a means of presenting visual truth increasingly powerful. User-generated

Figure 5.2 Police accountability activist uses his smartphone to record police clearing the street in Austin, Texas. (Photo by Mary Angela Bock)

media by organizations devoted not to traditional journalistic storytelling, but to social change, makes use of the mechanized authority of the camera and traditional notions of witnessing (Peters, 2001). The Occupy Movement in the United States has used live video apps and websites to document their efforts and provide counter-narratives in opposition to mainstream news coverage. In the Middle East, specific images of victims of violence have traveled through social networks to inspire activism and protest.

The proliferation of smartphones has also sparked a police accountability movement that encourages members to use video to monitor police activities (Bock, in press). Cop-watching activists use the power of the camera coupled with the Internet to publicize incidents of police misconduct, brutality, or mere rudeness. One website, *photographyisnotacrime.org*, documents clashes between officers and members of the public who try to video their work. The activity is constitutionally protected, but police officers often accuse photographers of interfering with their work, in spite of court rulings that protect such activity under the First Amendment (DJ-207–35–10). It counter's traditional journalism's coverage of police activity, which, as many scholars have reported, is often institutionally aligned with authorities (Gitlin, 1980; Tagg, 1999; Tuchman, 1978). As one cop-watcher puts it, the camera is an equalizer:

> You needed the 5 o'clock news back in the day to get a story out. Now anybody can be the reporter the journalist and with no swing or bias in any way. It's like, turn the camera on here we are my actions, your actions, and you bring everybody to that scenario (Bock, in press).

In sum, the audience learns from, enjoys, and uses images, and as technology changes, is increasingly a maker of images. For this reason, many media critics believe that members of the audience ought to receive education on how images operate in terms of persuasion and culture.

The "Bain d'Images"

Walter Lippman (1922) used the phrase "pictures in our heads" when he wrote in *Public Opinion* about how most of what we

know about the world is not from direct experience but through media. Today, many of the pictures in our heads really are pictures, not constructs from our imagination. As Hariman and Lucaites (2007) have shown, certain images have had more sway in our heads than others—and the reason that some icons of photography took root over others has much to do with ideology as aesthetics.

Have we moved from an era of words to one of images? Marshall McLuhan (1964) is perhaps the most famous scholar to make such a claim, but he is hardly alone. Some, like Mitchell Stephens (1998), are optimistic and see image-based communication (in this case, video) as a way to provoke multilayered thinking. Others, such as Neil Postman (1985), perceived the visual turn as cultural disaster. Such polarized assessments can be somewhat reconciled by clarifying the subject matter. Humans have always used their eyes to navigate the environment, so in a sense we have always lived in a visual world. What is different is that our mediated environment increasingly presents visual messages to persuade, entertain, and possibly seduce us into believing that by seeing something we have learned something. We watch television for the news rather than read it in a newspaper, send memes to our friends instead of riddles, interpret the commercial world through logos. That the media environment has delivered a "Bain d'Images" (bath of images) is hard to refute, and in light of what we know about image processing and human cognition, it is possible to say that both the alarmists and the optimists are right.

The impact of visuality on public discourse and political activity started as soon as photography was invented, of course. Lincoln is said to have credited Mathew Brady's portrait of him for election victory. Leaders at the turn of the twentieth century quickly realized the usefulness of newsreels to spread their political messages, and learned how to produce camera-attracting events. Boorstin (1961) called such events "pseudo" events—those produced only for the sake of visual coverage. More recently, Adatto (2008) documented the rise of image consultants and the importance of the "photo op," noting that "American politics is largely a contest for control of television images" (p. 52). The late sociologist Neil Postman's (1985) polemic against television, *Amusing Ourselves to Death*, sounded the

alarm against what Postman decried as an increasingly vapid, illiterate, picture-based social discourse:

> In a print culture, we are apt to say of people who are not intelligent that we must "draw them pictures" so that they may understand. Intelligence implies that one can dwell comfortably without pictures, in a field of concepts and generalizations (p. 26).

Though he was a philosopher, not a scholar of journalism, Jean Baudrillard's (1981) treatise on postmodernism makes a similar argument. In *Simulacra and Simulation*, Baudrillard contends that mediated society has supplanted real experience. "We live in a world where there is more and more information, and less and less meaning" (p. 79). Confusing as this seems, many students grasp the basics of Baudrillard's message through the popular (and still fictional!) movie *The Matrix*. The visual nature of mediatization is embedded in Baudrillard's argument. TV shows, theme parks, and holograms take on a life of their own, no longer signifying anything that really once existed. Think of Tupac Shakur's "performance" as a hologram with a living Snoop Dogg at the Coachella concert in 2012 or the way Americans feel nostalgia for a "Leave it to Beaver" life that never actually existed. Baudrillard's notion of "hyperreality" means that the audience no longer lives in the world but is lulled into feeling, thinking, and existing within a media-created dream.

Visual Pleasure

Sigmund Freud (1976) suggested that sexual pleasure could be derived via the visual, in that viewing others, particularly in their moments of privacy, objectified them and thereby controlled them. Film theorist Laura Mulvey (1975) noted that this sort of pleasure was unilaterally gendered in her classic essay "Visual Pleasure and Narrative Cinema." Mulvey combined traditional film theory with psychoanalysis and theorized that most movies were created to please the "male gaze," and thereby subjugated women. Mulvey's essay was widely influential as a feminist text, and while she has since refined her argument, its essential critique remains helpful for the interpretation of contemporary visual culture. The gaze, and

its concomitant rewards of power and pleasure have implications for race and social status as well. It is a form of consumption that strips away the humanity of those portrayed in the images. Lutz and Collins (1993) explored what they called "an intersection of gazes" in their research on the production and cultural significance of *National Geographic*. Their work focuses on the way that magazine's portrayals of people in developing nations emphasized their "otherness" for the enjoyment of white Westerners.

Seeing and Perceiving

Both rhetorical scholars and biologists make a distinction between physical vision and perception—a difference not unlike that between merely hearing something and "listening." Barry compares perception with what she calls visual "common sense" in her exploration of the difference between what the eyes take in and what the brain understands (1997). Neurobiologist Mark Changizi's (2009) research on human perception details the complicated relationship between the eyes and cognition and human evolution. For instance, Changizi's research theorizes that the particular color spectrum perceived by humans is tied to a need to detect subtle color changes (sickness, blushing) in each others' faces, and that symbols tend to resemble shapes that were familiar to early humans in nature, making them more easily—and quickly—understood. Schirato and Webb (2004) discussed the difference between seeing and perceiving in their textbook *Understanding the Visual*, and its relation to visual texts. Perception is involved in both "reading" and creating a visual text, and this skill is much more involved, influenced by culture and context, than merely seeing things.

This distinction, between merely seeing and being able to interpret, understand, and critique, is one that takes on greater importance in an increasingly visually mediatized world. Craig (1999) traced the history of images in advertising, and points out that "because written claims could be tested, industrialists employed visual claims to make consumer goods appear to fulfill every conceivable human need and desire without making explicit claims" (p. 57). Because the practice has worked, it's burgeoned not only in advertising but also in all other forms of persuasion. As politicians become brands with

"optics" and propagandists use social media to spread non-contextualized images, it would seem that an informed citizenry requires an understanding of how visuals communicate.

Visual Intelligence and Visual Literacy

Critical thinking is considered to be one of the most important skills imparted in higher education: the ability to critique a proposition, weigh evidence, and evaluate the logic of an argument. What happens, though, when verbal exposition is not used to convey the argument as is the case in the mediatized world? Images are able to pique the imagination and inspire emotion; when mixed with words they can be particularly powerful, for ill or for good.

Small wonder that many scholars cite a pressing need for the audience be educated about visual communication. Just how, or what, such a curriculum should include is a matter of debate, with the name of the subject—media literacy?—visual literacy?—unsettled. While calling for increased attention to the way science is understood through images, Trumbo (1999) breaks visual literacy into three dimensions: learning, thinking, and communication. Scholars in a variety of fields have questioned whether there exists a form of intelligence that involves the interpretation of the visual, and whether skills related to that intelligence can and ought to be taught. Two academic traditions, namely educators and communication scholars,[1] have approached the project with varied, though overlapping, concerns.

The educational approach is rooted in a definition published in 1970 by the founders of The International Visual Literacy Association (IVLA):

> Visual literacy refers to a group of vision competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually-literate person to discriminate and interpret the visible action, objects, and/or symbols, natural or man-made, that he (sic) encounters in his environment. Through the creative use of these competencies, he (sic) is able to comprehend and enjoy the

> masterworks of visual communication. (C. M. Williams and Debes, 1970, p. 14)

The idea that visual literacy not only existed but could also be measured and taught was not immediately accepted by many. Longtime IVLA member Lida Cochran later said in an interview "We were severely ridiculed. We were charged with creating an oxymoron" (Davis, 2009, p. 36). While the assertion that a visually literate person is able to "comprehend and enjoy the masterworks of visual communication," the concept goes beyond what could otherwise be simply called art appreciation. Since 1970, the IVLA has established its own journal and continues to explore the role of visual literacy on human understanding.

Is Visual Literacy something measurable and teachable? Meyrowitz (1985) suggested that literacy is *not* a visual process, and Messaris (1994) argued for caution in such a conceptualization, noting that neurobiology and research on people with limited media exposure indicates that everyday perception seems to help most people interpret visual messages. He argues that people can be taught about visual conventions. In a later iteration of that argument, Messaris and Moriarty (2005, p. 481) relented, writing that "although the linguistic analogy implied by the word literacy may be inappropriate and potentially misleading because it suggests that visual messages operate similarly to verbal messages, we can think of no existing, commonly employed alternative to this usage." Based on the work of students learning to edit movies, Messaris and Moriarty conclude that audiences would benefit from understanding not only the connection between production technique and manipulation, but also the "ramifications of context" and the "consequences of image selection" (494–495).

Zettl (1998) used the term "media literacy" for a model he proposed that rests on visual communication concepts such as aesthetics and associations as paths to higher-order critique. Williams and Newton (2007) argue that an understanding of how visual communication operates is essential, as a defense against manipulation and to better understand our intuitive selves:

> We need to recognize that our intuitive cognitive processes represent at least half of our consciousness, half of our cognitive abilities and half of our human experience. It is that half that connects us to a reality larger than ourselves, that is concerned with a global

> perspective, integrity, caring, nurturing, mystery, creativity sustainability and the quality of our lives. (p. 407)

While he never uses either term, John Berger's *Ways of Seeing* (1972), exemplifies the distinction between art criticism and visual literacy. The book is based on a BBC television series by the same name, and builds upon traditional art criticism to show, for instance, how visual culture has historically objectified women (and continues to do so) and how advertising cultivates dissatisfaction and what Berger calls "personal social envy." Berger's project was highly influential with its message that "every image embodies a way of seeing" (p. 10). That is, visual messages are not mere illustrations of the world, but are ideology-laden constructions.

Barry's (1997) research, blending neurobiology, film rhetoric, semiotics, and an investigation into historic uses of visual persuasion, makes perhaps the strongest case for visual literacy. She uses the term visual intelligence, and, like Postman (1985), sees danger in the visually mediatized world, though not because words have been displaced, but because images are too often seen as common sense representations: "Visual intelligence ultimately implies an understanding of the power of the visual image both to reveal and to reshape the world" (p. 337).

It may be that visual literacy, like art, music or other subjects that are considered "frills" in many educational systems, will not take hold as scholars might wish. Increased audience participation in visual media, however, may offer a different avenue for such an education. Once someone knows how to edit video, its techniques can be better interpreted in a political ad. Once someone knows the mechanics of Photoshop layers, some propagandistic efforts might seem downright comical. In fact, it may be not that the audience remains naïve to visual manipulation, but that it becomes so jaded as to distrust all of it, to the detriment of photojournalism.

Living in a Visual World

For most of human history, our ocular advantage has served us well. But in our digitized environment, with technology that can create

any visual landscape and distort reality, seeing is not necessarily believing (see also Is Seeing Still Believing in Traditional Media? in chapter 6). Images have always been subject to distortion and manipulation. Today, when the average toddler can play with image software on an iPad, media literacy is essential to successfully navigate the contemporary media landscape.

Because of what neurobiologists are learning about the way the human brain operates, often responding below the surface emotionally before consciously considering rational arguments, it is imperative that the contemporary audience be visually literate. Propaganda is insidious when it tugs at emotions over reason, and photographs, movies, or posters can enhance that power. Digital technologies add urgency to the need for visual literacy, because today everyone can create memes, alter a photo, or publish a graphic to the World Wide Web. Understanding the nature of images, how they convey meaning, how they can present arguments, and yes, how they can be enjoyed, is no longer the province of elite art critics. It is knowledge critical to all occupants of the contemporary media environment.

Adding visual literacy to the educational mix means more than teaching children to be skeptical about how toys are represented in television commercials. A visually literate adult might ask about the source of a photograph, and make choices about news sources based on transparency, reputation, and history. A visually literate citizen would recognize that a particular photograph was created to inspire a particular emotion, but then take an additional step and also consider various rational interpretations. Visual literacy further demands that we use the images we make in ethical and responsible ways, whether we're posting them to Facebook, creating a meme, or participating in citizen journalism.

Of course, even visual literacy would not prevent young moviegoers from thinking that Cameron's movie was about a fictional event. Only when it's part of a larger mix of an education that mixes history, culture, critical thinking, and visual literacy might such students appreciate how Cameron used his mix of film and digital animation to (pleasurably) manipulate our emotions and impose an ideological framework on a very real tragedy. A visually literate audience could appreciate both the art and its reflection on reality.

Conclusions

- As technology became easier to use, the audience quickly embraced photography as an everyday activity.
- Digital media have fueled an explosion of image creation by nonprofessionals.
- Images have played a role in how the audience understands science, the criminal justice system, and activism.
- Audiences may use images for pleasure and consumption as well as information, sometimes with problematic consequences for the human subjects portrayed.
- An increasingly mediatized culture has prompted scholars to call for some type of visual literacy to be taught so that the audience is better able to interpret messages.

Chapter 6

In Which Channel: Research on Media Used in Visual Communication

Is Seeing Still Believing in Traditional Media?

Nearly everyone has a digital camera now, in pockets, purses, on dashboards, desktops, even children's toys. It is hard to conceive of the days before people had the ability to perfectly and mechanically capture an image. That perfection was celebrated as "truth," whether it delivered landscapes from afar, portraits of loved-ones, or used in scientific investigation.

The truth of the photograph is rooted in its mechanics. What happens after the image is captured, however, is a matter of human activity, and humans are not always truthful. It took very little time after photography's arrival for the first instance of photographic fraud to emerge, and, of course, such manipulation is easier than ever. What's more, the "truth" about a photograph are shaped by its captions, context, medium, and the institutions presenting it. Small wonder that in the digital age when photos can be snapped in one location but instantly re-contextualized on the web, that faith in photographic truth is on shaky ground.

This loss of faith is a challenge for journalists, whose credibility, both individual and institutional, are at risk. Among the many factors influencing the recent well-documented slide in public trust

Figure 6.1 Digital manipulation is not the only way a photograph can be misleading. This image of a skull taken by F.S.A. photographer Arthur Rothstein during the depression is considered by many to be dishonest, even a form of propaganda that over-dramatized the drought conditions of 1936, because Rothstein moved the skull ten feet to enhance its aesthetics.

Source: National Archives–FSA.

in the media has been the increased ease of manipulating photos made possible by computer editing programs such as Adobe Photoshop.

Digital Manipulation

A recent issue of *El-Ahram* newspaper, a daily with the highest circulation in Egypt, ran in September 2010 an apparently altered photograph of former Egyptian president, Hosni Mubarak, showing him at the front, rather than the back, of a group of leaders who met at the White House to talk about peace in the Middle East.[1] Despite the

wide media coverage regarding this manipulated photo, the image appeared on the home page of *Al-Ahram* website two days later.

However, readers only tolerate minor levels of photographic editing such as burning (to darken some areas of an image) and dodging (to make some areas on an image brighter) (See Greer and Gosen, 2002). Huang (2001) studied the degree of trust readers have of digital images in documentary contexts and found that the audience expects the media to let them know if a digitally altered image has been used.

Early in its history, photography was thought to have one big advantage over written language: it was supposedly immune to dishonest manipulation. Of course, we now understand that the mirror is inherently and often intentionally warped, and has been from the beginning (see Figure 6.1). Multiple exposures (taking two or more exposures on the same frame), burning and dodging have been open to use and misuse from the start. As standard practice, techniques such as cropping, dodging, and burning have been accepted, however (Martin, 1991; Reaves 1987, 1991). Media professionals routinely correct for color imperfections that creep into images due to artificial lighting sources and imperfect equipment, such that the final printed image bears a closer resemblance to the initial scene than did the image that emerged from the camera (see also The Distinction: Ethics in chapter 3).

With the advent of digital photography and photo editing software, there was a marked increase in both the ability to manipulate and the ability to do so without *appearing* to do so. In other words, it became easier to lie convincingly. This use of digital technology raised core ethical questions of truth and the potential loss of public trust in visual media (Lester, 1991; Martin, 1991; Gladney and Ehrlich, 1996).

The unsettled nature of photo editing practices has also been driven home by the wide variety of decisions made by editors when they publish potentially disturbing images in traditional media from events of war, conflict, terrorist attacks, and shootings. Media scholars explain that ethical boundaries of war and conflict reporting are not clear-cut (e.g. Hulteng, 1985). Journalism ethics inherently come in many shades of gray and those shades multiply in times of crisis and military conflicts when emotions run high (Mohl, 2003). For example, a photo taken by *El Pais* photographer Pablo Torres Guerrero of rescue workers and victims at the site of the 2004 Madrid bombing included a body part in the foreground. Some editors ran the photo

as is but many others either removed or edited out the body part, usually without notifying the reader.[2] The decision by some papers to doctor or delete a clearly visible body part in pictures of the bombings in Madrid raised serious ethical questions. Similarly, the recent wars in Iraq and Afghanistan produced almost weekly still and moving images that challenged editors to balance taste with the public's right to know, and to confront standards regarding digital enhancement.

Fosdick and Fahmy (2007) introduced the idea of a "photation mark" to indicate whether or not a photo has or has not been altered. As they put it: "The main reason both for using photation marks at all and for having them (editors) indicate a claim of non- alteration is that such a system of punctuation would acknowledge a more reasonable default assumption on the part of the reader. Today's media world is huge, constantly changing, and potentially confusing to most readers" (p. 6). Ritchin (2009) later proposed to fellow photo editors that a watermark be placed on new images to indicate that they are un-retouched. He and his students convinced a few publications to use the watermark for a short time but the effort languished. He noted, "...marking a manipulated photograph would give the reader the impression that those *unmarked* were somehow 'true.'" (p. 64, italics added for emphasis). Because the boundaries are blurred, even among photojournalists who fiercely maintain boundaries of what is forbidden and what is allowable (i.e. dodging and burning) the digital age compels everyone to reconsider where and whether photographic truth still exists.

Traditional and Online Platforms

Once a photographer decontextualizes a scene, capturing a moment in space and time and converting it to something that can travel anywhere, the truth about an image is no longer established by the camera. As it travels through various technologies and organizations, the "truth" of the image is defined by its various re-contextualizations (Bock, 2012b). These recontextualizations are nearly infinite in the digital age, but research shows that even analog-age differences, such as those between television and print, have an impact on audience reception.

It is perhaps no surprise that over the years the study of visuals has coincided with research to consider differences in information processing, priming, and persuasion effects and source credibility between print and broadcast messages. Medium credibility research has looked at how channel attributes influence the credibility of the source. Work in this area typically compared media that are sending the same message, such as comparing newspaper and television content.

Generally, people respond automatically and unconsciously to media with information processing varying across media platforms. For example, individuals are less able to process messages that appear on television than those that appear in print media (Chaiken and Eagly, 1976; Wright, 1981). Meadowcroft and Olson (1995) attempted to test a broad range of theoretical predictions concerning differential information processing activities. They conducted an experiment to test media-related differences in information processing activities in print versus broadcast. Although they noted that a few information processing activities differed, findings suggest readers report more visualization of content than television viewers and more time spent processing messages for viewers than for readers. The researchers based these findings on Singer's theory that reading and viewing differ due to differences in media characteristics.

Singer (1980) suggests that information processing is dictated by a medium's characteristics. According to Singer, reading is more engaging and therefore the information is processed in more depth and television is less engaging and accordingly viewers process the information less thoroughly. Although televised information captures and holds viewers' attention, Singer (1980) explains that because of the fast nature of television messages, viewers don't have enough time to process and engage in the information the way they do with print.

The limited capacity model further explains this issue. The model explains the audiovisual message as complex, and as a result, it may cause information overload in a way that may impede processing of important information. The print format however, allows for more thorough information processing as it allows more focused concentration. This thorough and focused processing may enhance persuasion effects.

Studies show that more processing of persuasion symbols is most influential (Perloff and Brock, 1980). Thus, since print allows more

visualization than video (Meadowcroft and Olson, 1995) because video is characterized by rapid pacing that contributes to passive processing (Singer, 1980) one would expect more processing and persuasion to occur in information communicated through print rather than video. A more recent study challenged these views, however.

Fahmy and Wanta (2005) conducted an experiment to examine the appropriate media channel that might provide the audiences with what they need in order to retain so-called *critical* information. They used the theoretical concept of priming to examine how to organize the presentation of visual information in such a way as to allow more or less persuasion to occur in media messages and educational information. Thus, their study was founded on the notion that individuals exposed to information *cues* will be primed to retain that information in forming opinions (i.e. Fazio, Powell, and Herr, 1983; Severin and Tankard, 2001). In this experiment, if an individual was exposed to information about the relative ease in manipulating photographs, that person would be primed to view the media as less credible than would individuals not exposed to this information.[3] In other words, while information cues were presented to respondents on issues dealing with digital manipulation, the information in the message would likely have a priming effect beyond the content of the message.

Results of this study showed a significant difference in attitude changes among different groups preexposed to priming cues using different media. Findings suggested that using video to communicate information is more effective in priming than using print and that using the combination of video and print may lead to relatively unfavorable attitudes toward the priming message. The researchers produced unexpected findings suggesting that using video (or broadcast) as a priming medium is more favorable than using print and/or the combination of both the video and print. This can be related to past research that indicates that message learning can occur in the absence of attitude change and vice versa (Petty, Baker, and Gleicher, 1991). In other words, a person may not be persuaded although he/she was able to comprehend all the intended information communicated (Petty and Priester, 1994). Also, perhaps the video (or broadcast) and print provided too strong of a case for digital manipulation. Subjects may have felt the information was overwhelming and so reacted negatively toward the double stimuli.

As noted earlier, past research considered differences in information processing, priming, and persuasion effects and also looked into the issue of media credibility in traditional platforms. As early as the 1950s, the very nature of source credibility had been examined. Hovland and Weiss (1951) studied the differences and extent of agreement with trustworthy and untrusting sources after a communication act. They found that those who were exposed to the highly credible source were initially more persuaded than those who were exposed to the low credibility source. Overall, one can say that highly credible sources induce more attitude change than sources lacking credibility (See Perloff and Brock, 1980; Chaiken and Maheswaran, 1994). For example, in a study that examined the influence of source credibility and message framing, Jones, Sinclair, and Courneya (2003) found that an individual's impression about the source might have a significant impact on intention and behavior. Kelly and Nace (1994) investigated the effects of publication contexts and digital manipulation information on a small group of newspaper readers. Their results suggest that credibility seems to be dependent on the general reputation of the newspaper and on photographs under examination rather than on knowledge of techniques used to produce photographs. Fahmy and Wanta (2005) echoed these findings when they found the credibility of a publication went beyond the photography it portrayed. In other words, consistent with previous findings, the credibility of newspapers was not entirely tied to the believability of the photographs they ran. They also found that credibility decreased consistently regardless of whether individuals were exposed to articles from *The New York Times* or the *Sun* papers.

Recently, researchers have also investigated the impact of visuals on viewers' attitudes toward war policies (See Ayish, 2001; Domke, Perlmutter, and Spratt; Pfau et al., 2006; Pfau et al., 2008). Scholars have suggested how the use of visuals—especially graphic ones—may impact positive or negative public sentiments regarding military operations (Pfau et al., 2006). Zelizer (2004) posits that war visuals rank among the most powerful images "known to humankind" (p. 115). By embracing the prevalence of these images in the media, studies have shown that these viewers may be particularly affected by these visuals (see chapters 7, 8, and 9 in this book, on effects).

Undoubtedly, the camera has become a powerful tool through which we see the photos in the news as a "weapon" (Laustsen, 2008) in this new information war that seeks to use visuals to win the hearts and minds of the general public. This effect has also been reinforced by the ease and carelessness with which photographs are taken and distributed within social networks and the blogosphere nowadays. For example, in the context of the Iraq War, Griffin (2004b) argues that the pictures of Abu Ghraib confirmed the direct effect of visuals in shaping public opinion. In his view, these photographs gave the world a vivid realization of the torture that took place in Iraq. Griffin argues that the US occupation of Iraq dramatically changed as attention shifted to the pictures of tortured Iraqi prisoners. It is now no longer the picture of the toppling of Saddam Hussein's statue that is the iconic image of the Iraq War, but the photograph of a female soldier with an Iraqi on a leash (Griffin, 2004b).

As more people have relied on the Internet as their primary source of information, some of the most intimate images now come from cell phones equipped with cameras and video recorders. The availability of such technologies, combined with the ability to transmit images instantaneously, is enabling the world to view events with nearly the immediacy of an eyewitness. Smartphones, in the hands of journalists, citizens, and witnesses to news events are changing news routines (Bivens, 2008). *The Washington Post* explained that in an article about the London bombings of 2005, that a blurred image captured on a cell phone by a subway passenger trapped underground was broadcast and appeared online within hours (Nogucchi, 2005). Owen (2005) from *National Geographic* goes on to explain online that "the images that defined the media coverage of the July 7 London terrorist bombings, which claimed more than 50 lives, came not from professional news crews but from everyday people." Gordon (2007) also found that smartphones made a difference in the coverage of the London bombings, but took things even farther in two other instances: the SARS outbreak in China and 2002 and the Sumatra/Andaman Tsunami of 2004. In those cases, she writes, "there was a reluctance or inability for the authorities who had any knowledge of what was happening to inform the public. Mobile phones were relied on to exchange information as there was little in the public domain" (p. 315). In her book on the way small-screen movies, documentaries, and other user-generated media have been popularized in China, Voci (2010) finds that the

portability and ubiquity of smartphones may be giving citizens a bit of an edge in the face of government media controls.

So far, research indicates that the size of a smartphone screen does not seem to make a significant difference for viewer experience. Kelley (2007) conducted an experiment to compare how well viewers remembered TV news, and found that using earbuds with a smartphone led to a recall similar to that of subjects who watched on a conventionally sized TV. Kelley attributed the effect to the enhanced attention to the audio track. Another experiment by Bracken and colleagues (2010) similarly found that in a headphone condition, subjects reported more "immersion" with a video. That study also found that viewers experienced a greater sensation of "spatial presence" with a larger screen. Finally, in a study of viewer experience of online learning, rather than news, Maniar, Bennett, Hand, and Allan (2008) found that while students who participated were enthused about being able to watch teaching videos on their phone, the smallest cell phone screens were less effective for learning compared to the screens from the latest generation of smartphones. Much more investigation into the effects of small screens on comprehension, enjoyment, and affect will be necessary as journalism continues its shift into mobile delivery.

Visual Icons and Social Networks

More recently, images disseminated via the Internet have created visual icons that have assisted in bringing corrupt governments to their knees (e.g. Tunisia, Egypt). During the Arab uprising, social networking sites on the Internet were used by individuals as a tool to spread the word of their struggles. In fact, the success of the 2011 uprising that unfolded in Egypt has resulted in what many now refer to as Egypt's "Facebook Revolution."

In less than one week after policemen beat 28-year-old Khaled Said to death on a public street in Alexandria, Egypt, a Facebook page "We Are All Khaled Said" was created. The page became popular, attracting almost half a million users. On this page there were images of Mr. Said smiling, juxtaposed with graphic battered pictures of his face, creating a visual icon and one of the main catalysts that led to the Egyptian revolution and massive protests in January 2011. Meanwhile,

other social media such as YouTube broadcast similar images and other visuals of the Egyptian struggle in the streets, offering Egyptians a forum to bond and to express outrage toward abuses of the Egyptian government. Indeed, using Khalid Said's images as a visual icon provided a major focus, one that eventually became an important catalyst to one of the largest revolutions in Egyptian history.

That said, it is important to note that the Internet did not invent the 2011 revolution; rather it was the people on the streets of Egypt calling for action that made the real difference. Ali and Fahmy (2013) acknowledge that Facebook did not create courage. However, they explain, it certainly was a major catalyst in the uprising. Social networking sites allowed different groups in Egypt to find one another, and to provide a much-needed social support network in both the 2011 and the 2013 uprisings.

The role of social media, however important for such pro-democracy activity, should not be romanticized. Because images are de-contextualized, the use of imagery cuts both ways. U.S. President Barack Obama, for instance, has been accused by the Washington Press Corps of using sites like Twitter and FlickR to spread pro-administration propaganda (Lyon, 2013). Because the press has been shut out of Obama's work life in the White House, only staff photos of him at work are released. As Lyon put it: "By no stretch of the imagination are these images journalism. Rather, they propagate an idealized portrayal of events on Pennsylvania Avenue" (p. 39). The question is not whether the images themselves are "truthful," but whether the people taking, distributing and e-contextulizing them are presenting a complete story.

News Consumption, News Delivery

The recent State of the News Media report (2013) stated that digital delivery of news is well established as the majority of Americans now get online news on a daily basis—in combination with news from other media platforms.

> As a paperboy, I admired colleagues who were deft at getting the news onto front porches. As a reporter, I realized that didn't really

> matter. The challenge was to get the paper's message through the door. (Rosenblum, 2010)

The 2013 report also found that social media are playing a growing role and that the stories that draw the most attention in blogs and twitter differ substantially from stories offered by traditional mainstream press.[4] Further, news consumers are quickly moving to newer platforms. For example more than six in ten get news from smartphones on a weekly basis and more than one-third do so daily.

What is most interesting is that news consumers now do not depend on only one platform for news consumption (i.e. online). The State of the News Media report (2013) explained that the typical news consumer now gets news from both online and traditional offline platforms. A 2012 study by Pew Research Center and the Economist Group reported that more than half of tablet news users get news on a smartphone; almost eight in ten also get news on a desktop or laptop; half get news in print and a quarter get news on all four. Further, the 2013 State of the News Media report mentioned that major websites of news organizations such as newspapers, cable, and network news attract 20 of the 25 most popular news sites.

With news becoming omnipresent in the digital era, few credibility studies have looked at how channel attributes including the online platform influence the credibility of the source. For example the work of Johnson and Fahmy (2009) specifically focused on assessing how those who visit a specific news website judge the credibility of its affiliated TV station (if available). They used the Meaning Transfer Model to examine the degree to which those who have visited a particular website that had an affiliated TV station judged its network as credible even if they had not personally viewed its TV channel. They found that those who had watched the affiliated TV channel consistently judged it more credible than nonviewers. However, while two-thirds of those surveyed had never seen the particular TV channel under study, only a handful of people did not assess the credibility of the network. Results of their study, combined with the results of the State of the News Media report (2013), suggest that media users will assess credibility of a news source they don't know (whether in online or traditional platform) based on their knowledge of a news source they have familiarity with (whether in online or traditional platform).

As more news consumers have relied on the Internet channel as a main source of information, other researchers have examined how the Internet is used as a medium to cover war and military conflicts. While online newspapers have moved beyond the so-called *shovelware* stage of online journalism and have begun to incorporate hyperlinks and visuals (stills and video) regularly in their news reporting, one of the paradoxes of online war coverage is that whereas one would expect that cyber technologies would democratize the politics of war by liberating access to information about conflicts, various governments have tried to co-opt information and communication technologies to facilitate new forms of mass mobilization to gain support for war (Walsh and Julien, 2006).

Current literature indicates that online news reports, similar to their traditional counterparts, correspond with the accepted norms of every government and every culture. For example, a study that examined how CNN and Al-Jazeera news sites covered stories regarding the Iraqi civilian casualties during Iraq War revealed that both news outlets disseminated propagandistic messages (Youssef, 2004). Further, in examining the visual coverage of that war in 26 US mainstream news sites, Schwalbe (2006) found that five frames emerged to reinforce the US patriotic war narrative: conflict, conquest, rescue, victory, and control.

Changing Audiences: The "YouTube" Generation

In the context of new media in which young audiences are constantly exposed to online visuals—particularly the "YouTube" generation as explained earlier—the younger generation of adults receives and processes images in a far different manner than the way the generation of older adults have done so most of their lives. This could have a real impact on ethical decisions made by photo editors on whether or not to run specific images in the traditional media.

For example, the new technologies available for documenting visuals combined with the ability to transmit images instantaneously has enabled us to view pictures of Abu Ghraib with nearly the intimacy of

an eyewitness and these images have had a significant impact on public opinions and perceptions regarding support for the war in Iraq.

McKinley and Fahmy (2011) examined how young audiences or react to graphic visuals and the implications that these findings might have on the gatekeeping process in the traditional media. Specifically, they looked at whether policy beliefs and attitudes were influenced by varying degrees of "graphicness" in war images related to the Israeli/Palestinian conflict. Prior research suggests that the shocking nature of graphic visuals leads to increased attention, and ultimately these shocking images are particularly potent at influencing viewer beliefs and attitudes (See Ayish, 2001; Potter and Smith, 2000). Surprisingly, the findings of this study did not show that higher compared to lower levels of *graphicness* in war images led to differences in perceived severity of war or stronger policy perceptions. Higher levels of "graphicness" in images of the Israeli/Palestinian conflict did not affect beliefs regarding the severity of this issue or attitudes toward US involvement in the conflict.

Overall, the study's results indicate that journalistic concerns about ethical guidelines and the presentation of highly graphic images to viewers might have changed over time with the Internet producing immediate and constant graphic online visual material, such as the beheading of Nicholas Berg available since 2004. This information then leads us perhaps to the need of revising the current ethical standards, such as lifting the ban put in place in 1991 by then President George H. W. Bush allowing the media to photograph coffins of soldiers who died in the wars in Iraq and Afghanistan. Journalism in traditional platforms such as newspapers and TV should now allow for more realistic material to be available. As the results of this study indicate, the standards put in place decades ago might have now become outdated and unfounded.

Summary

For decades, images were perceived as culturally "lower" than words; as mere decorations to hold viewer interest to the more "serious" word-based journalism. For better or for worse, digitization may have equalized word and image, at least when it comes to their truth

value—for now the credibility of the image has shifted from camera to storyteller. Cameras may not lie, but people, even some journalists, do lie, and Photoshop makes it all to easy. News organizations today are faced with the enormous task of maintaining the public's faith in all forms of their work, as their images, captions, stories and films are so easily appropriated by non-journalists.

The changing digital landscape is changing the way photojournalists work and the way the audience views news images. Editors can remove an offensive portion of a news image to better meet the "taste" expectations of the audience, but the research indicates that viewers expect news images to arrive with very little editing. Priming and persuasion research indicates that a news organization's reputation seems to be more important to credibility measures than knowledge of digital manipulation. The rise in user-generated media raises even more questions about news credibility. New channels of delivery on the Internet may be changing the way the audience responds to graphic images as well. Therefore as changing technologies have influenced the way visuals are now disseminated and consumed, there is a greater need for editorial judgment. There is a need to teach the essence of photojournalism including ethics, truth, fairness, and balance to promote credible visual coverage across all channels and all media platforms.

Conclusions

- Readers tolerate only minor levels of photographic editing.
- The processing of photographic information varies across different media platforms.
- As more people have depended on the Internet for information, digital photographs have become powerful tools in influencing the hearts and minds of the general public.
- Young adults—the YouTube generation—receive and process images in a far different manner than the way the generation of older adults does.
- Changing technologies are blurring the boundaries between journalists and their audiences, and it may be that long-standing visual communication practices will be subject to significant revisions in the years to come.

Chapter 7

With What Effect I: Research on Cognitive Effects of Visual Communication

Before introducing the multiple contributions and opportunities for research examining cognitive visual effects, it is important to note that the digital age has made it possible for people to see events happen instantaneously. In this age, then, one might expect research to show that people to have a better cognition or grasp of what is going on in the world around them than ever before. For many scholars, however, this expectation has not been fulfilled yet. According to Bartels (1993), "The state of research on media effects is one of the most notable embarrassment of modern social science" (267).

Here and in the next two chapters that follow, a few explanations for these cognitive effects and others (attitudinal effects and behavioral effects) will be magnified in the context of serious empirical research and/or theorized causal mechanisms, allowing for some plausible assumptions of visual effects in mass communication.

This chapter, focusing on cognitive effects, places the arguments over significant effects in visual communication within wider debates in order to lay the foundation of visual effects research. The strongest debate dates back to early mass communication research, when sweeping claims were made suggesting a massive effects approach. This approach indicated that the mass media "permeate almost every corner of society, and have a strong impact on almost

everything they touch (Newtown, 2006, p. 209). In media-centric societies, such arguments seemed plausible and attractive, specifically for those keen on exposing the manipulation of visuals by corporate media. However, scholars eventually found few signs to suggest supporting evidence for such allegations (see Zaller, 1996). As a replacement came the minimal effects model that suggested the media instead "are generally a weak force in politics and government . . . they can and do exercise some direct and independent influence over some aspects of political life, and can even exercise string or crucial one under certain circumstances, but normally their impact is mediated and conditioned by a variety of other and more powerful forces" (Newtown, 2006, p. 210).

Current Trends and Deficiencies

Discussions of visual effects today, dealing with cognition fall by default into the general dominance of the minimal effects camp. Such research has been largely hampered by the shortcomings that make vague visuals harder to measure. This is not the fault of visual communication researchers, but rather an indication of the state of and nature of this field. Indeed, it is difficult to pinpoint deficiencies in the empirical evidence because as Barthes (1977) explains, visuals are intrinsic and ambiguous in nature. While it is widely held that visuals can stir emotions, there is thin support for such empirically wide claims. Zillmann and colleagues, for example (1999), write that acceptable proof of such effects is still in the infancy stage.

The cognition process emphasized here refers to the relationship between visual information and cognition. It identifies the way our mind processes visual stimuli in a subjective manner. To best describe this cognitive nature, Gibson (1979) explained it as the scanning and identification of various structures in the optic ecology. Our mind then compares external objects with internal knowledge that is stored in memory to make sense of information. For example, what our eye sees is not, say, an iPhone. What we see is a series of shapes, colors, and lines. It is only when that information has reached our brain and has been processed, that we realize that the shape is a cell phone. This process might sound simple, but it is not. Graber (1990)

shared much concern on how visual information is presented and how "information might be lost because its manner of presentation makes it difficult to absorb" (p. 134).

The current chapter presents what we need to know about the effects of visuals in the cognitive process, and how we should fill the gaps in existing knowledge. It first presents and analyzes visuals in relation to the related textual information and audio channels. This section presents the relationship between visuals and the related textual/audio information and discusses how visual information can contribute to learning and memory. The second section presents evidence on the way visuals impact affect and emotional responses. The last part presents how visuals interact with individual differences and contribute to learning, including how some individuals learn information faster and more effectively when the information is presented in a visual form.

Visual-Textual Consistency and Audiovisual Redundancy

Concern about the relationship between visuals and the related textual/audio information has promoted a body of research in this area (i.e., Drew and Grimes, 1987; Graber, 1990; Hall, 1973; Paivio, Rogers, and Smythe, 1968; Huang and Fahmy, 2013; Zillmann et al., 1999).

Past scholars have noted that still images may not be consistent with the textual or audio information. For example, while the texts may be talking about a soccer match, the photos could have been file photos in which the players were engaged in soccer training. Friedland and Zhong (1996) noted that while CBS showed images of students holding signs proclaiming the end of government corruption in China, and singing the anthem of international communism and symbol of patriotism, the reporting staff presented these images as portraying a prodemocratic/anticommunism movement.

Regarding still images, when captions and photos are examined separately in the media, they might produce different cognitive interpretations or the same interpretation in different frequencies.

This is because visual and verbal information work in different fashions (see Messaris and Abraham, 2001). According to Hall (1973), for example, images and words differ in their possession of explicit propositional syntax, and therefore when they contest for meaning, verbal information tends to direct viewers on how to interpret and process the visual information.

Previous studies found that visuals must fit with the accompanying story to facilitate comprehension and make information more memorable (Levie and Lentz, 1982; Levin, 1989). Wanta and Roark's (1994) study, for example, found that individuals' recall of a story was directly associated with how well the accompanying photograph related to that story.

To measure whether the visual information in photographs is consistent with the accompanying verbal information in a story, Huang and Fahmy (2013) proposed a "Visual-Textual Consistency" analytical framework. They argued that the interpretation of news events is the combined cognition of both visual and textual information. In other words, the explicit meaning produced by a photo alone can sometimes contradict the meaning that is produced by the combination of both the visual content and caption. Their "Visual-Textual Consistency" framework attempted to cast some light on the ambiguity issues that have been intrinsic to the study of visual communication. The authors called for a separate examination of visual content and related captions by measuring whether the caption matched the content of the image. They argued that the explicit meaning produced by a photo alone could sometimes contradict the meaning produced by the combination of both the visual content and caption, especially when captions suggest the opposite information or the visual is subject to multiple interpretations. Huang and Fahmy stressed the potential that captions have in playing a crucial role in strengthening the presentation of visuals—a process that could potentially affect cognition and interpretation of events. This is important because, over the years, scholars have not been successful at measuring objectivity in news photos—a concept that is related to the fact that visuals—as mentioned earlier—are vague and intrinsic in nature.

Another area that intrigued mass communication scholars has been cognitive effects related to audio/visual redundancy on a

screen. According to Zhou (2005) redundancy was defined early on as "the complete 'match' between messages presented in the audio and visual channels. This idea suggested that both channels in television messages need to carry exactly the same information to be completely redundant" (24).[1] The growing body of research in this area was prompted by a concern that because television offered two channels, there would be a potential for overloading and distraction in the information processing capabilities of audiences (see Drew and Grimes, 1987; Lang, 1995).

Research in this area, however, produced a mixed bag.

Some studies have showed that the use of visual elements inhibited information recall and did not facilitate learning (i.e., Edwardson, Grooms, and Pringle, 1976; Fndahl, 1972; Grimes, 1990; Jorgensen, 1955). For example, Grimes (1990) found that the redundancy condition yielded the worst video recognition as opposed to the nonredundant condition. Other studies suggested that effects depended on a variety of variables including the duration of stories and the quality of visuals that accompanied the narrative (see Gunter, 1980). In the case of conflict between the audio and video, scholars found that viewers attended to the video at the expense of the audio (see Drew and Grimes, 1987). Further, there is evidence that suggests, in the presence of compelling negative visuals in video, that memory is worse for information that precedes these negative compelling scenes (Newhagen and Reeves, 1992).

Other studies found different results. These studies suggested that the simultaneous presentation of visual and audio channels enhanced cognition (i.e., Graber, 1990; Grimes, 1991; Lang, 1995; Pezdek and Stevens, 1984; Reese, 1984). For example Reese (1984) found that children who watched news with video had much better recall and understanding than those who did not watch the accompanying video. Studies found that when two channels are redundant, viewers are slightly able to treat audiovisual presentation as a single source (Grimes, 1991), with the possibility of viewers focusing most attention on the audio for important information (Drew and Grimes, 1987).

While the above studies have not been conclusive, another area dealing with visuals and cognitive effects that begs attention is linked to the rise of digital media. The need for more current research is

evident regarding cognitive influences of textual/audio information accompanied by visual banners, scrolls, and bullets on a variety of multielements screens and platforms that are commonly available, including tablets and cell phones.

The following incidents prompt the question of whether information processing and cognition are altered when audiences view video information on a screen with textual information (in this case digital banners) that conflicts with it.

For example consider the following episodes that occurred during the Egyptian uprisings in summer 2013.

On June 30, 2013, CNN aired the footage of Tahrir Square in Cairo, Egypt, with millions of anti-Morsi protestors that were presented as "pro-Morsy" (Figure 7.1). Viewers used Twitter to complain and CNN acknowledged the error. However the network claimed the wrong banner was a technical glitch and refused to issue a correction or an apology. This lead to extreme public rage and

Figure 7.1 CNN while broadcasting visuals of millions of anti-Morsi protestors at Tahrir Square in Cairo presented them as pro-Morsi protestors.

Source: Screen shot by Shahira Fahmy of Facebook page https://www.facebook.com/CNNterrorism.

the creation of what became an extremely popular face book page: "CNN Supports Terrorism" (available at: https://www.facebook.com/CNNterrorism).

A few weeks later, on July 26, a similar episode happened when millions of Egyptians went back to the streets in a show of support for the military to crack down on violence and terrorism. Al Jazeera then broadcast the pro-army protests at the Ittihadia Presidential Palace by presenting them as "antimilitary rule" (Figure 7.2). FRANCE 24 similarly made a mistake that day by broadcasting footage of the Presidential Palace and presented it as a Rabaa al-Adawiya neighborhood (the location of antimilitary protestors). [2] To make it clear for those not familiar with the political situation in Egypt: protests at the Presidential Palace that day were pro-army protests. The main location in Cairo for anti-army protests was held in Rabaa al-Adawiya.[3]

Clearly, these mistakes raise a number of unresolved issues, specifically regarding professionalism and fact checking vis-à-vis international reporting. However, the main concern here is how these

Figure 7.2 Al Jazeera English while broadcasting pro-military protestors at the presidential palace in Cairo, Egypt, presented them as antimilitary protestors.

Source: Screen shot by Shahira Fahmy of Facebook page https://www.facebook.com/CNNterrorism.

unfortunate mishaps might influence the way we process visual information when there is conflict between the video information on a screen and the textual information presented in a digital format. In our high-speed visual-centric world, would viewers attend to the video at the expense of the textual information presented on a screen? And how would this influence the overall cognition of a news event?

In recent years, a limited quantity of scholarly studies have focused on cognitive effects regarding the use of digital information—in the form of scrolls, bullets, and banners. There is not enough accumulation of scholarly studies to determine cognitive effects on this type of information on visuals. This area, therefore, suggests a promising area for further research, with greater effort to enhance and measure cognitive effects in the digital world.

Affective/Emotional Responses to Visuals

Traditionally, most researchers have ignored the visual effects of affect on cognition. However, there has been a rapid increase in the number of cognitive mass communication scholars carrying out some research in the area related to affect and emotion.

Because the study of affect and visuals has lacked cohesion over its brief history and encompasses theory from a broad range of disciplines and subdisciplines, it is important to note the definition by Forgas (1991) who advocated that affect includes emotion, mood, or evaluation.

The body of literature first started with studies that examined the emotional effects of different content focusing on the effects of viewing violent mediated visual information. Such studies included studies by Atkin (1983), Geen (1975), Berkowitz and Alito (1973), Feshbach (1972), Sawin (1981), and Thomas and Tell (1974). For example, Geen (1975) videotaped violent scenes and showed them to participants. Effects included self-reported arousal, a condition that was confirmed by skin conductance tests.

Since then much of the research focused on political campaigns, looking at affect as a powerful predictor of electoral choice. There has

been a growing limited trend regarding the images candidates project and their importance in affective responses and perceptions.

Kaid and colleagues (1992) compared viewer perceptions of Bush and Dukakis in their 1988 political ads and found that Bush's image was positively affected by ads, while ads of Dukakis did not significantly affect his image. They concluded that for both candidates, image improvement seemed directly related to the generation of emotions among viewers through the campaign ads.

Coleman and Banning (2006) and Coleman and Wu (2010) adopted the second-level agenda approach to examine the affective framing of candidates through visual information. In examining the relationship between visual displays on TV news and the public's emotions about political candidates, Coleman and Wu (2010) found significant correlation between the public's perceptions and their exposure to media portrayals of Bush and Kerry for negative portrayals.

Another area that used second-level agenda setting was a path analysis model used to predict how emotional responses to the terrorist attacks of 9/11 would influence individuals' visual recall of 9/11 images (Fahmy, Cho, Wanta, and Song, 2006). Based on responses from a phone survey conducted two months after the terrorist attacks, they found if individuals reacted to the 9/11 attacks with sorrow or shock, they stored several images in their long-term memory, especially the emotional images of people jumping from buildings and depictions of dead bodies. Concern with terrorism also was influenced by the emotional reactions of respondents to 9/11.

Recent studies also focused on issues related to social events. For example, Arpan and colleagues (2006) found that negative pictures of social protests created more negative effect in viewers. The authors concluded that visuals alone can impact the way people process content and the way they perceive events presented to them in a pictorial form.

To sum up, a growing body of literature has shown that the affective attributes reported through visual communication channels influence affective and emotional reactions in viewers.

Individual Differences and Cognitive Influences

In recent decades, many scholars have focused on visual information and individual differences for determining cognitive responses to images (i.e. Casey et al., 1991; Jackson and Lawty-Jones, 1995; Jonassen and Grabwski, 1993; Riding and Ashmore, 1980; Riding et al., 1995; Sadler-Smith, 1996; Mendelson and Papacharissi, 2007; Mendelson and Thorson, 2004; Mendelson, 2004; Wanta and Roarke, 1994). Research in this area was based on the thought that cognitive influence is not based solely on the visual information or the individual (See Worth and Gross, 1974). Rather, such influences are based on the interaction between the stimuli (visuals) and how the individual interprets the nature of the event communicated to them.

Jonassen and Grabwski (1993) explained "We all differ in how we interact with our environment, extract and perceive information from it, and reflect and organize knowledge that we have acquired" (p. 173). Such interaction then determines the overall cognitive impact. In other words, the cognitive influence of visuals is the result of each viewer's predisposition for learning from the visual information being presented.

As early as 1970s, Cronbach and Snow (1977) emphasized the importance of individual's differences, such as learning styles and abilities to better understand how people process information. In analyzing how individuals process visual news, scholars found that the way individuals learn information depends heavily on their cognitive styles as well as the nature of the stimuli they are exposed to (e.g., see Mendelson and Thorson, 2004). Johnston (1995) wrote, "We cannot assume equivalent processes and responses by all adolescent viewers" (p. 523).

Over the years, results of numerous studies noted the importance of each individual's disposition for learning from visual information (Jackson and Lawty-Jones, 1995; Jonassen and Grabwski, 1993; Riding et al., 1995; Sadler-Smith, 1996; Wanta and Roarke, 1994). Scholars argued that a person with a visualizing style is image-oriented, and prefers to have someone show them how to do things (Mendelson and Papacharissi, 2007). They found that this type of individual tends to learn better when presented with information in a pictorial form or

when the task is visual in nature (see Jonassen and Grabwski, 1993; Riding and Ashmore, 1980; Casey et al., 1991). Overall, the literature suggested this could be due to this person's high ability to organize visual information in a meaningful and efficient manner.

Examples of empirical work that focused on this area of research includes Mark's (1973) study that found that people with better visualizing abilities were more accurate in recalling information in photographs than people with lesser visualizing abilities. More recent work such as Mendelson and Thorson (2004) and Mendelson (2004) indicated that each individual's visualizer level was a significant factor when presented with simply visual information accompanied with no text. For example Mendelson (2004) showed that high visualizers (the extent to which individuals prefer to learn more from images) perceived news photographs as more interesting and less complex when compared to high verbalizers (the extent to which individuals prefer to learn more from words), suggesting that high visualizers have the ability to see visuals as unified ensembles and perceive relationships among the different elements included in a single imagery.

While early research identified visualizers and verbalizers as being at the opposite end of a solo continuum in a way that seemed somewhat simplistic (e.g., Richardson, 1977), lately scholars have argued that these two concepts are not distinct (e.g., see Antoneietti and Giorgetti, 1998). For example, individuals might be both visual and verbal learners. Such individuals might prefer to learn from visual information and verbal/textual information combined.

The Future

Over the years, researchers have examined the power of visuals on cognitive effects. Clearly these cognitive effects are present, even if measuring them remains an infant science. Digital media have reshaped the structure of how we see the world, empowering new forms of visual journalism and subsequent cognitive effects that could produce significant knowledge gains. At the same time, there is little evidence to support the assumption that visual media in this digital form have massive effects on cognition. Its impact will vary

by case and will tend to interact in complex ways with a wide range of multiple platforms and individuals' predispositions and orientations. Serious empirical research into audiences and precise cognitive effects may ultimately vindicate the massive effects view, but more likely such evidence would cast it into doubt as it already has in the digital world where it is now becoming even tougher to define and separate visual truth from visual fakery produced by citizens and news organizations alike.[4]

As Mort Rosenblum (2013), former Associated Press special correspondent and former editor of the *International Herald Tribune*, explains:

> First, we need a firm grip on global realities. That requires professional reporters along with thoughtful readers who absorb what they report. Today's avalanche of "news" from multiple directions would be great if we knew what to trust. Mostly, it only confuses us. Good stuff gets lost in a tower of babble.

Conclusions

Overall, research dealing with visuals' effects on cognition concludes:

- While it is widely held that visuals can influence emotions such effects are still in the infancy stage.
- Because visual and verbal information work in different fashions, when captions and photos are examined separately they might produce different cognitive interpretations.
- Huang and Fahmy (2013) proposed a "Visual-Textual Consistency" analytical framework to measure whether the visual information in photographs is consistent with the accompanying verbal information in a story.
- While some studies have showed that the use of visual elements inhibited information recall and did not facilitate learning, other studies found the simultaneous presentation of visual and audio channels enhanced cognition.
- In recent decades, some work has focused on political campaigns looking at affect as a powerful predictor of electoral choice.

- Learning from photographs could be due to individual differences in learning styles.
- Digital media have reshaped the structure of how we see the world, and more research is needed to support the assumption that visual media in this digital form have considerable effect on cognition.

Chapter 8

With What Effect II: Research on Attitudinal Effects of Visual Communication

As the previous chapter noted, the cognitive effects of visual communication have received attention from researchers, though most of the attention has been relatively recent. The same could be said for attitudinal effects research, which has an equally rich tradition.

The field of psychology has conducted a wide range of research examining visuals and perceptions of individuals. The field of mass communication has applied many of the psychological processing concepts in recent research. Mass communication researchers have manipulated visuals accompanying news stories to examine potential effects. Recently, researchers have examined visual morphing, in which software is used to morph a person's face with a political candidate's face. Research has also examined the effects of gender and racial stereotypes in product advertising and in television programming.

Visuals in Advertising

Researchers in the advertising field have especially been concerned with visuals and attitudes. Advertisers are especially keen on creating

messages that influence how individuals view their products and services. By influencing consumers' attitudes, advertisers hope to ultimately influence consumers' behaviors—influencing purchasing decisions (see also Advertising Campaigns and Consumer Behavior in chapter 9). Having influence on consumers' attitudes is the main purpose behind advertising. Thus, effective use of visuals in advertising is of utmost importance.

One factor found to affect individuals' attitudes is the size of a visual. Researchers in both psychology and advertising research have demonstrated that picture size is positively related to memory and attitudes (See Kosslyn, 1980; Mitchell and Olson, 1981; Rossiter and Percy, 1980, 1983).

Varying the size of a picture that accompanied an ad, Rossiter and Percy (1983) found that larger pictures produced more favorable attitudes than ads that contained the same picture but in a smaller size. Thus, the larger photograph produced more positive attitudes toward a brand. A plausible explanation for this finding is that larger visuals elicit elaborated imagery processing (McMahon, 1973). Better elaborated imagery can increase positive behavioral attentions, including product purchase intention. Similarly, Mitchell and Olson (1981) found that visual stimuli evaluated as positive can increase attitude toward a product and purchase intention.

Several studies have found that imagery information processing is superior to discursive processing. MacInnis and Price (1987) argue that imagery processing may be more likely to lead to a holistic evaluation of the brand than discursive processing. They suggest that imagery information processing causes consumers to expect a higher likelihood for positive decision outcomes because consumers can visualize decision outcomes, and this visualization can make perceived outcomes appear more real (MacInnis and Price, 1987). Visual processing also produces some of the enjoyment an individual might derive from consumption of the product (Holbrook and Hirschman, 1982).

Other researchers have found similar links between visuals and positive attitudes in advertising. Mitchell and Olson (1981) found that visually oriented ads were more effective in producing a positive attitude toward a brand. Visual advertisements also were more

effective in communicating important attributes of the product than the text-oriented ads. Overall, then, they concluded that visual information was more likely to lead to positive changes in attitudes and purchase intentions than verbal information.

Singh and Dalal (1999) applied imagery processing to commercial web pages. They argue that by informing consumers of the product and encouraging consumers' positive attitudes and behaviors, web pages perform the same function as advertisements.

As indicated in the next chapter, researchers such as Bezjian-Avery and colleagues (1998) have found that advertising in traditional media formats can be more effective than interactive advertising online. Interactivity may distract individuals from the main message in the ad. Interactivity can reduce time spent viewing an ad as well as decrease purchase intention. However, as individuals become more accustomed to interactive messages online, these findings potentially could change.

Visuals and Mood

Research on visuals and mood can be placed into two categories: Studies that use mood as a dependent variable—influences of visuals on viewers' mood, and as an independent variable—mood influencing how individuals view visuals.

As mentioned earlier, advertisers are mainly interested in influencing the attitudes and purchase intentions of consumers. One way to influence attitudes is to positively affect the consumer's mood.

When people encode information into their memory, they not only record the visual and other sensory data, they also store moods and emotional states. Someone's present mood will affect the memories that are most easily available, such that when he/she is in a good mood the person recalls good memories, or the reverse. Since memory has an associative nature, individuals tend to link happy memories to other happy memories and sad memories to other sad memories. The likelihood of remembering an event is higher when the mood of encoding and recall match up. Thus, to increase positive

attitudes to a visual, the visual should facilitate the access of positive memories. This is why some advertisers use popular songs from the past, hoping that viewers will link happy memories of the music with positive attitudes toward a product.

However, the effect of linking past positive memories to information processing at a later time is unclear. Lewis and Critchley (2003), for example, argue that this approach is weak for three reasons:

1. Though emotions can elicit past information, researchers cannot differentiate between positive and negative moods with this approach.
2. It is uncertain whether either positive or negative moods will lead to activity in a positive or negative way.
3. Researchers cannot demonstrate that emotional activity due to mood interacts with emotional activity associated with memory.

Eye-Tracking Research

Among the most advanced techniques used in visual communication research involves the eye-track, a device created to track eye movement. The eye-track system involves a small camera placed on a hat or helmet aimed so as to following a person's eyes. Early studies in the 1990s argued for the importance of tracking readers' eyes on a newspaper page. With verifiable data on eye movement, they argued, newspaper designers could produce newspaper pages that would be more efficiently processed.

In one of the earliest eye-tracking studies, Garcia and Stark (1991), tracked eye movements on a newspaper front page and recorded the eye movements on videos. They found that newspaper readers usually enter a page by first looking at the largest visual. Their eyes typically then go to the second largest visual, then the third largest. Readers thus pay more attention to visuals than to news stories, at least at first. Garcia and Stark (1991) conclude that readers scan rather than read newspapers. At some entry points, readers stop scanning and begin to read a story connected with the entry point.

Many of the eye-tracking researchers use a helmet equipped with a small camera that follows eye movement. The computer records the eye movements, thus eliminating the need for researchers to do any kind of coding.

In a study using 12 readers of the Copenhagen newspaper *Det Fri Aktuelt*, Hansen (1994) found results similar to Garcia and Stark (1991): pictures are looked at first, then graphics, then headlines of different sizes, and finally text.

In a follow-up study, Lundqvist and Holmqvist (2001) tested 14 readers of the Swedish daily newspaper *Dagens Nyheter*, focusing on the effect of size on attention, attitude, and memory of ads.

Recent studies have focused on reading of Internet content. Holmqvist and colleagues (2003) examined scanning versus reading of newspapers and Internet articles and found significant differences. Readers of newspapers read 55 percent of the time and scanned 45 percent of the time while Internet readers read only 44 percent of the time and scanned 56 percent of the time.

Semiotics and Eye Movement

Eye-movement research has also been linked to semiotics. Kress and Van Leeuwen (1996) developed several assumptions with regard to what they term "semiotic space" on newspaper pages. Briefly, readers:

1. Expect the newest information to be on the right.
2. Prefer general information at the top and specific information at the bottom.
3. Expect the most important information in the center of the page and less important information on the periphery.
4. Look for "graphically salient" elements.
5. Look for "paratexts," elements that accompany news stories.
6. Are able to follow elements connected to each other by framing devices such as lines and arrows.
7. Scan the semiotic space before taking a closer look at text.

The idea of semiotic space, developed by Kress and Van Leeuwen (1996), is based on the research approach of semiology, the science of sign systems and their social uses first developed by Saussure. According to Jensen (1991), a sign consists of signifier (image) and signified (concept). Barthes (1972) provided early guidelines for semiotic analysis from a perspective of inherent meaning, noting that texts and ideology cannot be separated. He argued that a photograph of a black soldier saluting the French flag on the front page of a Paris newspaper became a sign for French imperialism (see Visual Discourse, chapter 4 in this book).

Symbols in visuals have long been a focus of research. The use of a revolving door at the state prison in Massachusetts during a George H. W. Bush commercial in the 1988 presidential election is a clear example of semiotics. The revolving door implied that Bush's opponent, Michael Dukakis, was weak on the crime issue. More than 20 years later, some voters still remember the commercial.

Other symbols are different for different people. A convertible automobile can be a symbol of freedom and youth for one person but of overextravagance to someone else.

Along with symbols, color also can affect people's attitudes. Meyers-Levy and Peracchio (1995) highlighted the importance of color in advertising. They created three ads—one in full color, another with spot color, and the third in black and white—and tested the effectiveness of the ads under different levels of processing effort. When little effort was exerted, spot color ads outperformed the black and white ones. However, when information processing was high, full-color ads were more persuasive.

Other colors can have symbolic meaning. Green, for example, can give impressions of wealth (green money) or health (plants and vegetables). Research on color and attitudes dates back several decades. An important early study (Hevner, 1935) found that subjects in her experiment felt red was related to happiness and excitement, while blue was perceived as serene, sad, and dignified.

Other feelings about colors, as reported by Lamancusa (2003):

> *Red*: Symbolic of emotional personal feelings: aggression, danger, passion, and love. Red alerts us to dangers, such as a stoplight.

Pink: Symbolic of innocence and youth. Pink demonstrates energy.
Orange: Traditionally perceived as being cheap and low budget. However, orange relates to seasonal and ethnic connotations while also giving the impression of being tangy and citrusy.
Yellow: Symbolic of energy. Yellow elicits feelings of brightness and heat of the sun. Yellow is also cheerful, mellow, and soft. Yellow is sometimes associated with uncertainty, restlessness, and caution.
Brown: Associated with earth and elicits feelings of stability. Brown is also perceived as dirty and undesirable.
Green: Signifies life. Green represents nature. As mentioned above, green also signifies money and power.
Blue: Symbolizes peace and tranquility. Blue signifies law, order, and logic. Blue is dependable, serene, and cool.
Purple: Signifies sensuality and elegance. Purple can elicit a wide range of feelings, from contempt to royalty.
Gray: Neutral colors such as beige and gray symbolize durability.
White: Represents purity and simplicity. White gives the impression of clarity and cleanliness.
Black: Represents class and elegance. Black is associated with death and mourning, but is also associated with sophistication and strength.

Attitude Change

Research on the power of visuals to change people's attitudes has taken several approaches. One area that has received extensive research is the effect of watching sexual content on attitude regarding sex. Though there is an extensive amount of research in this area, researchers have not reached a consensus on the strength of these effects.

According to Buerkel-Rothfuss and Mayes (1981), and Ward and Rivadeneyra (1999), individuals who watch a great deal of sexual television content overestimate the real-world frequencies of behaviors such as extramarital affairs, using sex for favors, and sex without love. These results thus offer support for Cultivation Theory. As Cultivation Theory research would predict, high television viewers tend to believe the televised world is similar to the real world. In

other words, people who watch a great deal of sexual content will believe the world is similar to that on television.

Other researchers (Signorielli, 1991; Ward, 2002) also found support for an attitudinal effect of television viewing. Their findings show that heavy television use correlated with more permissive sexual attitudes.

Attitudinal influences of viewing sexual content have also been found through experiments. One study (Bryant and Rockwell, 1994) had early adolescents watch television programs after school that either contained sexual subject matter or did not have sexual subject matter. A third group watched no television at all. Subjects watching sexual subject matter expressed more tolerance for sexual improprieties.

On the other hand, findings were mixed in an experiment conducted by Calfin, Carroll, and Shmidt (1993). College students who viewed erotic video expressed more permissive attitudes on some questionnaire items than subjects seeing a romantic, nonsexual video or no video at all. However, subjects seeing the romantic nonsexual video expressed more permissive attitudes on several other items. Greenberg, Lindsangan, and Sodermann (1993) found no significant results in their study: teens who watched television content that contained scenes of prostitution and either married or unmarried intercourse demonstrated no differences in attitudes.

As mentioned earlier, individuals process text and visuals differently. That is also the case with visuals and text containing sexual content. As Huesmann (1997) explains, individuals viewing sexual content try to make sense of the content by retrieving relevant information from their memory, often information that is chronically accessible. Since the vague visual sexual content on television is likely to be consistent with the information retrieved from memory, finding any effect of the television content is unlikely. This is in contrast with verbal representations of sex, which, Huesmann (1997) argues, is less ambiguous than visual information on television and therefore would activate fairly specific information from memory, which may conflict with television content, leading to an alteration of their stored memory and thus leading to an observable effect.

Morphing

Technology has led to many research approaches in visual communication. This is especially evident in the area of morphing—a case in which two facial images are merged into one image through a technological transition. Morphing differs from photoshopped images in that the image of one person is essentially changed to appear slightly similar to the image of another person without the viewer's knowledge. Photoshop, on the other hand, is most often used to add or delete segments of a visual, such as the photo of President Obama kissing Hugo Chavez mentioned in chapter 9.

Morphing has been used by the motion picture industry since the 1980s. Early uses were when one scene in a movie was morphed into another scene to create a seamless transition. Advanced software, however, has made morphing much easier.

The use of morphing outside of motion pictures is increasing, though application of morphing is sometimes viewed for potential deceptive reasons. Bailenson, Iyengar, Yee, and Collins (2008) point to potential misuse in politics. They conducted three experiments to examine the effects of morphing. In their first experiment, they distributed images of two Florida gubernatorial candidates, some of which had been morphed with photos of participants. Subjects voiced a strong preference for candidates who had been morphed with their own image. In the second experiment, subjects were again shown images that were morphed with photos of themselves. This time, the images were of George H. W. Bush and John Kerry. Strong partisans showed no preference for the images, but weak partisans and independents preferred the candidates that had been morphed. Their third experiment compared attitudes toward candidates with policy similarity or facial similarity. Policy similarity was most powerful in predicting attitudes toward candidates, but facial similarity, nonetheless, had a significant effect for unfamiliar candidates.

While the likelihood of political candidates using morphing to influence voters is remote—imagine the public outcry after it would be discovered—there certainly appears to be strong support of influences on attitudes.

Summary

As with cognitive effects of visual communication, research dealing with attitudinal effects of visuals is relatively young but maturing. Also similar to cognitive effect research, scholars know that attitudinal effects of visual communication exist, though the full extent of these effects is still largely unexplored.

New technologies and software have made the manipulation of visual information easier and more common. Manipulation of visuals has the potential for powerful effects on individuals' attitudes.

Conclusions

Some conclusions of research dealing with attitudinal effects of visual communication:

- Several researchers (Kossyln, 1980; Mitchell and Olson, 1981; Rossiter and Percy, 1980, 1983) found that the size of a visual leads to better memory of an advertisement and a more positive attitude toward the ad.
- Singh and Dalal (1999) explain that web pages perform the same function as advertisements. But Bezjian-Avery and colleagues (1998) demonstrated that interactivity on the Internet can distract viewers from the message in the ad.
- Some scholars used an eye-tracking device to examine how people process information on a newspaper page. Readers typically enter a newspaper page through the largest visual and look at a smaller visual before they read text.
- Kress and Van Leeuwen (1996) developed seven rules dealing with how individuals process "semiotic space" on newspaper pages. These include the tendency for readers to look for "graphically salient" elements.
- Individual colors can act as a symbol, with each color transmitting a different message.
- Some researchers found support for Cultivation Theory for viewers of sexual materials. High sexual content viewers overestimate

the real-world frequencies of extramarital affairs, using sex for favors, and sex without love. However, other researchers found limited or no effects of viewing sexual content.

- Morphing—the merging of images of two people to create one image—has become increasingly easier and pervasive thanks to new technology.

Chapter 9

With What Effect III: Research on Behavioral Effects of Visual Communication

Interest in the media's roles in visuals' effect on behavior has been increasingly growing in recent decades. There is much theoretical and empirical evidence that suggests that images attract viewers' attention and holds it. This encourages viewers to think about the visual message in a way that would allow its content to be processed carefully so that it might influence behavior.

Most studies in this area, however, have focused on the advertising field and political campaigns. The appeal in this type of visual effect stems naturally from the interest in grabbing attention and keeping viewers looking at a product/service or a candidate assuming that the longer a viewer looks the more likely the image being communicated will stick in the viewer's mind. Commentators, practitioners, and scholars have studied these effects on photos in print and on pictures on a screen. Most of the findings showed that these images have a powerful impact by increasing viewers' attention and retention.

Early studies on visuals' effects on behavior were primarily from a psychological standpoint. Some of these studies, for example, suggested facial expressions to be informative and powerful stimuli (see Ekman, 1972; Ekman and Friesen, 1975). Mullen and colleagues (1986) published an article in the *Journal of Personality and Social*

Psychology investigating the association between newscasters' facial expressions and the voting behavior of viewers during the reporting of a political campaign. They found that voters who regularly watched the newscaster with biased facial expressions were significantly more likely to vote for the candidate that the newscaster had smiled upon. This suggests that, early on, researchers concluded that newscasters, while referring to political candidates, can show biases using facial expressions and these biases are then associated with voting patterns by the viewers.

The Most Prominent Trends of Visuals' Effects on Behavior

In recent decades, the Internet has penetrated national boundaries, even those of the most closed and authoritarian societies. Websites and weblogs currently provide endless opportunities to further examine the visuals' impact on behavior beyond cultural and political entities.

Many scholars and practitioners today view the role of visuals in society as critical to our understanding of consumer/political participation, usually seeking a more nuanced understanding of the way imagery (online and offline) shapes behavior.

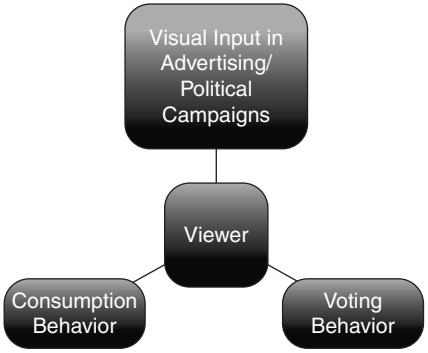


Figure 9.1 A simple way to understand how visuals influence behavior. (Graph by Shahira Fahmy)

In fact, scholarship of visual effects on behavior has been a growing theme in mass communication. Over the years, researchers have examined the power of visuals to create mental images. They developed and experimented with visuals designed to promote a particular product or idea specifically in areas dealing with advertising and political campaigns.

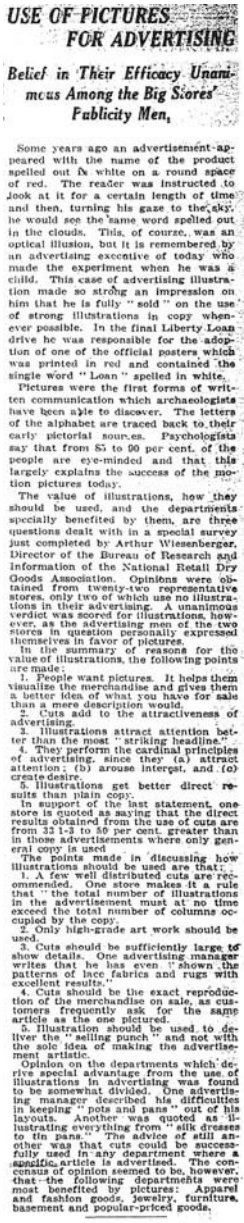
The following section offers the two most prominent trends of visuals' effect on behavior.

Advertising Campaigns and Consumer Behavior

The importance of advertising in creating mental images cannot be underestimated. Advertisers have long been interested in creating powerful visual imagery that would help shape viewers' behavior about the product or service advertised. For example, if an advertisement shows a giant paint stain fading and finally disappearing after being sprayed with a stain remover spray, the viewer might feel confident that buying the product can get rid of any stain. After all, the stain remover spray successfully removed the giant paint stain.

The impact of extensive use of pictures in consumer imagery has been well-documented. Some research especially sought to approach the topic of effective advertising through visuals from an academic perspective. Psychological models for example, including *classical conditioning* have been adopted to theorize the way imagery in advertising influences consumers' responses (Rossiter and Percy, 1978; Shimp, Stuart, and Engle, 1991). Scholars by and large demonstrated the impact of extensive use of visuals in consumer processing strategies (Edell and Staelin, 1983), attitudes and beliefs toward brands (Rossiter and Percy 1980; Mitchell and Olson 1981; Kisielius and Sternthal, 1984) and memory for advertising (Shepard, 1967).

Not surprisingly, professionals have been engaged over the years in providing guidelines for the effective use of visual content to produce the types of advertisements that would be most effective in enticing consumers to purchase a product (see Visuals in Advertising, chapter 8). As a result, several general applications for effective visual input in advertising emerged, including paying relatively more attention to visuals rather than text, the use of concrete visuals, the use of



USE OF PICTURES FOR ADVERTISING

Belief in Their Efficacy Unanimous Among the Big Stores' Publicity Men.

Some years ago an advertisement appeared with the name of the product spelled out in white on a round space of red. The reader was instructed to look at it for a certain length of time and then, turning his gaze to the sky, he would see the same word spelled out in the clouds. This, of course, was an optical illusion, but it is remembered by an advertising executive of today who made the experiment when he was a child. This case of advertising illustration made so strong an impression on him that he is fully "sold" on the use of strong illustrations in copy whenever possible. In the final Liberty Loan drive he was responsible for the adoption of one of the official posters which was printed in red and contained the single word "Loan" spelled in white.

Pictures were the first forms of written communication which archaeologists have been able to discover. The letters of the alphabet are traced back to their early pictorial sources. Psychologists say that from 85 to 90 per cent. of the people are eye-minded and that this largely explains the success of the motion pictures today.

The value of illustrations, how they should be used, and the departments specially benefited by them, are three questions dealt with in a special survey just completed by Arthur Wiesenberger, Director of the Bureau of Research and Information of the National Retail Dry Goods Association. Opinions were obtained from twenty-two representative stores, only two of which use no illustrations in their advertising. A unanimous verdict was scored for illustrations, however, as the advertising men of the two stores in question personally expressed themselves in favor of pictures.

In the summary of reasons for the value of illustrations, the following points are made:

1. People want pictures. It helps them visualize the merchandise and gives them a better idea of what you have for sale than a mere description would.
2. Cuts add to the attractiveness of advertising.
3. Illustrations attract attention better than the most "striking headline."
4. They perform the cardinal incipies of advertising, since they (a) attract attention; (b) arouse intergst, and (c) create desire.
5. Illustrations get better direct results than plain copy.

In support of the last statement, one store is quoted as saying that the direct results obtained from the use of cuts are from 33 1-3 to 50 per cent. greater than in those advertisements where only general copy is used.

The points made in discussing how illustrations should be used are that:

1. A few well distributed cuts are recommended. One store makes it a rule that "the total number of illustrations in the advertisement must at no time exceed the total number of columns occupied by the copy.
2. Only high-grade art work should be used.
3. Cuts should be sufficiently large to show details. One advertising manager writes that he has even "shown the patterns of lace fabrics and rugs with excellent results."
4. Cuts should be the exact reproduction of the merchandise on sale, as customers frequently ask for the same article as the one pictured.
5. Illustration should be used to deliver the "selling punch" and not with the sole idea of making the advertisement artistic.

Opinion on the departments which derive special advantage from the use of illustrations in advertising was found to be somewhat divided. One advertising manager described his difficulties in keeping "pots and pans" out of his layouts. Another was quoted as illustrating everything from "silk dresses to tin pans." The advice of still another was that cuts could be successfully used in any department where a specific article is advertised. The consensus of opinion seemed to be, however, that the following departments were most benefited by pictures: Apparel and fashion goods, jewelry, furniture, basement and popular-priced goods.

The New York Times
Published: May 22, 1921

Figure 9.2 *The New York Times*: Use of pictures for advertising.

color, and the use of large illustrations to enhance emotional motivation (see Rossiter, 1982).

A review of the advertising literature indicates that consumers process visual advertising messages and form inferences about product attributes, contributing to purchasing behavior. Early evidence by Mitchell and Olson (1981) suggested that picture and words were influential in consumers' beliefs about product attributes. Smith (1991) conducted an experiment to examine the effects of visual and verbal content on consumers' inferences about these attributes. Taken as a whole, results suggest the powerful effect of pictures on consumers' responses to advertising. In other words, the literature indicates that consumers' inferences are strongly visually dependent for the execution of successful advertising.

Powerful visual messages to be effective, however, must be capable of representing concepts that can be used in the communication of a complex argument (see Scott, 1994). To intensify responses from viewers and influence purchasing behavior, these concepts sometimes have even used controversial techniques to gain popularity and create awareness of social issues that might not be related to the product advertised.

To begin understanding how such controversial advertising images have been used in mass communication, consider the Benetton advertising campaigns over the past few decades. These campaigns have been known for their provocative marketing roots.

About two decades ago, Benetton rode to global fame using controversial advertising campaigns such as "Sentenced without Words," in which the concept of its advertising challenged capital punishment. The images showed convicted criminals as models for its fashion label. For a more recent publicity attempt in 2011, Benetton ads featured in its "Unhate" campaign photoshopped images of President Obama and other world leaders kissing, such as one in which he appears to be kissing the late president Hugo Chavez. Benetton claimed the campaign's motive was to combat the culture of hate, to promote closeness among different cultures, religions, and races.

Benetton's campaigns proved somewhat confusing though. The producers of these highly charged controversial imagery anticipated a response that would associate their fashion label with social justice

in such a way that would influence consumers' behavior to buy their products. However, the mere assumption that such images would have inevitably produced a positive attachment to the brand in a matter that is automatic is rather reductive and mechanistic. We now have learned the process is a lot more complex.

Consumers respond to pictures differently because responses might vary by each individual's interpretation (see Scott, 1994) and a variety of backgrounds as well as cultural, political, religious, and visual orientations. Indeed, in many parts of the world, several of the Benetton campaigns were deemed inappropriate, raising the question of whether some of its campaign images, including the one of the Pope kissing the sheikh of the al-Azhar mosque, encouraged fashion consumers to buy their brightly colored clothes from Benetton. Some would argue, most likely not. In fact, Benetton eventually retracted this particular image portraying the religious figures and issued a formal apology. This incident suggests that many found such an image insulting, indicating perhaps that advertising images must be explained by references to conventional wisdom and their meaning acceptable over time to be effective. Additional research, therefore, exploring differences and similarities of how controversial images impact individual behavior seems to be warranted.

Another issue that needs further attention is related to the rise of the Internet. Increasingly, web pages including microblogs such as Facebook and the like are offering viewers online advertising information visually (still and video commercials). In recent years, only a few scholars have explored the impact of interactive advertising on the Internet.

Bezjian-Avery and colleagues (1998), for example, found that traditional advertising using the conventional format is better than the exciting new means of connecting with consumers through interactive advertising online. Their findings showed that the time spent viewing ads declined when advertising was interactive. They concluded that sometimes this type of online advertising is not better as it might interrupt the process of persuasion. Visually, the researchers found that processing was inhibited by interactivity. Respondents that were visually orientated seemed hampered by this process as shown by two indicators: (1) a decrease in purchasing intention, and (2) less time spent on the advertising per se. These results, however,

need to be continually revisited. The increase of interactive advertising with the explosion of the Internet calls for more research to fully understand how interactivity online aids or interrupts the process of consumer behavior specifically in the context of campaigns with strong visual orientation.

The main issue here isn't just the use of simple advertising imagery to influence behavior. In recent years, a limited quantity of scholarly studies have been conducted to examine the way consumers process effective advertising, specifically regarding the two main topics discussed here: (1) the use of controversial images to represent complex concepts, and (2) the use of online and interactive visuals across media platforms.

The need for more current research is evident. Visual effects are used to help persuade the target market about a product or a service. There is not enough accumulation of recent scholarly studies to determine how and why such visual messages impact people differently, whether they are effective over time, and whether they succeed in producing even minimal effects on behavior specifically in the current media environment.

Another area dealing with visuals and effects involves subliminal messages, or research that examines words, images, or sounds that are not perceived within the range of normal consciousness but somehow make an impression on the mind (Treimer and Simonson, 2001). While this area has drawn minimal research attention recently, researchers as far back as the 1800s have been intrigued by the possibility of individuals being influenced by stimuli that they aren't aware of (see, for example, Sidis, 1898).

Fears over manipulation through subliminal messages were sparked by James Vicary who, in 1957, claimed he had increased the sale of popcorn and soft drinks after flashing "Eat Popcorn" and "Drink Coke" during a movie in a New Jersey theater. While Vicary later revealed that his results should not be considered as strong evidence of manipulation, the claim nonetheless led to extensive research in the 1960s and 1970s (Dijksterhuis, Aarts, and Smith, 2005).

The research on visual subliminal messages, however, has found minimal effects. As Broyles (2006) notes: "The literature repeatedly shows that most effects are only obtained in highly artificial

situations, and no research has shown an effect that changed attitudes or impacted purchasing behavior" (p. 392). So unsuccessful was research on visual subliminal messages that much of the recent research has concentrated on examining audio subliminal messages.

Political Campaigns and Voting Behavior

In recent US history, political campaigns expressed through the mass media have been the leading form of communication in the political process using verbal and nonverbal means. Looking at the nonverbal format, theoretical studies as well as political experience suggest an association between visual images of politicians and voting behavior of viewers (see Glaser and Salovey, 1998; Jones, Hoffman, and Young, 2012; Kaid, Leland, and Whitney, 1992; Lee, Ryan, Wanta, and Chang, 2004; Mullen, Furtell, Stairs, Tice, Baumeister, Dawson, Riordan, Radloff, Goethals, Kennedy, and Rosenfeld, 1986; Noggle and Kaid, 2000; Waldman and Devitt, 1998).

Information transmitted through imagery performs several functions in the political sphere, known mostly as powerful social stimuli that link visual communication and voting behaviors of viewers during political campaigns (Ekman, 1972, Ekman and Friesen, 1975; Mullen et al., 1986; Waldman and Devitt, 1998).

In contemporary politics, visual messages have been used to advance ideas, build confidence, increase knowledge about candidates, and cultivate public support for political campaigns. Technically, research on impact of visuals and political behavior can be viewed as a subset of visual effects in mass communication. The following section combines and integrates approaches dealing with the understanding of the relationship between electoral politics and nonverbal communication. It identifies the impact of imagery on affect and behavioral influences signaling how visual messages impact behavior directly and indirectly.

First, as alluded to earlier, prior studies suggested a strong direct behavioral influence. Studies found an association between news practitioners' facial expressions and voting behavior as voters who regularly watched newscasters with biased facial expressions were

significantly more likely to vote for the candidate that newscaster had shown positive expression towards (see Mullen et al., 1986). Lee and colleagues (2004) explain that tight shots of political candidates could be specifically important for viewers during elections when they may be interested in seeing candidates' facial expressions when faced with tough questions during a debate. Similarly Waldman and Devitt (1998) found that manipulations in facial expressions are likely to produce changes in evaluation of candidates.

More scholars, however, looked at the indirect approach, which could be viewed as a less direct influence because it deals with the way visual messages convey emotional information. These scholars indicated that images could create affect, a powerful predictor of electoral choice. They concluded that such affective reactions have a great impact on voting behavior. In other words, they perceived this type of "indirect" visual impact as an important factor influencing viewers' behavior in a political context.

Psychologists conducted much of this early research using electoral politics focusing on the emotions of voters (Abelson, Kinder, Peters, and Fike, 1982). Few political scientists with psychological leanings (e.g., Marcus and MacKuen, 1993) and marketing researchers (e.g., Newman & Sheth, 1985) also contributed to this body of work. These scholars have long demonstrated a strong relationship between feelings and evaluations of political candidates. The fact that many consider emotions (or affect) to be key in voters' responses has been well established (see Abelson et al., 1982; Diamond and Bates, 1984; Jamieson, 1984; Sabato, 1981; Schwartz, 1973).

Much of the vast literature on political campaigns has focused on the role of mass communication in this process suggesting that visual images in the media are capable of producing powerful responses in voters (see Glaser and Salovey, 1998). The way the news media project images of candidates has been examined because of the effect these forms of nonverbal communication are likely to have.

However, while the effects they have on political behavior has been relatively well researched, this has not been the case yet for online media. Recently, Jones and colleagues (2012) examined the behavioral effect of online emotional appeals communicated through online media. However, because their study did not look at

nonverbal communication specifically, replicating their study focusing on visual information across online media platforms represents a fruitful area for future research.

Few scholars linked the theory of second-level agenda setting to include how images conveying emotional attributes reported in the media about newsmakers such as political candidates influence the attributes the public associates with those newsmakers. The second level here refers to the examination of how the media attributes (emphasize or describe) specific qualities or characteristics of an object or an issue (Golan and Wanta, 2001; McCombs, llamas, Lopez-Escobar, and Rey, 1977). Scholars using this theoretical framework consistently found that attributes of candidates and issues emphasized in the news become the attributes emphasized by the voters—with one dimension of this process being affect or emotions. Visually, Coleman and Banning (2006) suggested the use of emotional framing of candidates using nonverbal information in presidential campaigns and found that those who watched more television news coverage of candidates were significantly more likely to hold attitudes that mirrored the negative or positive visual messages included in the media.

Going Forward

The study of behavioural effects in visual communication has evolved into a relatively broad field characterized by two major trends, both of which should remain active research arenas. These trends, related to advertising and political campaigns, although somewhat unfocused and broad, represent interdisciplinary domains of study that contribute to the understanding of both voting behavior and consumer behavior more generally.

The preceding studies and analysis of approaches to research on media effects in the context of advertising and political campaigns reveal several fundamental weaknesses. Progressively the Internet, including news websites, social media, and microblogs have offered viewers visual information online and scholars are yet to fully explore the impact of these interactive forms of mass communication on behavior. While several scholars have started to look at the

impact of nonverbal communication (e.g., Jones et al., 2012), additional research can be organized to continually explore positive and negative contributions of these increasingly new forms of mass communication (see Bezjian-Avery et al., 1998).

The lack of collaboration among scholars from different fields and practitioners and of lack of multidisciplinary tools for analysis might have been responsible for the slow knowledge. The first step to close this gap could be an effort to construct practical approaches and projects. The effort should be based on careful integration of models and theories among mass communication, advertising, psychology, and political science scholars. Additional analysis in the context of visual effects on behavior across media platforms, which have not been the bases of several advances in the mass communication field is encouraged. For example, one could investigate the functions and dysfunctions of visual information expressed via Twitter, Facebook and/or YouTube among other online visual formats expressed increasingly through advertising and political campaigns.

Conclusions

Overall, research dealing with visuals' effects on behavior concludes:

- Visuals have a powerful impact by increasing viewers' attention and influencing behavioral patterns.
- The role of visuals is critical to our normative and empirical understandings of consumer/political participation.
- Early studies on visuals' effect on behavior primarily stemmed from a psychological perspective.
- The two most prominent trends of visuals' effects on behavior are related to advertising and political campaigns.
- Consumers respond to visuals differently because responses might vary by each individual's interpretation and a variety of backgrounds as well as cultural, religious, and visual orientations.
- To intensify responses from viewers and influence purchasing behavior, controversial images have been used, including ones

communicated through Benetton advertising campaigns in recent decades.

- In political campaigns, researchers showed that visual messages can impact behavior both directly and indirectly.
- While the impact of visuals on behavior in traditional mass communication venues has been well researched, this has not been the case for online media.

Chapter 10

Conclusion

As the previous chapters have outlined, research in visual communication is a robust field, providing fruitful areas for mass communication researchers. Research has become much more rigorous both methodologically and theoretically in the past 20 or so years. Indeed, there is much to be excited about in visual communication research.

Also as outlined in previous chapters, research in visual communication has taken a wide range of approaches, from qualitative analyses employing semiotics and historical perspectives to quantitative analyses employing complex statistical tests. The broad range of approaches has greatly expanded our knowledge of visual communication.

The wide variety of approaches, however, may well be one factor hampering the development of a visual communication theory. Research in this field has expanded at the expense of a systematical approach to theory building.

This book utilized the model proposed many decades ago by Lasswell, categorizing visual communication by Who, Says What, To Whom, In Which Channel, With What Effect. It is a useful categorization system that highlights strengths and weaknesses in building a visual communication theory.

Who: Visual communicators are gatekeepers, providing visual information to the public. Sociology has provided one helpful route to understanding these practitioners using the lens of professionalism.

A few key ethnographies have also described the daily work of photojournalists and their colleagues, and how practice affects product. Finally, an ideological frame has also proven useful, as researchers seek to understand the ethics and motivations that fuel professional identity. This chapter ends by examining how citizen journalism and user-generated media have blurred professional boundaries, with both positive and negative implications for the public.

Says What: Numerous studies examined the visual content that the media produced. Despite the overall vague conceptualization of visual framing, a plethora of studies focused on framing analysis. In this chapter, we suggest the use of different levels approach to analyze the deep-level structure of framing such as examining visuals in terms of macro-level frames versus microlevel framing devices. Framing studies generally focused on analyzing disasters and conflicts. Many analyzed visuals based on camera angle, frequency, prominence, and news sources. Recently, scholars used war/peace journalism frames, offering a new direction in visual media research. Other studies analyzed racial and gender stereotyping to understand how images use discourse and collective memory to interpret information. Overall, the different ways of looking at content either quantitatively or qualitatively allows for a more detailed evaluation of visual content and potentially a more productive research strategy.

To Whom: Even in its earliest years, photography was a relatively accessible activity for both hobbyists and emerging professionals. Audiences have also made use of the products of photography, whether daguerreotypes, stereoscope cards, or illustrated publications to learn about the world and to strengthen cultural understandings. Cultural critics have argued that an increasingly mediatized and visual culture may contribute to social disconnect. Today's digital environment, however, has made it possible for the audience to participate in the visual realm as activists. Finally, researchers are not entirely in agreement about how to precisely define a concept known as visual literacy, but they are investigating whether and how the audience might be better able to use and interpret images.

In Which Channel: There has been a growing area of research dealing with differences between online and traditional media, including increasing levels of digital imaging alterations that are lowering visual credibility. The ability to transmit imagery

instantaneously is enabling the world to view events with nearly the immediacy of an eyewitness. However the diffusion of photo editing software raises core ethical questions of truth and the potential loss of public trust across different media platforms. The issue of digital enhancement has also been reinforced by the ease and carelessness with which images are taken and distributed within social networks. As the technology influences the way visuals are now channeled and consumed, there is a greater need for editorial judgment. There is a need to teach the essence of photojournalism including ethics, truth, fairness, and balance to promote credible coverage across all channels and all media platforms.

With What Effect I, cognition: Visual communication strongly influences the cognitive process. The process identifies the way our mind processes visual stimuli in a subjective manner. This chapter first analyses visuals in relation to the related textual information and audio channels. Then it discusses the relationship between imagery and the related textual/audio information and consider how visual information can contribute to learning and memory. The second section presents evidence on how visuals impact affect and emotional responses. The last part examines how imagery interacts with individual differences, and contributes to learning, including how some individuals learn information faster and more effectively when the information is presented visually. Finally, this chapter acknowledges that digital media have reshaped the structure of how we see the world, and advocate more research to support the assumption that visual media in digital format have considerable effect on cognition.

With What Effect II, attitudes: The field of psychology has conducted extensive research examining visuals and perceptions of individuals. Mass communication researchers have manipulated visuals accompanying news stories to examine potential effects. Recently, researchers have examined visual morphing, in which software is used to morph a person's face with a political candidates face. Here, if the candidate looks somewhat like an individual, the individual will view the candidate more positively. Research has also examined the effect of gender stereotypes in product advertising and semiotics, the use of symbols in mass communicated messages.

With What Effect III, behavior: Over the years, the study of visual behavioral effects in mass communication has evolved into

a relatively broad field characterized by two major trends, both of which should remain active research arenas. These trends, related to advertising and political campaigns, although somewhat unfocused and broad, represent interdisciplinary domains of study that contribute to the understanding of both voting behavior and consumer behavior more generally. Progressively, the Internet, including news websites, social media, and microblogs have offered visual information online and scholars are yet to fully explore the impact of these interactive forms of mass communication. This chapter encourages additional analysis in the context of visual effects on behavior across media platforms, which is yet to be the basis of several advances in mass communication.

The model is built upon a foundation, which includes an understanding of the history of images. Three types of chronologies have dominated historic accounts of the mediated image: technological, biographical, and textual. Because photography blends art and science, each thread informs the others. Technological accounts show how changes in cameras and other mechanisms have changed the stories told through images. Biographical accounts have value for their emphasis on the impact of human practice. Textual accounts examine the role of images in culture over time. A fourth type of history can be seen in studies of the development of photojournalism; often narratives of legitimation, these histories explain photojournalistic ideology and practice.

Building a Theory of Visual Communication

Shoemaker, Tankard, and Lasorsa (2004) argue that in theory building, researchers should consider seven criteria: Falsifiability, explanatory power, predictive power, parsimony, organizing power, internal consistency, and scope. The last of these criteria—scope—is clearly apparent in visual communication, since visuals are such a significant part of everyone's lives. The other criteria at this point demonstrate more potential than actual evidence.

Falsifiability is possible depending on the research questions being asked. Previous research shows that visuals having a cultivation effect or agenda-setting influence certainly can be falsifiable.

Visuals could have high explanatory power in areas such as examinations of factors in the gatekeeping process. Research can show how and why certain visuals are selected over others.

Predictive power may increase as more research is conducted. Cognitive and attitudinal effects could become more consistently predictable with additional research.

Parsimony has been an issue in visual communication because of the extremely varied approaches taken by researchers. This may be the most difficult criteria to meet given the range of topics studied in the field.

Visual communication research similarly suffers in organizing power. This book is an attempt to put the wide range of perspectives in a manageable framework.

Finally, internal consistency should become stronger with further research. There are clearly trends in visual communication, especially in the area of cognitive research. Other categories of research have far to go to reach internal consistency.

Despite the large number of studies discussed in this book, there is an overall lack of visual communication studies when compared to text. This is mainly due to a lack of a clear theoretical model for visual research in the mass communication field and the ambiguity in visuals—factors that slowed the progress of visual studies. Opportunities exist with other disciplines that could improve the current state of research in visual communication. Thus, collaboration and cross disciplinary work should be encouraged.

Much future research is important for continued progress. This book can serve as a beginning resource to organize past research with an eye toward the future.

With technology evolving at a dramatic pace, the future of visual communication will not suffer from a lack of research challenges. The largest challenge, however, may be to develop a systematic approach to merging the various approaches to fully expand our knowledge of the field of visual communication.

Notes

Foreword

* David D. Perlmutter is a professor at and dean of the College of Media and Communication at Texas Tech University. He is the author or editor of ten books on political communication and persuasion including *Photojournalism and Foreign Policy: Framing Icons of Outrage in International Crises* (1998), *Visions of War: Picturing Warfare from the Stone Age to the Cyberage* (1999), *Picturing China in the American Press: The Visual Portrayal of Sino-American Relations in Time Magazine, 1949–1973*, and, coedited with Thomas J. Johnson, *New Media, Campaigning and the 2008 Facebook Election* (2011). He has written several dozen research articles for academic journals as well as more than 250 essays for US and international newspapers and magazines such as *Campaigns & Elections*, *Christian Science Monitor*, *Editor & Publisher*, *Los Angeles Times*, *MSNBC.com.*, *Philadelphia Inquirer*, *and USA Today*. He writes a regular column, "Career Confidential," for the *Chronicle of Higher Education*. In 2010, he was elected to the Association for Education in Journalism & Mass Communication Standing Committee on Research, and is now chair. In August 2011, he began a three-year term on the AEJMC Finance Committee. Perlmutter has been interviewed by most major news networks and newspapers, from the *New York Times* to CNN, ABC, and The Daily Show. He regularly speaks at industry, academic, and government meetings, and runs workshops on personal and institutional branding via social media and on promotion and tenure in academia.

1. David D. Perlmutter. "The State of Visual Communications Research." Presentation to a luncheon of the Visual Communication Division of the Association for Education in Journalism & Mass Communication and the staff of the Chicago Tribune, Chicago, IL, August 8, 2008.

2 HISTORY

1. Students of photography interested in the *Life* archive are well-served by Google, which has scanned every page of every issue for reference.

3 WHO: RESEARCH ON THE SOURCES OF VISUAL COMMUNICATION

1. Professor Rosenblum covered stories on seven continents since the 1960s, from war in Biafra to tango dancing by the Seine. He was editor of *The International Herald Tribune*; special correspondent for *The Associated Press* (AP); AP bureau chief in Africa, Southeast Asia, Argentina, and France.
2. Reprinted with permission.
3. These have been techniques used in the dark room during the printing process to manipulate the exposure of a selected area(s) of a photographic print. For example dodging decreases the exposure for areas of the print that the photographer wishes to be lighter, while burning increases the exposure to areas of the print that should be darker.

4 SAYS WHAT: RESEARCH ON THE CONTENT IN VISUAL COMMUNICATION

1. On April 16, 2007, Cho Seung-Hui killed 33 people on the campus of Virginia Tech (VT). Seventeen others were injured and an entire campus was victimized. The event was widely covered in all media, including newspapers.
2. The categories used were: the crime and suspect frame (a frame that has an expository purpose that is characterized by an emphasis on suspects, with a secondary emphasis placed on victims); the tension management (a frame that is concerned with providing the most possible information to the audience by covering news as it unfolds); and finally the use of the graphic device that, as we know by now, is most salient when dealing with visuals of trauma.
3. It was difficult for photographers to access images of the shooter and the weapons used in the attack immediately after the shooting. However

once they had access to these photos they emphasized it heavily in their coverage.
4. Once images of violence and tragedy of the attack were captured, newspaper editors around the country faced the ethical challenge of deciding whether to publish them. In this case, for example, the need of being socially responsible must have represented an ethical dilemma for most editors. They had to decide whether pictures of the tragedy violated standards of taste and if there was a compelling reason to publish those visuals.
5. A review of the literature suggests that the focus on the shooter was not entirely surprising. Past research suggests that emphasis on the suspect and his/her role in the crime is a frame that is used to explain why the individual committed the crime. Because the VT shootings were so unexpected, media outlets relied on images of the suspect, to help readers come to grips with the tragedy.

5 To Whom: Research on the Audiences in Visual Communication

1. Visual processing is also a specialty for scholars involved in computer programming, a technical approach that could inspire yet another chapter, if not another book, on digital design theory.

6 In Which Channel: Research on Media Used in Visual Communication

1. According to the BBC News, the original image, taken at the White House when talks were formally relaunched, shows Mr. Obama leading the way and Mr. Mubarak trailing behind.
2. The Poynter Institute created an online presentation comparing published images of this photo. It also ran an article that included comments by editors on their choices (Irby, 2004).
3. This was based on findings by Greer and Gosen (2002) that found familiarity with digital imaging software was linked to tolerance of visual alteration.
4. However, it is important to note that Singer (2005) found citizen-generated materials, such as blogs, are being used by traditional media organizations to enhance their coverage.

7 WITH WHAT EFFECT I: RESEARCH ON COGNITIVE EFFECTS OF VISUAL COMMUNICATION

1. The dual coding theory presented by Paivo (1986) suggests a conceptual understanding of how viewers process verbal and nonverbal information.
2. The French network acted differently than CNN and Al-Jazeera channels. FRANCE 24 apologized for the error (Minister Denies Police Opened Fire on Protesters, 2013).
3. Commenting on the amount of visual disinformation made available during the Egyptian uprisings in summer 2013 that were used to paint a particular perspective on the news, the BBC reported: "The sheer volume of disinformation has led to the creation of verification pages on Facebook, such as Da Begad?—or Is This Real?—which tries to verify posts, images, and videos, regardless of their origin" (Altered Images, 2013).
4. The availability of micro blogs such as Facebook and Twitter have played a key role in setting up unrealistic expectations and complicated the availability of fast and accurate visual information with a common narrative.

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