# CHAPTER ONE  Vantage Point and Image-Worlds

Time past and time future

Allow but a little consciousness.

To be conscious is not to be in time

But only in time can the moment in the rose-garden,

The moment in the arbour where the rain beat,

The moment in the draughty church at smokefall

Be remembered; involved with past and future.

Only through time time is conquered.

**—T. S. Eliot, "Burnt Norton"**

**Space and Time / News and Images**

I begin this chapter with an exploration of television not because this most important of mediums will be examined in any great detail in *How Images Think,* but because television's influence goes far beyond the boundaries of the medium. As I mentioned in the introduction, images are mediators between all the different layers of what are increasingly complex image-worlds. No technology has had a greater influence on this unfolding history of images than television.

Over the last decade the focus of television as a broadcast medium has changed from entertainment to news. This shift has been dramatic with international networks like BBC, FOX, and CNN spawning many local, national, and international imitators. The news now comes to audiences as a flow of information—part of a continuum with exceptional events as punctuation marks. This flow connects a variety of sources together (from the Internet to radio, daily newspapers, and many other media sources) and knits space, time, and history into a set of visual, oral and textual discourses that are for the most part based on the increasingly sophisticated use of images. The notion of flow that I am using is slightly different from the one that Raymond Williams developed (see Williams 1989).

Broader and more diffuse notions of information and visualization are replacing older forms of journalistic enquiry. Digital technologies are not just adding to this flow. On the contrary, the availability of the news on a twenty-four-hour basis through the Internet and television irrevocably alters the meaning not only of information but the formal means that are used to communicate ideas and events to broad and geographically nonspecific audiences.

In this context, the role of images as purveyors of meaning and aesthetic objects changes. What are the formal properties of images designed to "represent" the flow of relationships among a variety of events that are classified as newsworthy? How do images change when they move beyond boundaries of convention ("seeing" dead bodies) and standards of artifice (docudrama melts into documentary)?

Images combine all media forms and are a synthesis of language, discourse, and viewing. Images are not one isolated expression among many and are certainly not just objects or signs. Within the continuum I am discussing, CNN is a blur of sounds and pictures folding into the shows and channels that surround it. Live television merges with technologies in the home and is a portal into a variety of experiences and uses that link digital cameras, computers,

**FIGURE 1.1**    Screen shot, CNN.COM (April 4, 2002)

and games. In other words, images are both the outcome and progenitors of vast and interconnected image-worlds. All of these elements may have been discrete at one time or another but not anymore. Pictures of a series of crises, for example, come from so many sources, that the parts become the whole and the whole seems to have no end or even any parts. Viewers who watched the first Gulf War in 1991 and the invasion of Iraq in 2003 experienced the intensity and breadth of round-the-clock coverage. The same concentration of passion and despair characterized the events of September 11, 2001. During crises image-worlds become all-encompassing. This raises important issues about history and identity, some of which I respond to in this chapter, issues that are at the core of what is meant by experience, memory, and viewing at the beginning of the twenty-first century.

This screen shot of CNN.COM (figure 1.1) underlines the complexity of the continuum I have been discussing. Texts, images, stories, news, and the or-

ganization of information combine into an image that no sooner appears on the computer screen than it becomes part of another page and another set of images. The parts fold together as if there were no end in sight—a continuum. The television version of this has converted the TV screen into a multidimensional map with any number of different elements trying to burst out of the boundaries of the screen.

As part of this continuum, viewers begin their morning or nightly viewing experience engaging with a variety of image-based and often, news-oriented phenomena. The images might be centered on an event or a moment in history, a sitcom, or groups of people protesting the impact of globalization on the world's poor. Alternately, viewers may change the channel. They might be interested in the impact of the cinema on working class culture in Britain (Documentary Channel). They may have a desire to understand more fully why so many young people enjoy video games and go to entertainment centers throughout the world (Independent Film Channel). They may be interested, as I am, in the role of images in society, in their use and the ways in which they are incorporated into everyday life (the subject of a number of shows produced by the British Broadcasting Corporation). Some viewers may decide to play video games, some may choose to connect their digital cameras to the TV to view images of relatives, or some may turn on their computers and retrieve a completely different set of elements to further enhance their experiences of image-worlds.

This screen shot from the CBS site (figure 1.2) crosses all of the possible boundaries between the news and fiction. *America Fights Back* is set against *CSI* and *The Amazing Race.* The former is dramatic fiction and the latter, a mixture of reality shows, documentary, and old style game shows. But the centerpiece of the page is *Survivor,* which is one of the best examples of the synthesis of reality/fiction ever created on television.

All of these elements interact in sometimes new and unpredictable ways. Images become tools for the creation and expression as well as visualization of stories. Stories are never limited either by the medium used to express them or by viewers or listeners. It is this expansive landscape that has provided the media with a toehold in nearly all aspects of human life irrespective of nationality or ethnicity. The pervasive presence of narratives of every sort told through the multiplicity of shapes and forms of modern media far exceeds the conventional boundaries of human conversation and interaction. This excess is not a negative characteristic. Rather, it is a marker of the profound shift in the ways in which humans act upon the world both within

**FIGURE 1.2** Screen shot, CBS.COM (April 1, 2002)

the media context and outside of it. In this chapter I begin to examine whether these claims about change and transformation hold up as images and as the cultural context within which they operate shifts from analogue to digital forms of expression.

### Nature and Artifice in Image-Worlds

Television, radio, and the Internet are always on. The media don't disappear when viewers turn off electrical switches, just as electricity doesn't disappear when it is not being used. This continual presence is part of a new natural and constructed environment being built through human ingenuity and inventiveness. These are not simulated worlds. They are the world. The distinctions between what is natural and what is not natural have thankfully disappeared.

The trees on the horizon and the stars in the sky no longer come to viewers through a purity of process and vision divorced from the *images* they have seen of trees and stars. Over the last two centuries, Western societies have built physical and psychological infrastructures that are dependent upon images or what I call image-worlds. This pulls trees from their natural location into a more complex mediated space that is inscribed rather than natural. The images viewers watch are no longer just images; rather, as the great photographer Jeff Wall ([1998] 2002) has suggested, images represent a technological intelligence that shifts the ways humans see themselves, from individuals to hybrid personae, where identity no longer resides in one particular place, object, or person (90–92).

In this context, there are many identities within humans performing different functions, most of which are dependent upon the relationships humans have with image-worlds. Inside these worlds images disperse their content through screens physically housed within any number of technologies or media institutions. In other words, there is no such "thing" as an image divorced from a variety of media or social contexts of use and application. Most societies use a variety of materials to give life to images. And the beauty, as well as contradiction of this process, is that spectators become less and less aware of the influence of those materials upon the experience of viewing (Burnett 1995). In effect, the hybrid spaces viewers occupy reflect the competence and flexibility they have developed to handle the multiplicity of levels of communications and interaction with which they engage to survive. Events are no longer viewed through the simple relations of viewer and image; rather, viewers deal with increasingly complex discourses as they struggle to make sense of images that literally seep into every aspect of their lives.

For example, events on television are discussed as if the event and its depiction were one and the same or as if the screen that separates viewers from the event were unimportant. "An airplane has been hijacked," not "Those are images of an airplane hijacking," or "That is a depiction of an airplane hijacking," or even "Those images are smaller than the event itself." The viewer's challenge is to describe events as if the visual field, artifice, and form actually move language from representation to visualization. The event is internalized, personalized, and then discussed as if the images approximate "being there." Even though the event is heavily mediated by technology and medium, conventional categories of analysis and description, as well as conventional ways of talking about image-worlds make it appear as if mediation is unimportant.

In this context, images seem to be powerful enough to overcome how language is used to portray the events to which they refer (if indeed reference

as a concept is adequate to describe how humans interact with image-worlds). Viewers are continuously probing the boundaries among different levels of reality and image and among the various elements that constitute depiction, representation and visualization. The challenge is to find the connections and to make the experiences personal. The challenge is also to map the experiences of interacting with images into a process that is discursive, intellectual, and emotional so that it can be understood and applied to the viewing process. Part of the joy here derives from the ways in which viewers establish dialogues with images, the ways in which they talk to images, and the manner in which images talk to viewers.

I am fascinated with the stories that are told through this confusing haze of mediation, experience, and screen. The experience of viewing is, for the most part, about a struggle between proximity and distance. Viewers sit far enough away from the television or computer screen to be able to see its contents. At the same time, viewing is about the desire to enter into the screen and become a part of the images and to experience stories from within the settings made possible by the technology. I believe this explains the remarkable growth of video and computer games because they invite participants into the screen and give them the ability to change the graphic interface as well as the aesthetic look of the games they are playing. The games also actualize a collective engagement with technology in general. This is extended even further through Internet-based gaming cultures. However, video games are an intermediate step between conventional viewing and complete immersion. Their narrative content and structure are still evolving and it is unclear whether total immersion (the disappearance of mediation) is really possible or even desirable.

This struggle between closeness and distance is at the heart of storytelling. It is, after all, the role of the storyteller to weave language, images, and sounds into a magical space that listeners or spectators can move into and experience (Walton 1990). The sounds of someone telling a story are distant until the connection is found, and this permits the listener to enter a daydream that encourages the linking of sounds, and internal and external images. Films also encourage this type of entry into images and sounds and bring spectators closer to what is depicted while at the same time sustaining the distance between viewer and screen. Experiments in virtual reality immersion are about collapsing these boundaries, and they represent the next stage in the human love affair with images. At the same time, unless everything becomes image, it is unlikely that the tensions between closeness and distance will fade away. In fact, an argument can be made that they should not disappear.

As I have mentioned, images are increasingly intelligent instruments that can be used for so many different purposes that a titanic shift may be needed in the discourses that are used to examine them. It is not possible to be a part of Western culture *without* some reference to the impact of images on everyday life. By extension, the meaning of the term "image" has to be carefully rethought. In other words, it is not possible or desirable to talk about the social construction of meaning and messages without reference to images as sites of communication, miscommunication, mediation, and intelligence.

The issue is not whether there are images or phenomena to examine. The issue is what methods work best for each of the particular situations under examination. What focus should there be? What points of entry will facilitate the creation of rich and engaging discourses that will also be accessible and meaningful in trying to understand the convergence of human experiences and images? This is as much a challenge to the analyst as it is a challenge to viewers.

For example, what happens when there is a loss of consistency to the everyday experience of images and sounds—when expected patterns of explanation and interaction are disrupted as with the tragic events at the World Trade Center in September 2001? The importance of images to this event cannot be overstated. However, a great deal of what happened was beyond the images and instead was in people's houses, on the streets, and in shared thoughts about the pain and suffering of those who died. The images were powerful, but they were not enough as people looked for social contexts in which they could share their pain and shock at the events with others. Images of suffering have this dual effect of distance and closeness and are examples of the frailty of communication as well as its strength.

This raises other questions. Does human participation in and acceptance of image-worlds require new definitions of history and a radical reimagining of what it means to engage with events, both near and far? Are new definitions of place, locality, and community needed? Are images predicting a dramatic move to an oral culture, where notions of preservation and memory shift from written language and discourse to traces, fragments, the verbal, the musical, and the poetic (Carpenter 1970)?

**Vantage Point**

What methods of analysis will work best here and which methods have become less relevant? I suggest that method (the many ways in which the anal-

ysis of phenomena is approached, analyzed, and synthesized) is largely dependent on *vantage point,* a concept that is closely related to perspective and attitude. This means not only that the phenomenon is important, but also that position, placement, who one is and why one has chosen one form of analysis over another (ideological, philosophical, or personal) need to be transparently visible.

To varying degrees, I believe that images are not just products, representations, or copies of reality. Images are not the by-product of cultural activity. They are the way in which humans visualize themselves and how they communicate the results. They are at the very center of any coherent and historically informed definition that can be made of human nature and the cultural and social configurations that humans create. The construction, use, and distribution of images are fundamental to every culture. Furthermore, just as the human mind is wired for language, it is also wired for images. In fact, language, images, and sounds are inherent parts of human thought and the human body, as well as generative sites for the thinking, feeling process.

The ability that humans have to speak sits in an interdependent relationship with their aptitude to image and imagine the world around them. By extension, I agree with Noam Chomsky's carefully articulated argument that the ability humans have to use grammar is innate, although I am also convinced that experiences shape that innateness in early childhood (Chomsky 1968). Similarly, I believe that children are born with the ability to transform the world into images of an imaginary nature or through the application of sounds, fantasies, and dreams to experience (Winnicott 1965). Therefore, the ability to use and create images comes from an innate disposition that humans have that is sometimes proportionately balanced by experience and sometimes not. I am convinced that dreams are one of the royal roads into a world that does not need a narrator to be effective and that daydreams are among the most important residual strategies that humans make use of to manage the swirl of thoughts and images they encounter within themselves and in the environments of which they are a part (Grotstein 2000).

### Seeing Sight

The vantage points I have chosen for this book can best be summarized through the following story. As a child, I was always fascinated with my eyes. I actively searched for some explanation for how my eyes worked. I wondered why seeing was a relatively unconscious process, although I didn't use those words. Most of the time, I scanned the world around me for particular points

that were more or less important depending on circumstance and state of mind. I read voraciously and watched television not only because it was a new medium, but also because it somehow grabbed me into a world I could not control. (I will return to this point often. One of the great errors of the modern concern for interactive technologies is the failure to understand the pure and unadulterated pleasure of simply allowing images and sounds to be in control—allowing the process to take over as in a dream.) Then, one day I was walking down to the basement of my parents' house and had this odd sensation that I was looking at myself *seeing.* It was a profound moment, as close to an epiphany as I have ever had. Fleetingly, I was able to step outside of myself and recognize the flow of seeing, the flowing contours of sight.

**Seeing freed from the constraints of sight. Or perhaps, sight rediscovered through an act of insight.**

Why is this story important and, to return to my earlier point, does it help in understanding vantage point? Perspective comes from many different strategies, tests, and hypotheses about experience. Therefore, perspective is not the result of one approach to reality or fantasy. The ability to see, seeing, that is to enter into a metaexperiential and metatheoretical relationship with the process of sight, is fundamental, to any critical analysis of culture. The "visible," the many phenomena available to sight, is always partial and fragmentary. As a result, vision and thought are an engagement with the various "pieces" that make up perception and subjectivity. But no analysis of subjectivity can ever account for all of the fragments, and, as a result, "the act of seeing with one's own eyes" is always contradictory because it is not clear if vantage points can really be found. That lack of clarity is the site of an intense struggle among a variety of subjectivities, which make up every human being.

The arguments I have been developing in this chapter are the result of self-observation and to varying degrees engagement with "cultures of vision" over a lifetime. This is where vantage point rears its head once again. There are many competing points of view about vision, but the bottom line for humanists is that an ethnographic study of viewers (valid up to a point, more concrete in some very limited ways) of what they see and why, for example, would still be faced with the same contradictions that I have just mentioned. A study of patterns of viewing in relation to different forms of expression will still end up making claims about perception and sight that are the product of what people say, feel, and think. And the central issue remains, what can be said about sight and vision, about processes that require inner reflection to be understood? According to John Berger (1980), "There is a widespread assumption that if one is interested in the visual, one's interest must be limited

to a technique of somehow *treating* the visual. Thus the visual is divided into categories of special interest: painting, photography, real appearances, dreams and so on. And what is forgotten—like all essential questions in a positivist culture—is the meaning and enigma of visibility itself" (41).

Berger captures a crucial point in this quote. The enigma of visibility is also the enigma of sight, but at least some evidence for these enigmas can be found in the everyday reality of image-worlds. The visual in all of its complexity can be broken down for the purposes of analysis and criticism, but essential components of vision will remain enigmatic. Submersion inside image-worlds is as fundamental to human existence as eating and breathing. The question of vantage point is thus even more important, but the solutions are not that self-evident. Image-worlds can be mapped but that suggests a geography that can be seen and comprehended. This circles back to the problem of seeing "sight."

This circle of contradictions is precisely why the *choice* of vantage point is so crucial. The challenges of vantage point have become even greater with the arrival of digital technologies, which have added more and more layers to image-worlds. The tensions of visualizing place and self have only increased. These tensions are productive, necessary, and often exhilarating. From my vantage point, these ambiguities are provocative enough to open up the "viewpoints" that are needed to enter into new and challenging discourses about the impact of image-worlds.

**"There is a natural link between vision and light. It is not an accident that the 'enlightenment' was about learning and discovery, about new ways of bringing truth, discourse, science and religion into more productive relationships with each other. Light, in the fifteenth and sixteenth centuries, was as mysterious as the eyes themselves, the manifestation of a physical effect without simple causality." (Park 1997, 237)**

**Photography and Visualization**

In order to explore these issues in greater depth, let me turn to the photograph in figure 1.3.

I took this photograph (figure 1.3) during a period of my life when I was thinking, dreaming, and reading about the Holocaust. A large part of my family was lost in this terrible event. I have lived my life in the shadows, stories, and metaphors of that experience and the familial memories that are attached to it. Yet, I did not set out to *shoot* this picture with the Holocaust in mind. How then can one "write" about this image? Does it "speak" to me? Am I conferring a particular and personal meaning onto the photo in an effort to

**FIGURE 1.3**        Smokestack against a night sky (Ron Burnett)

make it relevant? In fact, am I imposing a meaning upon it for the purposes of this discussion?

Is this photograph like a text? Must I "read" it in order to understand what it is saying? I recognized the importance of this photograph some weeks after it had been taken. What time does this photograph come from? Is it the time of its taking or the time of its interpretation? When exactly did all of these aesthetic, personal, and historical factors come into play? What if I had said that this photograph had been taken in 1944 or 1955? Can one "play" in such an arbitrary fashion with both the photo and the experience of viewing it? Should one?

An argument could be made that this photo more accurately documents *my* feelings than any other photo I have seen taken during the Holocaust or subsequently recovered from that period. Something happened when I saw the scene presented to me—and irrespective of the fact that there is no way of validating the relationships that I am establishing here, the process of interpretation is creating a variety of vantage points. Something distant—events, memories, and histories—comes into "view."

And perhaps that is the issue. Vantage point does not come in a simple or direct way but must be *created.* Seeing is an activity of creative engagement with processes of thinking and feeling, and, as a result, there is not a transparent relationship between figure 1.3 and its meaning. Seeing and thinking have often been bundled into reductive notions of perception as if perception were somehow less mediated and more instantaneous than just gazing or looking (Arnheim 1969). If to see is to create, then images are never "just" the product of one or many internal or external processes. The distance needed to understand "sight"—distance from an event, person, or picture—is created through an act of engagement that temporarily connects and overcomes the storm of thought within the human mind. Even familiarity with a scene may not provide enough information to make vantage point clear or usable for interpretive or experiential purposes.

This issue of creativity is central to *How Images Think.* The intersections of creativity, viewing, and critical reflection are fundamental to the very act of engaging with images in all of their forms. This would suggest that the notion of the passive viewer, for example, is a myth. The experiences of seeing images are always founded upon a series of engagements. To me, there is no such "person" as a couch potato (although it would be necessary to examine why that myth is so strong and why it has endured).

Figure 1.3 does have an intrinsic meaning for every viewer. I had to draw upon my personal history and create a text for the photograph. I find figure

1.3 extremely sensuous. As a result, I am able to move from its flatness and two-dimensional nature to words in an easy and unforced manner. At the same time, the symbolic "value" of the image seems to move it into the realm of representation.

I would prefer to "see" figure 1.3 as *visualization*. This is an important distinction. Visualization is about the relationship between images and human creativity. Conscious and unconscious relations play a significant role here. Creativity in this instance refers to the role of viewers in generating what they see in images. I am not talking about vision in general but the relationships that make it possible to engage with images. Visualization as a concept is also an entry point into the depth of the viewer's experience—a way of moving beyond the notion that there is depth "in" the image. Even more so, this approach tries to understand the various and complex ways in which a subjective basis for visualization can be analyzed.

Images do not stand in a symmetrical relationship with depiction, understanding, and analysis. To visualize also means to bring into being. This may eliminate some of the traps that the notion of representation sets, for example, that creators actually have a great deal of control over what they create and viewers generally respond in kind (Maynard 1997).

In a more general sense, how does one arrive at the meaning of images? The content of images and photographs seems to be self-evident. How large is the photo? What objects are present? What color do they have? Do the contents of the image translate into "smokestack" (Wittgenstein 1965, 2)? These are important questions about the character and nature of the photo, but they describe the empirical surface of what is being pictured. In order to deal with this image one would have to move to a higher level of abstraction (Barthes 1981). My comments about figure 1.3 provide a frame that surrounds the image and a context for examining it. My interpretation of the image would have been self-evident if I had added the caption "Holocaust" or "Auschwitz" to it.

My discussion transforms the photograph into a complex metaphor and may reveal the motivations that attracted me to the scene in the first place. In a general sense, the meaning of the photograph depends on the discursive efforts I put into it and on the tensions between my own interpretation and that of other viewers. This is at least one part of the creativity and tension of viewing, which encourages the development of a variety of different vantage points as well as contestation around the meaning of images.

In the nineteenth century photographs were seen as transparent windows onto the scenes that they pictured. This is why photographs were not regarded as "art" but as records of events, people, and environments. The im-

pact of that attitude remains to this day even as the introduction of digital techniques alters the terrain of expectations around truth and transparency in photographs. The problem is that when images are seen as records, the perspective that is chosen for analysis will generally shift to whether what they show reflects the reality the images are meant to depict. This locks images into a representational triangle of object, image, and viewer. The creative intervention of viewers is then seen as a disruption of the intentions of the image-creators rather than a necessary part of the process of visualization.

Some photographs are more opaque than others and derive their strength from a set of references that are internal to the aesthetic of the picture. This poses challenges of interpretation and explanation, as well as realism. Figure 1.3 does not "demonstrate" a clear relationship with the meaning and/or message(s) I am trying to communicate in this text. I conferred a particularly personal meaning onto figure 1.3. However, there need not be any congruence between what I say and what another viewer does with the photo. There is a constant tension between the universal and the particular here. This is because photographs suggest a *demonstrable* relationship between objects and subjects in pictures and what is seen, even though the activities of viewing are about different levels of visualization and often, increasingly complex levels of abstraction and thought (Mitchell 1992).

However, since I consider viewing to be an intensely creative act, it is likely, if not desirable, that what I see is not what someone else will see. I am not suggesting that the interpretation of images is entirely subjective and relative. There are conventions, codes, and rules governing the elements in an image and its overall organization. The issue is what happens to images when they are placed into a viewing environment? Certain images say a great deal instantly, and it seems as if creative engagement were far less important than recognition and identification. I will return to this question, since I believe that what feels instant at one moment is not at another.

The images of the destruction of the World Trade Center by terrorists were not static; they immediately became part of a dynamic, ongoing historical process. It is precisely because images are the product of a particular moment that more must be added to them than is ever present in the images themselves. This excess, which is often seen as somehow interfering with the meaning of the image, is a necessary staging ground for interpretation and analysis (Deleuze 1986; Eco 1984).

**"Images freeze movement, demonstrating choice. Once sights are set in pictures, fleeting experience is stilled. Movement is not banished; rather, it appears residual, a memory of the process of fashioning the image, a reference to potentially disturbing spaces beyond the edges of pictures." (Ossman 1994, 19)**

Imagine someone standing to the side of figure 1.3, pointing toward it, and saying, "That is a smokestack set against a fiery sky." The image seems to become more specific and constrained. Yet the statement will only be valid if it is accepted. Images depend upon a shared agreement among viewers and a fairly structured set of conventions (Eco 1997, 57–122). Yet they remain a site of dispute if not contestation. There is a social and linguistic agreement to accept the word "smokestack" to describe a particular object, but the same arrangement has not been made with *images* of smokestacks.

This is what allows me to make a claim about figure 1.3—my claim, however, may not be true. This argument has important implications for what is meant by the term "image." In a sense, image as a term makes it appear as if all of these contradictions could be contained—this is the seduction—while at the same time, engaging with images far exceeds the boundaries of the frame and involves a process of visualization that cannot be constrained (the mental space of the viewer) nor should it be (Bourdieu 1990; Stafford 1996).

Clearly, figure 1.3 is related to images that I have seen of Auschwitz and other concentration camps. And, to some degree, it reflects an unconscious desire to possess those images—a desire to create some kind of present tense out of experiences that are historical but traumatically felt as if time had not passed. Photographs contribute to this sense that time has been marginalized even as they come to stand for events from the past.

In his book *The Art of Memory,* Francis Yates describes a useful distinction originally developed by Francis Bacon between active images and thinking. Bacon's goal was to distinguish between memories formed through the worship of idols and traditions of rational thought linked to the bible and its interpretation (see Huizinga 1966). In some respects, both Yates and Bacon point to a central issue in the history of photography. The appearance of photography in the nineteenth century resulted in many criticisms, including accusations that mechanically produced images would lead to the destruction of truth and therefore to the undermining of human memory. This has not happened. Photographic images have become the foundation upon which historical events are viewed and archived. Yet there is a lingering cultural sense that photographs can and often do lie. These tensions have increased as digital technologies have made it possible to alter photographs in more and more sophisticated ways. The active image in Bacon's sense is very much in the present tense (felt immediately, as in images of human suffering), in contrast to images that require more lengthy contemplation in order to be understood. It is the active image that risks overwhelming spectators so that questions of truth and rationality become secondary to the viewing experience.

According to Yates ([1966] 1974), "[Francis] Bacon fully subscribed to the ancient view that the active image impresses itself best on memory, and to the Thomist view that intellectual things are best remembered through sensible things" (372). Nevertheless, the active image is one that is never forgotten and remains sensuously engaged with viewers even as it is layered with more and more meanings. The presence of all of these layers moves the photograph from *its* time to another and perhaps more abstract moment. This tension is not between the present and the past; rather it is an expression of the problems that arise when different levels of expression collide with each other because time and history continuously recontextualize meaning and viewership. No photograph and no image retains its meaning for very long, which creates serious problems for vantage point. If there is so little stability, how can perspective be maintained?

This lack of stability suggests that different meanings have to be searched for in other ways and through other means. For example, who built the large buildings and infrastructure at Auschwitz that were necessary to kill so many people in a relatively short period of time? (There were actually twelve construction companies involved. They ranged from specialists in ventilation to a company that waterproofed the gas chambers.) Of course, figure 1.3 cannot reveal these details on its own which creates both a problem and a challenge for visualization and how memories can be contextualized.

There is a photograph available that shows Heinrich Himmler studying the plans for Auschwitz with an engineer of the IG Farben Company. How could that photograph be included in figure 1.3? The map reproduced in figure 1.4 indicates the closeness of the factory to the concentration camp. The point is that figure 1.3 cannot contain enough of the historical elements of the situation to allow for the breadth of interpretation and analysis I am developing here.

Images piled upon images. Memories contained by images in frames. Ideas that move far beyond what individual images signify. The process of layering through language and analysis, as well as through the exploration of "seeing" leads in many different directions. The photograph of a smokestack reaching to the sky brings to mind Alain Resnais's devastating exploration of Auschwitz in *Night and Fog,* the film that he made in 1955.

The images in the film, as Bacon suggested, have never disappeared from my memories of the war itself. Yet I was born after the war. This means that I am combining images, films, stories, a whole host of media, a plethora of texts, and familial testimonies into a series of memories and discourses that bring all of these pieces together. This is precisely what *Night and Fog* does as a film because Resnais cannot return to the moments he describes and pic-
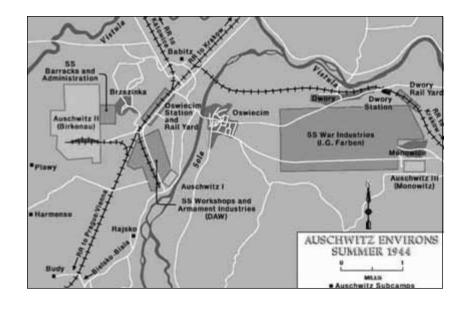
**FIGURE 1.4**    Map of Auschwitz

tures in the film. This is a good example of a set of relationships formed through a chain of interrelated images and texts where there is no real unity to the outcome.

It is evidence of my submersion in a world that is almost entirely made up of traces, in which no message is complete in and of itself. It is this incompleteness and the inability of images to assert absolute meanings that sustains the viewer's interest in them as instruments of exchange and communications. It is also why images are so multidimensional even in those instances when they picture something in a very direct or active way.

However, the personal and discursive process that permits claims to be made that there is a difference between images and people's experiences of them needs to be explored. When someone says, "That is not a picture of me," is he or she claiming that the picture is not a likeness or that the image cannot contain or express the subjective sense that the person has of himself or herself?

For example, a photographer snaps an image of Jane. When Jane sees it, the photographer says, "I took that photo of you!" It appears as if the image can stand for Jane and will be used by the photographer to illustrate Jane's appearance to a variety of different spectators. In a sense, the image separates itself from Jane and becomes an autonomous expression, a container with a label and a particular purpose. For better or worse, the photo speaks of Jane, and often *for* her.

The photograph of Jane is scanned into a computer and then placed onto a Web site. It is also e-mailed to friends and family. Some of Jane's relatives print the image and others place it in a folder of similar photos in their computers, a virtual photographic album. In all of these instances, Jane travels from one location to another and is viewed and reviewed in a number of different contexts. At no point does anyone say, "This is not a picture of Jane." Therefore, one can assume that a variety of viewers are accepting the likeness and find that the photo reinforces their subjective experience of Jane as a person, friend, and relative.

The photograph of Jane becomes part of the memory that people have of her, and when they look at the photo a variety of feelings are stirred up that have more to do with the viewer than Jane. Nevertheless, Jane appears to be present through the photo, and, for those who live far away from her, the photograph soon becomes the only way that she can be seen and remembered.

Picture the following. Jane's photograph is on a mantel. When Jane's mother walks by, she stares at her daughter's picture and then kisses it. Often, when Jane's mother is lonely, she speaks to the image and, in a variety of ways, thinks that the image speaks back to her. Jane's mother knows that the photograph cannot speak; yet, there is something about Jane's expression that encourages her mother to transform the image from a static representation to something far more complex, in other words to *visualize* her daughter's presence and to recreate the distance between herself and the image.

This example points out that the language of description that usually accompanies a photograph cannot fully account for its mystery. It is as if the photograph exceeds the boundaries of its frame in an almost continuous fashion and brings forth a dialogue that encourages a break in the silence that usually surrounds it. Where does this power come from? It cannot simply be a product of the emotional investment in the image. To draw that conclusion would be to somehow mute the very personal manner in which the image is internalized and the many ways in which it is made relevant to human experience (Deleuze 1988).

Could it be that viewers see from the position of the image? Do they not have to place themselves inside the photograph in order to transform it into something they can believe in? Aren't they simultaneously witnesses and participants? Don't they gain pleasure from knowing that Jane is absent and yet so powerfully present? Isn't this the root of a deeply nostalgic feeling that overwhelms the image and brings forth a set of emotions that cannot be located simply in memories (Baudrillard 1990)?

What would happen if someone tore up the photograph? The thought is a difficult one. It somehow violates a sacred trust. It also violates Jane. Yet if the photo were simply a piece of paper with some chemicals fixed upon its surface, then the violence would appear to be nothing. Why and how does the image exceed its material base?

This question cannot be answered without reflecting upon the history of images and the growth and use of images in every facet of human life, in other words the creation of image-worlds. Long before humans understood why, images formed the basis upon which they defined their relationships to their experiences and to space and time (Jay 1993). Long before there was any effort to translate information into formal written languages, humans used images to communicate with each other and with a variety of imaginary creatures, worlds, and gods (O'Donnell 1998). The need to externalize an internal world, to project the self and one's thoughts into images remains as fundamental as the act of breathing. Life could not continue without some way of creating images to bear witness to the complexities of human experience, and this applies to those instances in which images were banned or destroyed. This wondrous ability, the magic of which surrounds people from the moment they are born, is a universal characteristic of every culture, social, and economic formation. This is the case with language and what needs to be understand and accepted is the degree to which it is the same with images (Mitchell 1986).

The invention of photography, for example, did not happen in a vacuum. Aside from the long history of experimentation with chemistry that preceded the insight that light leaves a trace on certain surfaces that have been treated with chemicals, centuries of experimentation with images of every type and shape occurred (Hillis 1999). Photography simply reflected a continuing and quite complex desire to translate and transform the world into many different forms. Images are not a reflection of this desire; they are the very incarnation of the need to take hold of the world and visualize experience. Images are one of the crucial ways in which the world becomes real (Scharf 1968; Kittler 1986).

Images are also one of the most fundamental grounds upon which humans build notions of embodiment. It is for that reason that images are never

simply enframed by their content. The excess this produces is a direct result of what people do with images as they incorporate them into their identities and emotions. Images speak to people because to see is to be within and outside of the body. Images are used as a prop to construct and maintain the legitimacy of sight. It is as if sight could not exist without the images that surround most cultures. The translation of sight into various forms of expression suggests that vision and images are codependent (Hayles 2002).

Think for a moment of the shock that comes from looking at the world through a camera obscura. Here is a device whose sole purpose is to translate the world into images. Why not simply revel in the delights of seeing? Why build an apparatus that reduces the world to an image? Perhaps, images are not reductions. Perhaps, they are the very basis upon which the body and the eye can manage the experience of being in the world. Perhaps, it would not be possible to see without images? If that were true, then the impulse to create the camera obscura, as well as the many experiments that took place at the same time, came from a deeper source. Ultimately, there may be a need to simulate the world in order to understand it, but this would introduce even more mediators into the experiences of seeing and understanding than I have mentioned up until now (Stephens 1998; Levi-Strauss 1997).

This is something that Roland Barthes (1981) recognized when he declared early on in *Camera Lucida* that he "wanted to be a primitive, without culture" (7). Barthes did not want to know about all the cultural mediators that transformed a photograph of his mother from being a simple reflection of her face and body into a complex artifact. He wanted to experience the kind of direct pleasure that sensuously and instantaneously connects viewers to what they see. This is similar to the Thomist view that Yates mentions in the earlier quotation. It is at the heart of why time seems to disappear in photographs, not because of depiction or realism, but because memories of past scenes are lost and regained every time a photograph is viewed and because the excess that is generated transforms images into traces within and outside time.

This excess cannot be derived in a simple sense from photographs themselves and reveals as much about the strength of memory as it does about the fickleness of "remembering." It is both the force and the frailty of remembering through "sensible things." What is sensible can be approached as if in a dream, and dreams can be approached as if they were part of reality. In all of this, the visible world that is recovered by billions of photographs shot by humans of every culture, stands as an encyclopedic compendium of the human desire to preserve the endless circle of memories and forgetting, dreams and insights, experiences and reflections.

HE     You saw nothing in Hiroshima. Nothing.
SHE    I saw everything. Everything.
SHE    The hospital, for instance, I saw it. I'm sure I did.
       There is a hospital in Hiroshima. How could I help seeing it?
HE     You did not see the hospital in Hiroshima.
       You saw nothing in Hiroshima.
SHE    Four times at the museum . . .
HE     What museum in Hiroshima?
SHE    Four times at the museum in Hiroshima. I saw the people walking
       around. The people walk around, lost in thought, among the photo-
       graphs, the reconstructions, for want of something else, among the
       photographs, the photographs, the reconstructions, for want of
       something else, the explanations, for want of something else.

       — Marguerite Duras, *Hiroshima Mon Amour*

The main character, Riva, in the film *Hiroshima Mon Amour,* from which this dialogue is taken, has "forgotten" her love affair with a German soldier during the war. *Hiroshima Mon Amour* explores the slow unveiling of her repressed memories as a trope for the ways in which forgetting becomes endemic and trauma is forgotten (Burnett 1995, 178–182). According to Primo Levi (1988), "Human memory is a marvelous but fallacious instrument. This is a threadbare truth known not only to psychologists but also to anyone who has paid attention to the behavior of those who surround him, or even to his own behavior. The memories which lie within us are not carved in stone; not only do they tend to become erased as the years go by, but often they change, or even grow, by incorporating extraneous features" (23).

Levi, of course, had to tell the tale of his experiences at Auschwitz over and over again in a variety of stories and through a variety of metaphors, much as Jorge Semprun, the French writer, in order to keep the trauma alive not only for himself but for succeeding generations. For Levi, history had to be lived everyday to be understood. Semprun (1997) has spent his life exploring and testifying to the experiences of being a prisoner at Buchenwald:

*I'd need only to close my eyes, even today. It wouldn't take any effort—on the contrary, the slightest distraction of a memory brimful of trifles, of petty joys, would be enough to summon that ghost. . . . It would take only a single instant of distraction from oneself, from others, from the world, an instant of non-desire, of quietude this side of life, an instant when the truth of that long-*

*ago, primal event would rise to the surface, and the strange smell would drift over the hillside of the Ettersberg, that foreign homeland to which I always return. (Pp. 6–7)*

In *Hiroshima Mon Amour,* a seemingly endless series of conversations "produces" a reawakening—history comes to life because the past always exists within the present and because speech, memory, and image cannot be disengaged. (This is one of the central themes of "Burnt Norton," the poem by T. S. Eliot quoted at the beginning of this chapter.)

Yet, this is one of the fundamental ambiguities of images whether moving or still, which "announce" a relationship to time (and to a period) while marginalizing history. The instant of a photograph is in fact only one moment of history and is therefore open to many different interpretations. The same variability exists in the cinema and other media. A photograph shot in one period of history becomes archival in the next. In fact, some photos are almost instantly archival such as pictures from wars and large-scale human tragedies.

There is an irony here, because traumatic events are more often than not the *most* difficult experiences to remember, let alone picture. It is by bearing witness to trauma that humans learn how to connect time, subjective experiences, and history. Weaving trauma into art, images, and aesthetic forms is part of bearing witness to occurrences that cannot be understood or experienced in any other manner (Felman and Laub 1992, 57).

Levi and Semprun work with words and stories, and they move easily between fiction and nonfiction. The difficulty with images is that they bear witness in very different ways and make it seem as if events could be pictured or reconstructed when they can only be *reimagined.* This is perhaps one of the greatest ironies of historical photographs. They are meant to demonstrate a relationship to the past that appears to be empirical but, for the most part, their impact is almost entirely contingent upon the imagination of viewers (Baer 2002).

### Technology and Vantage Point

Technology seems to elevate photographs beyond these kinds of relative and contingent restrictions. Instruments, tools, and technologies seem to be neutral purveyors of the interests of humans. Unlike literature, the use of technology to bear witness to trauma supposedly elevates pictures, for example, to a level of truth that does not need additional explanation.

Yet, this is clearly one of the central issues of vantage point. The story of an event is not the event itself. At any given moment, as events are mediated by everything from the medium of expression to the imagination of the individual viewer, a chasm is created that spectators have to bridge. This is one of the sources of visualization. It is as if the bridge between event and depiction needed to be created, but since that is a physical impossibility, it is done mentally and from within carefully constructed and imaginative scenarios, what I would like to call a 'dynamic daydream.'

Figure 1.3 is therefore as much a reflection of what I know as it is an expression of what I have remembered *and* repressed. It is a visualization of events that I have not experienced. My desire to "take" the photograph and to witness a scene that cannot be *reproduced* is what makes this image important. Auschwitz cannot be reproduced not only because of the horror that it represents but also because of the very nature of history *as* a set of traces open to continual reinvention in the present.

Michel Serres (1995) suggests that "people usually confuse time and the measurement of time" (60–61). Photographs make it seem as if time can be seen and the past is waiting to be "produced" in order to be understood. In reality, photographs and images are traces or signs of what *may* have been. There is a constant interplay between events, their recounting, and images. And, for the most part, all these elements exist in contingent relations with each other. This is a challenging fluidity since it suggests that the ways in which viewers *link* the traces is far less dependent on what is depicted than might appear to be the case.

What then happens to memories and images of trauma when an even more complex aesthetic and artistic process is introduced?

In figure 1.5 I have taken the original photograph and altered it digitally. It now seems as if figure 1.3 were the original and figure 1.5 is a transformation. I have moved (seemingly) from the record of a moment and experience to a more aesthetic and mediated version. Is it valid to ask which is the more mediated of the two? What if the viewer had come upon figure 1.5 before seeing figure 1.3? This is at the heart of the paradox about photographic truth. Photographs are only records if viewers agree by convention that truth is present. This agreement often comes in an instant, as recognition. It can also be validated by a variety of social and cultural processes.

If photographs are always a medium for reimagining the scenes that they depict then the differences between figures 1.3 and 1.5 are not that important. This may explain why the content of a photograph is always open to challenge. It is as if reinvention were as important to viewing as the image it-

**F I G U R E   1 . 5**     Smokestack against a night sky with moon (Ron Burnett)

In a short but important work on the Holocaust, historian Saul Friedländer comments on what he feels is the "indiscriminate word and image overload on topics that call for so much restraint, hesitation, groping, on events that we are so far from understanding" (1984, 96). This is a crucial point. Yet, it has not stopped an endless procession of images and texts on the Holocaust from appearing year after year. This is a situation in which the excesses of the image cannot constrain the boundaries of exploration and visualization. In part, this is because the Holocaust can only be visualized in fragmentary form.

self. Is there an identifiable pattern to these relationships that explains their interaction? A variety of potential connections and disconnections exist among reinvention, visualization, imagination, and retelling. But it is not clear that a claim can be made about the patterns and therefore about the conventions that govern any one of the four categories that I have just mentioned. The challenge is to work with these categories as if images were only a part of what is ultimately a creative process *for viewers.*

In figure 1.5, I have gone from "taking" a photograph to *creating* an image. The smokestack no longer has the same set of references; rather, I imposed a new set of potential meanings upon the process and operations of the medium. Figure 1.3 is a scanned Polaroid picture, while figure 1.5 has been scanned into my computer and altered inside Adobe Photoshop. It was compressed into a JPEG before being imported into the word processor that I am using.

Are all of these processes simply minor variations on an existing theme? Or do they speak of the fluidity and fickleness of images in general? Is it true that images are things or objects that can be handled in any number of different ways? Each effort to handle images is really about a set of relationships among subjects *and* objects, capable of exchanging positions all of the time (Latour 1996). The questions about what is pictured and what is real or not real have to do with vantage point and not necessarily what is in the image. The irony is that when photography initially became a mass medium, the ambivalence about its truth-value increased. With time, the very photographs that were challenged for their authenticity have become historical documents, treasures, as it were. This shift toward archival value is about the strengths and weaknesses of human memory. Oral cultures sustained stories and myths for generations without archives. Western cultures need archives to validate memory.

## From Analogue to Digital Photography

Analogue pictures have now become one of the standards for the measurement of historical truth. But what happens when

**FIGURE 1.6**    Smokestack against a night sky with train, Vienna, 1938 (Ron Burnett)

analogue and digital pictures can be mixed or when digital pictures increasingly become the norm? Digital images fundamentally alter not only meaning but also materiality; images become defined by the layers of artifice that have been placed in them. Reference then becomes a function of the interior organization and architecture of the photograph, the traces of what has been done to it and the manner in which those traces are interpreted. This has always been recognized with respect to painting, and the move to digital technology will make it clearer in photography as well. It may be that it is of no value to speak of "taking" a photo; rather, value must be extracted from what is visualized or recreated by both creators and viewers.

Up until now, I have used "photograph" and "image" interchangeably. To me, photographs become images the minute they are seen. The moment that photographs enter into relationships with subjects they shift from one level of reality to another. It could, of course, be argued that photographs never work in isolation of creators or viewers. That is precisely why photographs only exist in the instant they are shot. That is also why Barthes was so perplexed by meaning in photographs, because he tried to link the instant creation of images with postmortem analyses. The shift to the digital has shown that photographs are simply raw material for an endless series of digressions. They lie tethered to moments that have long since disappeared. As images, photographs encourage viewers to move beyond the physical world even as they assert the value of memory, place, and original moments. In that sense, the flow of references does not end with the photograph as an object. Rather, every photograph that becomes an image pivots on a variety of contingent directions.

The beauty is that images are so malleable; they encourage processes of sculpting, change, and transformation. They invite the addition of words and texts. Photographs permit and encourage an eruption of fantasy *as if* they had become subjects. I return to this argument in chapter 4 when I discuss virtual reality experimentation in greater detail, but it should now be clear that my concerns for the many ways in which images contribute to the creation of meaning requires a redefinition of the subject-object distinction as it has been applied to visualization.

Figure 1.6 is a further transformation of the original Polaroid. In the left-hand corner there is a cropped picture of a train leaving Vienna before the war. The people you see leaning out of the train are leaving their families for an unknown future. One of those people is my mother.

The train, of course, brings other memories to bear, including the ways in which the Germans transported Jews and many other nationalities to the

concentration camps. The transformation of figure 1.3 now means that it is more of a collage than a photograph. There is an increasingly tenuous connection to the original, and intention is more visible, or so it seems. The image began as an innocent "snapshot" and has become a rhetorical device in the development of an argument. In a sense, I am beginning to "write" on the picture, recasting the original impulses or perhaps more fully understanding them. I am also trying to bring more evidence of the original motivations for taking the photograph into its actual makeup.

Increasingly, the distinctions that might allow for some consistency in the original photograph are being disrupted. This is not so much a matter of tinkering with the original as it is bringing the power of discourse into the actual construction of the photograph itself and therefore moving beyond the "instant" of its taking. Clearly, time is being altered to fit the orientation that I am choosing. For example, was the time spent working in Photoshop more important and more significant than the historical elements of the image and when it was shot? What has scanning done to the original photograph of the train, and has the fact that the photograph has become a data file changed its meaning? Am I violating the poignancy of the original photo of my mother by cropping it?

In figure 1.7 the image has a third element to it, a photograph of my paternal grandmother and great-grandmother. The former, Elly, survived the war, and the latter, Helene, died in Auschwitz.

The image, including its mixtures of color and shape, is becoming more and more stylized. Although elements are being added to it, the language that I am using to describe the photo tends to naturalize the relationship between what I am saying and what I want the photo to mean. There is also an inevitable tension between what I am saying and creating and another viewer's own relationship to the image. Even more important, I am identifying the faces in the image(s) and claiming that there is a relationship between "their" time and my own.

In fact, by personalizing this image, I am diluting the flexibility that viewers may need to produce their own interpretation. I not only made the original "historical," but I added elements to reinforce my initial premise about the photo and used archival images to validate my interpretation. Keep in mind that I have introduced a series of "effects" into the Polaroid to accentuate the photograph's ability to "speak" in the full knowledge that it is my own voice that I want viewers to hear. However, this is a site of struggle rather than a place where my needs will be fulfilled. As any creative person discovers, the gap between intention and communication is vast and requires a variety of

**F I G U R E  1.7**     Smokestack against a night sky, mother, grandmother, and great-
grandmother (Ron Burnett)

compromises that often seem to have nothing to do with the images themselves. Of course, I am arguing that the compromises are part of a negotiation that is at the core of how image-worlds operate (Weiss 1989).

Voice is an ongoing problem for photographs. The fact that technology has to be used to "take" the photo implies that the role of the photographer is actually less important in the creative act. The photograph seems to be disengaged from its creator. James Elkins (1999) suggests, as does Roland Barthes, the following: "Fundamentally, I think we wish pictures could sometimes be pure, devoid of codes, signs, letters, numbers, or any other structured sources of meaning. At the same time, we hope that the pictures we are interested in will always have enough structure to yield meanings — to be, in the inevitable metaphor, legible" (57).

This contradictory desire for purity and legibility, for instant recognition and understanding, is part of the reason that so much "intention" is conferred onto cameras. Thus, the quality of a lens is equated with the quality of an image and sometimes given as much weight as the photographer herself. Polaroid photographs are seen as instant, quick, and produced through a process that does not have as much intentionality attached to it as a carefully composed 35-mm shot. Purity and legibility can mean that technology has replaced the creator of the image. What is the balance between the camera eye and the human eye? Which side of this unsteady fulcrum is best suited for analytical purposes (Sontag 1978)? For example, what has the image of the smokestack in figure 1.3 been modeled on? The "scene" was there for me to capture or, it could be said, that the scene captured me. Did I "create" it, or is it just a snapshot? Whose voice is dominant here and how can it be discerned from the photograph? What is legible and what is not (Tyler 1987)?

Rather than assuming it is the *real* that has to be captured or reproduced, the *production* of the real as image may be one of the foundations for the visible and may be the key sign of voice at work (Vasseleu 1998). Historical information can be reshaped to fit into the framework provided by images. Nevertheless, the difficult issue here is that there is no necessary equation between history and image. This means that the integration of images into every aspect of modern culture has resulted in a sophisticated and yet inevitably flawed inventory of images that is supposed to point toward the real and toward history.

I would make the claim that very little of what is described as the real exists in isolation of its double as image *and* text. In other words, it is not just the case that images depict events. Images and events coexist within a shared context and are part of a shared foundation that upholds and gives coherence

to reality. This doppelganger is a source of tremendous energy and anxiety (Kember 1998). It is also the reason why it seems so difficult to find vantage points that would allow some perspective to be taken with respect to events, images, creativity, and interpretation (Schwartz 1996).

Although figure 1.3 is not a copy of the smokestacks at Auschwitz, it hints at a relationship with the past. The vantage point that I have chosen allows for an interpretation that brings the original concentration camp smokestacks into a relationship with the present. This "production" and visualization of the real bring some coherence to memory, but also become the basis for new memories.

Vantage point is about the rather tenuous relationship or perspective that is used to describe these interactions. The statement "This is a picture of my grandmother" lends empirical weight to the image, produces the image, and attempts to mirror the past while, at the same time, *situating* figure 1.7 and recreating it. My vantage point allows me to make all of these claims, but, for the most part, they are not verifiable. I can point to the contingencies, assert their validity, and argue about the truth, but none of this will resolve the ambiguous power that my discourse has over the picture.

I am reversing the conventional notion (and cultural myth) that images have the power to overwhelm the viewer, and I am describing a process that is far more *collaborative*. I am arguing that this creative engagement with pictures begins the moment that images enter into relationships with viewers. I am making the claim that images are not outside of conventional perceptual activities, not the place where things happen that don't happen elsewhere. Rather, images are integral to, and are at the foundation of, visual, linguistic, and perceptual processes.

It is not the case that what viewers watch *as* image comes to them in the form of a tabula rasa, nor is it the case that spectators approach images in isolation of their historical relationship to photography in general. In fact, photography has been a part of historical discourse since the invention of the medium, although it took until the 1960s for the skepticism about pictorial truth to become diluted. Now there is a complete reversal, where the value of images *as history* far exceeds their capacity to visualize the past.

As I have been saying, images are fundamental to the growth and development of human consciousness (Piaget 1951; Chomsky 2000). The role of language is equally foundational. According to Steven Pinker (1997),

*The eminent psychologist D. O. Hebb once wrote, "You can hardly turn around in psychology without bumping into the image." Give people a list of*

*nouns to memorize, and they will imagine them interacting in bizarre images. Give them factual questions like "Does a flea have a mouth?" and they will visualize the flea and "look for" the mouth. And, of course, give them a complex shape at an unfamiliar orientation, and they will rotate its image to a familiar one. (P. 285)*

Pinker is pointing toward the power of visualization, and although Hebb was a behaviorist and thus not really concerned with images as sites of recreation or fantasy, Pinker's comments make it clear that imagination is at the heart of what he means by mind.

These fundamental issues of language, thought, and images will be dealt with in greater detail in this book. For the moment, it is crucial to understand that images are both mental and physical, within the body and mind, and outside the body and mind. To see images is also to be seeing *with* images. The visual field is as psychological as it is "real" and external to the viewer. From a cognitive point of view it is just not possible to separate what has been seen from what has been thought, and the question is, why would that type of separation be suggested or even thought of as necessary (Ramachandran and Blakeslee 1998)?

There is no particular sequence to the activities of visual engagement. To be able to see and understand images means that human subjects have already been engaging in the process. Spectators often think of their engagement with images as some sort of input process, as if humans were merely reacting to what they see and not collaborating in the creation of the experience. If any allowance were to be made for the complexities that characterize the multifaceted lived experiences that human subjects have, then the ability and the competence to view images cannot be reduced to the simplicity of input/output models (Edelman 1989, 2000).

Another way of thinking about these claims is through the following example. Disgust at the image of a child running from a village that has been napalmed can be shared by a wide variety of different people, but disgust is not *in* the photo (Chong 1998). *Disgust is the representation.*

It is commonly assumed that what is seen in a photograph is something that represents something else. A photographed tree is accepted as such, even though the tree has been reduced to a small size and is two-dimensional. Culturally, this jump in logic seems natural because the language that allows the word "tree" to be used in the first place doesn't change dramatically because there is an image of a tree. But the tree as image is only there by virtue of an agreement that is both cultural and individual. This agreement says that

the image can be used to refer to "tree" without any necessary loss in meaning (Rorty 1991).

Disgust is the product of a relationship that links and reinforces these agreements about meaning and represents the conventions as well as the social context that has made them possible. It is what I bring to bear on the photograph, how I frame and examine my experience, what my experience and sense of identity is, that converts the interaction into feelings of disgust. This is why even the most painful of images can be looked at, in part because the images are not the experience but point to some of its elements.

In a similar vein, the pain that I feel looking at figure 1.4 (a map) is of course present to me, but only to the degree that it is seen as such, only to the extent that there is an agreement that links history to cultural convention and my experience to the Holocaust. However powerful, images remain within a set of relationships that are based on the creative and interpretive abilities of viewers. Figure 1.4 requires a quick movement into it and a projection as well as identification with the pain of the past, but this does not happen solely as a function of the map itself. If the instant of recognition were the only important feature of figure 1.4, then all of the complex attachments of the map to its history and context would disappear. It would speak with even less of a voice than it deserves.

Earlier in this chapter I spoke about ambiguity and the particular way in which photographs nurture contradictory meanings that require the intervention of human subjects to generate and create order. Often, images promote a quick and recognizable clarity. That is both their power and a source of their undoing. The challenge is to move the image continuously around so that its context can be examined from a variety of perspectives and vantage points. For example, the photograph I mentioned of a child running from a napalmed village during the Vietnam War and a Viet Cong soldier being shot in the head are intensely voyeuristic, posing crucial questions about the photographers who took them, their motivations, and the need to place the images into the context of the news. Keep in mind, I am not claiming that I know why the photographers took the shots. I am simply addressing my own reaction and trying to examine the relationship between the immediacy of my reaction and my skepticism about the assumed spontaneity of the photographer's role.

Why were there cameras at those scenes in the first place? Of the many photographs taken during the Vietnam War, why were these used as extreme examples of brutality, and why have they remained so famous? If these two photographs have become symbols of the wrongheadedness of the Vietnam

**FIGURE 1.8**     Leaving Vienna, 1938

War and the role of the Americans in it, was this the reason that they were taken? Does the exposure of the child's body suggest something about the desire of the photographer for intensity and effect? All of these questions may simply return the images to their point of departure as powerful antiwar statements. But if the photograph is to be taken beyond its role as a phenomenon, then the levels of meaning I have suggested need to be mapped. This mapping will allow the image to be replaced, recreated, then positioned in a loop of communications, visualization, and exchange.

**How Images Become Virtual**

Figure 1.8 is a shift away from figure 1.3, to an archival image that is over sixty-two years old. Yet it is no more original than the Polaroid. It is a *virtual* image of an historical event, a train leaving from Vienna just prior to the beginning of World War II. The stages through which this photo has become virtual are listed in figure 1.9.
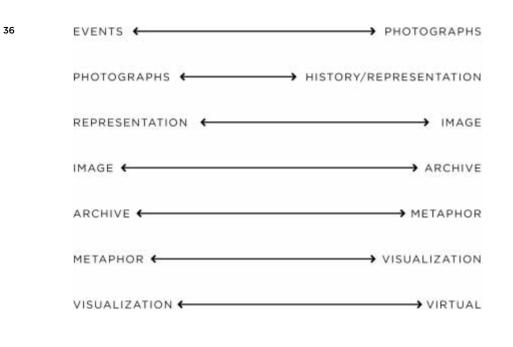
EVENTS ⟵————————————⟶ PHOTOGRAPHS

PHOTOGRAPHS ⟵————⟶ HISTORY/REPRESENTATION

REPRESENTATION ⟵————————⟶ IMAGE

IMAGE ⟵————————————⟶ ARCHIVE

ARCHIVE ⟵————————————⟶ METAPHOR

METAPHOR ⟵————————⟶ VISUALIZATION

VISUALIZATION ⟵————————⟶ VIRTUAL

**FIGURE 1.9**     The trajectory of figure 1.8 from visualization to the virtual

    The events that influenced the departure of my mother from Vienna in 1938 would have happened with or without the photo being taken. Yet, after the events, the photo helped create a shared familial and communal knowledge about the war and the Holocaust. It is not a record in the strict sense of that word, meaning a pure reproduction. Historical events overwhelm efforts to reproduce what has happened. The representations are always traces. The full historical quality of figure 1.8 cannot be flushed out through the photo itself. This is both the dilemma and potential richness of the photo. A variety of intellectual and discursive tools must be applied to the photo in order to move beyond an initial view of it. These tools will dynamically reengage viewers every time they come across the photo, and it is this reengagement that converts the photo into an image. Note that in figure 1.9 representation is at some distance from the more essential tasks of visualization.

    The transition from event to photograph suggests a relationship without creating interdependence between history and image. At the same time,

the photographs immediately become archival and objects of interpretation quite distinct and different from the moment in which they were taken. Once the photo has an archival quality, a great deal of historical weight is placed upon it (Price 1994). Increasingly, it becomes a vehicle for interpretation and, in so doing, becomes a metaphor for the event. As an archival object its location in time changes, and the web of conversation and discourse around the image grows ever larger. As metaphor, it can only suggest a part of what happened, a trace of how the event came to be and why. This process can be viewed as evolutionary, but it is also ambiguous. The ambiguity comes from the distance between the event and the metaphors used to explain the events that caused the image to be taken in the first place. It is this fluidity and the fact that the image can be used and viewed in any number of different ways that "virtualizes" it (Grau 1999a, 1999b).

A claim can be made that the image has no ontological validity unless and until the archival, metaphorical, and virtual qualities of the image have been fully explored. This moves the process of interpretation beyond the "first" look of an image and requires a shift into the labyrinth of metaphor. This process in no way removes the image from its emotional impact. In fact, a significant part of the communication process remains silent, without words, and is not dependent upon the discourse that is applied to the image. There will always be both tension and contradiction between what is said and what is experienced with images. I would locate the creativity of viewing inside this tension. This is as much a struggle with language that seems inadequate in relation to what has been seen as it is a struggle with the ontological validity of what has been pictured or created by photographers.

Figure 1.10 is a photograph of Auschwitz that was taken in 2002 by the photographer Judith Lermer Crawley. It is a multilayered visualization of the prisoner's barracks and smokestacks. Is it a more realistic depiction than figure 1.3? On the surface, that would seem to be the case. I would claim that although Crawley shot this on location, the photo moves far beyond the parameters of the camp itself and invokes a generalized view of all such horrific symbols of war and death. In that sense, time is both irrelevant and at the center of the photo. The image virtualizes the past and negates a simple or direct look. To "site" this image is to drag it from the past into the present and back again. It is to both identify with horror and disavow the flood of memories that the image engenders. The photo can play as flexible a role as the spectator desires, and this can lead to its undoing—to irrelevance. Alternately, the activity of viewing can be brought into a process of visualization and discursive richness, which means engaging with the image in many different ways and

**FIGURE 1.10**     From the exhibition *About Auschwitz* (Judith Lermer Crawley). Used by permission.

not allowing that first look to be the only reference point for the experience. This means that the trauma of the event itself recedes into the background as the image becomes "virtualized." The struggle of interpretation, then, is between the virtual status of the image and knowledge of events, history, and language.

Chapter 2 explores the movement from images to visualizations and the resulting creation of virtual, image-based environments. Digital images are in many ways a practical solution to the dilemmas that I have been describing in this chapter. As more "intelligence" is processed into image-worlds, the question of the boundary between humans and images becomes ever more complex. At the same time, digital worlds are very much about the integration of images into every aspect of human activity, and therefore they underscore the importance of understanding how images think.