Chapter 1 WHERE TO GO FROM HERE

In this and the following chapters, some of the articles we mention in print versions may be available through academic databases. For books, sample passages and chapters may also be available in PDF or other formats, particularly from publishers’ or authors’ websites.

The Making of Collateral

Our case study of Collateral’s production derives in part from the DVD’s making-of supplement, “City of Night: The Making of Collateral.” This 39-minute documentary covers the decisions about filming on HD-video, about lighting the interior of the taxi, and about the three-movement musical track that accompanies the climax. This and some short films on the actors rehearsing and on the special effects of the final sequence appear in the two-disc DVD set (DreamWorks Home Entertainment #91734).


The Illusion of Cinematic Motion

For about 80 years, writers on film have maintained that the reason we see movement in movies is due to “persistence of vision.” Today, no researcher into perception is likely to accept this explanation. Several optical processes are involved, but the two most prominent are flicker fusion and apparent motion. More specifically, the stimuli in a film instantiate “short-range” apparent motion, in which small-scale changes in the display trigger activity in different parts of the visual cortex. Filmic motion takes place in our brain, not on our retina. For an explanation of these ideas, and a thorough critique of the traditional explanation, see Joseph and Barbara Anderson, “The Myth of Persistence of Vision Revisited,” Journal of Film and Video, 45, 1 (Spring 1993): 3–12. It is available online at http://academic.evergreen.edu/curricular/emergingorder/seminar/week_1_anderson.pdf.

Film’s Roots in Technology
André Bazin suggests that humankind dreamed of cinema long before it actually appeared: “The concept men had of it existed so to speak fully armed in their minds, as if in some platonic heaven” (What Is Cinema? vol. 1 [Berkeley: University of California Press, 1967], p. 17). Still, whatever its antecedents in ancient Greece and the Renaissance, the cinema became technically feasible only in the 19th century.

Motion pictures depended on many discoveries in various scientific and industrial fields: optics and lens making, the control of light (especially by means of arc lamps), chemistry (involving particularly the production of cellulose), steel production, precision machining, and other areas. The cinema machine is closely related to other machines of the period. For example, engineers in the 19th century designed machines that could intermittently unwind, advance, perforate, advance again, and wind up a strip of material at a constant rate. The drive apparatus on cameras and projectors is a late development of a technology that had already made feasible the sewing machine, the telegraph tape, and the machine gun. The 19th-century origins of film, based on mechanical and chemical processes, are particularly evident today, since we’ve become accustomed to electronic and digital media.


**Film Distribution and Exhibition**


Stages of Film Production


In *How I Made a Hundred Movies in Hollywood and Never Lost a Dime* (New York: Random House, 1990), Roger Corman reviews his career in exploitation cinema. A
sample passage: “In the first half of 1957 I capitalized on the sensational headlines following the Russians’ launch of their Sputnik satellite. . . . I shot War of the Satellites in a little under ten days. No one even knew what the satellite was supposed to look like. It was whatever I said it should look like” (pp. 44–45). Corman also supplies the introduction to Lloyd Kaufman’s All I Needed to Know about Filmmaking I Learned from the Toxic Avenger: The Shocking True Story of Troma Studios (New York: Berkeley, 1998), which details the making of such Troma classics as The Class of Nuke 'Em High and Chopper Chicks in Zombietown. See as well the interviews collected in Philip Gaines and David J. Rhodes, Micro-Budget Hollywood: Budgeting (and Making) Feature Films for $50,000 to $500,000 (Los Angeles: Silman-James, 1995).


Moviemakers Speak

For the website Movie City News, David Poland has created a series of enlightening interviews with participants in the production process. See movicitynews.com/dp30/.

See also the interviews gathered by the British Association of Film and Television Artists at http://guru.bafta.org/home.

As for print, there are many interviews with production personnel. We will mention interviews with designers, cinematographers, editors, sound technicians, and others in the chapters on individual film techniques. The director, however, supervises the entire process of filmmaking, so we list here some of the best director interview books: Peter Bogdanovich, Who the Devil Made It (New York: Knopf, 1997); Mike Goodrich,Directing (CransPrés-Céligny, 2002); Jeremy Kagan, Directors Close Up (Boston: Focal Press, 2000); Andrew Sarris, ed., Interviews with Film Directors

Some important directors have written books on their craft, including Edward Dmytryk, *On Screen Directing* (Boston: Focal Press, 1984); David Mamet, *On Directing Film* (New York: Penguin, 1992); Sidney Lumet, *Making Movies* (New York, Knopf, 1995); and Mike Figgis, *Digital Filmmaking* (New York: Faber & Faber, 2007). Paul Cronin has collected the writings of Alexander Mackendrick in *On Filmmaking* (London: Faber & Faber, 2004). Mackendrick was a fine director and a superb teacher, and the book offers incisive advice on all phases of production, from screenwriting (“Use coincidence to get characters into trouble, not out of trouble”) to editing (“The geography of the scene must be immediately apparent to the audience”).

The University Press of Mississippi has published an extensive series of books collecting interviews by various directors. See [http://www.upress.state.ms.us/category/film](http://www.upress.state.ms.us/category/film).

Rick Lyman had the intriguing idea of asking a director or performer to choose a film and comment on it while it was projected. The results are in *Watching Movies: The Biggest Names in Cinema Talk About the Films That Matter Most* (New York: Henry Holt, 2003). See also Mark Cousins’s *Scene by Scene: Film Actors and Directors Discuss Their Work* (London: Laurence King, 2002).
Good websites collecting print and video interviews with directors include

http://industrycentral.net/director_interviews/ and


Screenwriting and Rules

In mass-production filmmaking, the screenwriter is expected to follow traditional storytelling patterns. For several decades, Hollywood has called for scripts about strong central characters who struggle to achieve well-defined goals. According to most experts, a script ought to have a three-act structure, with the first-act climax coming about a quarter of the way into the film, the second-act climax appearing about three-quarters of the way through, and the climax of the final act resolving the protagonist’s problem. Writers will also be expected to include plot points, twists that turn the action in new directions.


Filmmaker J. J. Murphy identifies and examines the distinctive conventions of independent screenplay writing in *Me and You and Memento and Fargo: How Independent Screenplays Work* (New York: Continuum, 2007).


**Small-Scale Production**


The DIY movement has largely been fostered on the Internet. For the DIY Film Festival, see its homepage, http://diyfilmfestival.blogspot.com/. The 48 Hour Film Project is here: http://www.48hourfilm.com/. Many of the films can be found on the website or on YouTube, where a search on either “DIY film” or “48 Hour Film Project” yields thousands of results. For a list of the cities that hold screenings of locally made 48 Hour films, see http://en.wikipedia.org/wiki/48_hour_film_project. New Zealand has created its own version, 48Hours; see http://www.v48hours.co.nz/2011/. Films from this festival can be found at YouTube by searching “48 Hour New Zealand.”

**Websites**

For topics in this and later chapters, Wikipedia and other general online reference sources may furnish points of departure for your reading and research.
General Reference

http://www.imdb.com/ The Internet Movie Database is a basic reference source for films, people, and companies worldwide. The Power Search is particularly helpful. Not infallible, so double-check on other sites.


http://www.zeroland.co.nz/film_movies.html A site gathering links to basic resources in national cinemas and other topics.

http://filmstudiesforfree.blogspot.com/ A wide-ranging survey of online publications, blogs, websites, and other resources examining film history, theory, and criticism.

On the Film Industry

http://www.cjr.org/resources/index.php The Columbia Journalism Review site on media conglomerates, with up-to-date lists of holdings.

http://boxofficemojo.com/ Lists U.S. and international gross receipts for current films, as well as records of films released in previous decades by country and genre.
http://www.the-numbers.com/ Similar to Box Office Mojo in charting top-grossing films around the world, with market analyses.

http://www.variety.com/ Current commentary on production, distribution, and exhibition trends from the most important entertainment-business newspaper. Access to the Archives, a searchable database of past issues going back to 1906, is by annual subscription.

http://www.hollywoodreporter.com/ The Hollywood Reporter, the other major entertainment-business newspaper, offers current statistics and features on trends. Access to some articles is proprietary for subscribers or libraries.

http://www.boxofficemagazine.com/ Box Office magazine covers current trends in theatrical exhibition, mostly the United States. The Vault is a free database of past issues of the magazine going back to the 1920s.


http://www.screendaily.com/ Screen International’s site for current information on trends across Europe, Asia, Latin America, and other regions. Some articles available only to print subscribers.

http://www.indiewire.com/ Provides current information on U.S. independent cinema.


http://www.aintitcool.com/ A popular film fan site hosted by Harry Knowles, with emphasis on science-fiction, fantasy, and action films.
http://www.mpaa.org/ The official site of the Motion Picture Association of America, the trade organization of the major distribution companies. Statistics on box office, film attendance, and other trends.

http://www.natoonline.org/ The official site of the National Association of Theatre Owners, with some statistics.
Chapter 2 WHERE TO GO FROM HERE

Form in Film and the Other Arts


On the relation of form to the audience, see the book by Meyer mentioned above. The ABACA example is borrowed from Barbara Herrnstein Smith’s excellent study of literary form, *Poetic Closure* (Chicago: University of Chicago Press, 1968). Compare Kenneth Burke’s claim: “Form is the creation of an appetite in the mind of the auditor and the adequate satisfying of that appetite.” (See Kenneth Burke, “Psychology and Form,” in *Counter-Statement* [Chicago: University of Chicago Press, 1957], pp. 29–44.)

This chapter presupposes that any filmmaker uses basic formal principles. But is the filmmaker fully aware of doing so? Many filmmakers use formal principles intuitively, but others apply them quite deliberately. Spike Lee’s cinematographer Ernest Dickerson remarks, “A motif we used throughout [*School Daze*] was two people in profile, ‘up in each other’s face.’ That was a conscious decision” (*Uplift the Race: The Construction of “School Daze”* [New York: Simon & Schuster, 1988], p. 110). Sidney Lumet decided to give *Twelve Angry Men* a strict progression by shooting from different camera positions as the story developed. “As the picture unfolded I wanted the room to
seem smaller and smaller. . . . I shot the first third of the movie above eye level, the second third at eye level, and the last third from below eye level. In that way, toward the end, the ceiling began to appear” (Sidney Lumet, Making Movies [New York: Knopf, 1995], p. 81). Our quotation from Nicole Kidman on the knife motif in The Shining comes from Watching Movies: The Biggest Names in Cinema Talk About the Films That Matter Most (New York: Henry Holt, 2003).

Further evidence that filmmakers think in terms of the overall shape of the film comes in Bruce Block, The Visual Story: Seeing the Structure of Film, TV, and New Media (Boston: Focal Press, 2001). Many directors have studied Block’s ideas about creating visual motifs that weave their way through the film.

Maya Deren, the American experimentalist who made Meshes of the Afternoon, was quite self-conscious about formal principles. She argued that a film should exploit the features that differentiate cinema from other arts—chiefly, its unique handling of space and time. Deren believed that a film’s organization emerges from the ways in which all the images subtly affect one another. “The elements, or parts, lose their original value and assume those conferred upon them by their function in this specific whole.” For more thoughts on this, see her 1946 essay “An Anagram of Ideas on Art, Form and Film,” in Essential Deren: Collected Writings on Film by Maya Deren, ed. Bruce R. McPherson (Kingston, NY: Documentext, 2005).

**Form, Meaning, and Feeling**

How does cinema evoke emotion? It’s actually a bit of a puzzle. If a giant ape were lumbering toward us on the street, we’d run away in fright. But if King Kong is
lumbering toward us on the screen, we feel frightened, but we don’t flee the theater. Do we feel real fear but somehow block our impulse to run? Or do we feel something that isn’t real fear but is a kind of pretend-fear?

Similarly, when we say that we identify with a character, what does that mean? That we feel exactly the same emotions that the character does? Sometimes, though, we feel some emotions that the character isn’t feeling, as when sympathy for her or him is mixed with pity or anxiety. Can we identify with a character and not have the same feelings she has?

Most of these authors draw upon an approach called cognitive film studies. We reflect on similar topics on our blog. For entries, consult the category “Film Theory: Cognitivism.” Documentary filmmaker Errol Morris interviews two prominent psychologists studying how we perceive, or misperceive, film in his article, “Play It Again, Sam (Re-enactments, Part Two),” available on the New York Times site at http://opinionator.blogs.nytimes.com/2008/04/10/play-it-again-sam-re-enactments-part-two/.

An alternative approach to understanding spectators’ responses has been called reception studies. For an overview, see Janet Staiger, Media Reception Studies (New York: New York University Press, 2005). Often scholars working in this tradition seek to understand how specific social groups, such as ethnic groups or historically specific audiences, respond to the films offered to them. Influential examples are Kate Brooks and Martin Barker’s Judge Dredd: Its Friends, Fans, and Foes (Luton: University of Luton Press, 2003) and Melvin Stokes and Richard Maltby, eds., American Movie Audiences: From the Turn of the Century to the Early Sound Era (London: British Film Institute, 1999). For a general perspective, see Will Brooker and Deborah Jermyn, eds., The Audience Studies Reader (New York: Routledge, 2002).

Critics form an audience of their own, and Janet Staiger’s Interpreting Films: Studies in the Historical Reception of American Cinema (Princeton, NJ: Princeton University Press, 1992) examines how several major films have been understood by critics and reviewers. In Perverse Spectators: The Practices of Film Reception (New York: New York University Press, 2000), Staiger discusses how audiences and critics can respond to films in ways that the filmmakers could not have anticipated.

**Linear Segmentation and Diagramming**

When we’re analyzing a scripted fiction film, creating a segmentation often amounts to retracing the screenwriter’s creative steps. The writer typically builds a screenplay out of a list of scenes, sometimes noting each scene on a card and laying out the cards to assess how the plot is shaping up.

Because today’s feature films tend to have short scenes (typically running one to three minutes each), there may be 60 or more sequences in a film. Older films seldom contain more than 40, and silent films may have only 10 or 20. Of course, sequences and scenes can also be further subdivided into smaller parts. In segmenting any film, use an outline format or a linear diagram to help you visualize formal relations (beginnings and endings, parallels, patterns of development). We employ an outline format in discussing *Citizen Kane* in the next chapter and in discussing modes of filmmaking in Chapter 10.

**Websites**
http://scsmi-online.org/ A site devoted to the Center for Cognitive Studies of the Moving Image, which examines various aspects of psychological and emotional responses to film.

http://scienceblogs.com/cognitivedaily/research/film A site collecting psychological research on film and television.


http://henryjenkins.org/ The major theorist of “participatory culture” runs a vast blogsite examining ways in which audiences help shape today’s popular media—not only film but also television, music, comics, and video games.
Chapter 3 WHERE TO GO FROM HERE

Narrative Form


Stories from different times and places seem very different, yet we know of no culture that doesn’t tell stories. What might explain this apparently universal interest in narrative? Brian Boyd investigates this question in his wide-ranging *On the Origin of Stories: Evolution, Cognition, and Fiction* (Cambridge, MA: Harvard University Press, 2009).

For more on principles of film narrative, you can visit our blog, *Observations on Film Art*, and check the categories “Narrative Strategies” and “Narrative: Suspense.” As a start, consider this entry on beginnings and endings:


**The Spectator**


**Narrative Time**
Most theorists agree that both cause–effect relations and chronology are central to narrative. The books by Chatman and Sternberg cited above provide useful analyses of causation and time. For specifically cinematic discussions, see Brian Henderson, “Tense, Mood, and Voice in Film (Notes After Genette),” *Film Quarterly* 26, 4 (Summer 1983): 4–17; and Maureen Turim, *Flashbacks in Film: Memory and History* (New York: Routledge, 1989).

Our discussion of the differences between plot duration, story duration, and screen duration is necessarily simplified. The distinctions hold good at a theoretical level, but the differences may vanish in particular cases. For example, story duration and plot duration differ most drastically at the level of the whole film. There two years of action (story duration) might be shown or told about in scenes that occur across a week (plot duration) and then that week itself could be rendered in two hours (screen duration). At the level of a smaller part of the film—say, a shot or a scene—we usually assume story and plot duration to be equal, and screen duration may or may not be equal to them. These nuances are discussed in chap. 5 of Bordwell, *Narration in the Fictional Film* (mentioned above).

**Narration**

One approach to cinematic narration has been to draw analogies between film and literature. Novels have first-person narration (“Call me Ishmael”) and third-person narration (“Maigret puffed his pipe as he walked along slowly, hands clasped behind his back”). Does film have first-person or third-person narration, too? The argument for applying the linguistic category of “person” to cinema is discussed most fully in Bruce F.


The title of a film can be an important factor in its narration, setting us up for what is to come. We reflect on titles Hollywood tends to use in our blog entry “Title wave,” at [http://www.davidbordwell.net/blog/2008/09/11/title-wave/](http://www.davidbordwell.net/blog/2008/09/11/title-wave/).


**Is the Classical Hollywood Cinema Dead?**

Since the early 1990s, some film historians have claimed that the classical approach to Hollywood narrative faded away during the 1970s, replaced by something variously termed *post-classical, postmodern, or post-Hollywood cinema*. Researchers argued that films of later decades are best characterized by extremely simple, high-concept premises, with the cause–effect chain weakened by a concentration on high-pitch action at the expense of character psychology. Some scholars suggest that tie-in merchandising and distribution through other media have also fragmented the stories movies tell. Other historians argue that the changes are superficial and that in many ways underlying classical principles endure.

Screenwriting teachers have also argued that modern moviemaking maintains the classic approach to structure that emerged in the American studios in the 1920s and continued into the 1960s. The two most influential script gurus are Syd Field, *Screenplay: The Foundations of Screenwriting* (New York: Delta, 2005), and Robert McKee, *Story: Substance, Structure, Style, and the Principles of Screenwriting* (New York: HarperCollins, 1997). Both consider the classic *Casablanca* (1942) as a valid template for today’s screenwriting.

More recently, however, Field has suggested that technological changes have encouraged a more fragmentary, multimedia form of screenwriting. He contrasts moments of exposition in *Casablanca* and *The Bourne Ultimatum* on his site at [http://www.sydfield.com/featured_evolution_revolution.htm](http://www.sydfield.com/featured_evolution_revolution.htm). Linda Aronson develops
the idea of alternative plot patterns in more detail in *The 21st Century Screenplay: A Comprehensive Guide to Writing Tomorrow's Films* (Los Angeles: Silman-James, 2010). Nonetheless, she holds that “all of the unconventional narrative forms we find in today’s films rely heavily on the traditional rising three-act model” (p. 168).

“Rosebud”


Robert Carringer’s *Making of “Citizen Kane,”* rev. ed. (Berkeley: University of California Press, 1996), offers the most extensive account of the film’s production. The political forces behind the scenes are considered in the Public Broadcasting System documentary, “The Battle over *Citizen Kane,”* available as a supplement on some DVD releases of the film.

**Websites**

http://www.writerswrite.com/screenwriting/scrnlink.htm A list of screenwriting links, including articles, interviews, and other sites.

http://www.dmoz.org/Arts/Writers_Resources/Screenwriting/ Another aggregated list of links, arranged by topic.

http://www.wga.org/writtenby/writtenby.aspx The official site of the magazine *Written By,* published by Writers Guild West, the professional organization of American screenwriters. Includes informative articles about trends in screenwriting.


http://johnaugust.com/ One of the world’s most popular screenwriting sites, run by the author of the scripts for *Big Fish, Corpse Bride, Go,* and *Charlie’s Angels.*
On the Origins of Mise-en-Scene


On Realism in Mise-en-Scene

Many film theorists have seen film as a realistic medium par excellence. For such theorists as Siegfried Kracauer, André Bazin, and V. F. Perkins, cinema’s power lies in its ability to present a recognizable reality. The realist theorist thus often values authenticity in costume and setting, naturalistic acting, and unstylized lighting. “The primary function of decor,” writes Perkins, “is to provide a believable environment for the action” (*Film as Film* [Baltimore: Penguin, 1972], p. 94). Bazin praises the Italian neorealist films of the 1940s for “faithfulness to everyday life in the scenario, truth to his part in an actor” (*What Is Cinema?* vol. 2 [Berkeley: University of California Press, 1970], p. 25).

Although mise-en-scene is always a product of selection and choice, the realist theorist may value the filmmaker who creates a mise-en-scene that *appears* to be reality. Kracauer suggests that even apparently unrealistic song-and-dance numbers in a musical can seem impromptu (*Theory of Film* [New York: Oxford University Press, 1965]), and
Bazin considers a fantasy film such as The Red Balloon realistic because here “what is imaginary on the screen has the spatial density of something real” (What Is Cinema? vol. 1 [Berkeley: University of California Press, 1966], p. 48).

These theorists set the filmmaker the task of representing some historical, social, or aesthetic reality through the selection and arrangement of mise-en-scene. Though this book postpones the consideration of this problem—it lies more strictly in the domain of film theory—the realist controversy is worth your examination. Christopher Williams, in Realism and the Cinema (London: Routledge & Kegan Paul, 1980), reviews many issues in the area.

**Computer Imaging and Mise-en-Scene**

*Digital*, or *3D*, animation typically involves a few widely used programs, such as Maya for creating movement and Renderman for adding surface texture. Animators deal with specific needs of their projects by developing new software for such effects as fire, water, and moving foliage. The figures to be animated are created either by scanning every surface of a maquette (a detailed model, such as the dinosaur in 1.29) or by using motion capture (“mocap”), filming actors or animals in neutrally colored costumes covered with dots, which are the only things visible to the camera. The dots are connected by lines to create a “wire-frame” moving image, and the computer gradually adds more detailed layers to build a textured, three-dimensional, moving figure. Backgrounds can also be created digitally, using matte-painting programs. For figure animation, see The Art of Maya: An Introduction to 3D Computer Graphics, 3d ed. (Alameda, CA: Sybex, 2007), which includes a CD-ROM with introductory material.
For fiction feature films, 3D animation became viable with digital compositing, used for the T-1000 cyborg in *Terminator 2: Judgment Day*. Here a grid was painted on the actor’s body, and the actor was filmed executing movements. As the film was scanned, the changing grid patterns were translated into a digital code similar to that used on compact discs. Then new actions could be created on the computer frame by frame. For a discussion, see Jody Duncan, “A Once and Future War,” *Cinefex* 47 (August 1991): 4–59. Since *Terminator 2*, sophisticated software programs have enabled directors to create “actors” wholly from models that can be scanned into a computer and then animated. The most famous early example is the gallimimus herd in *Jurassic Park*. The phases of the imaging process for this film are explained in Jody Duncan, “The Beauty in the Beasts,” *Cinefex* 55 (August 1993): 42–95.

Both analog image synthesis and digital compositing were used in *The Matrix*; for background, see Kevin H. Martin, “Jacking into the Matrix,” *Cinefex* 79 (October 1999): 66–89. The rendering of realistic human and humanlike characters depended on finding a way to create the elusively translucent quality of skin. Such figures as Jar Jar Binks in *Star Wars Episode 1: The Phantom Menace* and especially Gollum in *The Lord of the Rings* finally achieved this goal. See *Cinefex* 78 (July 1999), completely devoted to *The Phantom Menace*; Joe Fordham, “Middle-Earth Strikes Back,” *Cinefex* 92 (January 2003): 70–142; and Joe Fordham, “Journey’s End,” *Cinefex* 96 (January 2004): 55–142. Computer visual effects have become so common that any issue of *Cinefex* details the technology used in one or more recent films.
The combination of live-action filming with computer animation has created a fresh range of cinematic effects. Méliès’ urge to dazzle the audience with the magical powers of mise-en-scène continues to bear fruit.

**Particular Aspects of Mise-en-Scene**


Michael Caine’s *Acting in Film: An Actor’s Take on Movie Making* (New York: Applause Books) offers excellent and detailed discussion. See also the accompanying video, *Michael Caine on Acting in Film*; portions are posted on YouTube at [http://www.youtube.com/watch?v=Njs6ZNSoFC0](http://www.youtube.com/watch?v=Njs6ZNSoFC0). Caine: “The most important thing we do, we actors who are in the movie, is hang onto each other’s eyes.”

The ways in which a performance can be integrated with a film’s overall form are considered in three other manuals: *The Film Director’s Intuition: Script Analysis and Rehearsal Techniques*, by Judith Wilson (Studio City, CA: Michael Wiese, 2003); Delia Salvi’s *Friendly Enemies: Maximizing the Director–Actor Relationship* (New York: Billboard, 2003); and Tom Kingdon, *Total Directing: Integrating Camera and Performance in Film and Television* (Los Angeles: Silman-James, 2004).


**Depth**

Art historians have long studied how a two-dimensional image can be made to suggest a deep space. A comprehensive introductory survey is William V. Dunning, *Changing Images of Pictorial Space: A History of Spatial Illusion in Painting* (Syracuse, NY: Syracuse University Press, 1991). Dunning’s history of Western painting emphasizes the
manipulation of five techniques we’ve considered in this chapter: linear perspective, shading, the separation of planes, atmospheric perspective, and color perspective.

Although film directors have manipulated the image’s depth and flatness since the beginning of cinema, critical understanding of these spatial qualities did not emerge until the 1940s. It was then that André Bazin called attention to the fact that certain directors staged their shots in unusually deep space. Bazin singled out F. W. Murnau (for *Nosferatu* and *Sunrise*), Orson Welles (for *Citizen Kane* and *The Magnificent Ambersons*), William Wyler (for *The Little Foxes* and *The Best Years of Our Lives*), and Jean Renoir (for practically all of his 1930s work). By offering us depth and flatness as analytical categories, Bazin increased our understanding of mise-en-scene. (See “The Evolution of the Language of Cinema,” in *What Is Cinema?* vol. 1.)

Interestingly, Sergei Eisenstein, who is often contrasted with Bazin, explicitly discussed principles of deep-space staging in the 1930s, as recorded by his faithful pupil, Vladimir Nizhny, in *Lessons with Eisenstein* (New York: Hill & Wang, 1962). Eisenstein asked his class to stage a murder scene in a single shot and without camera movement; the result was a startling use of extreme depth and dynamic movement toward the spectator. For a discussion, see David Bordwell, *The Cinema of Eisenstein* (Cambridge, MA: Harvard University Press, 1993), chaps. 4 and 6. For a general historical overview of depth in mise-en-scene, see David Bordwell’s *On the History of Film Style* (Cambridge, MA: Harvard University Press, 1997), chap. 6.

**Color Design**
Two clear and readable discussions of color aesthetics in general are Luigina De Grandis, 
Zelanski and Mary Pat Fisher, *Colour for Designers and Artists* (London: Herbert Press, 
1989).

For general discussion of the aesthetics of film color, see Raymond Durgnat, 
Johnson, “Coming to Terms with Color,” *Film Quarterly* 20, 1 (Fall 1966): 2–22. The 
most detailed analysis of color organization in films is Scott Higgins, *Harnessing the 

**Frame Composition and the Viewer’s Eye**

The film shot is like the painter’s canvas. It must be filled up, and the spectator must be 
cued to notice certain some things and to neglect others. For this reason, composition in 
film owes much to principles developed in the graphic arts.

A good basic study of composition is Donald L. Weismann, *The Visual Arts as 
Human Experience* (Englewood Cliffs, NJ: Prentice Hall, 1974), which has many 
interesting things to say about depth as well. More elaborate discussions are to be found 
ed. (Berkeley: University of California Press, 1974), and his *The Power of the Center: A 
Study of Composition in the Visual Arts*, 2d ed. (Berkeley: University of California Press, 
1988). See also Peter Ward, *Picture Composition for Film and Television* (London: Focal 
André Bazin suggested that shots staged in depth and shot in deep focus give the viewer’s eye greater freedom than do flatter, shallower shots: the viewer’s eye can roam across the screen. (See Bazin, *Orson Welles* [New York: Harper & Row, 1978].) Noël Burch takes issue: “All the elements in any given film image are perceived as equal in importance” (Burch, *Theory of Film Practice* [Princeton, NJ: Princeton University Press, 1981], p. 34). Psychological research on pictorial perception suggests, however, that viewers do indeed scan images according to specific cues. In cinema, static visual cues for “when to look where” are reinforced or undermined by movement of figures or of camera, by sound track and editing, and by the overall form of the film. The psychological research is outlined in Robert L. Solso, *Cognition and the Visual Arts* (Cambridge, MA: MIT Press, 1994), pp. 129–56. In *Figures Traced in Light: On Cinematic Staging* (Berkeley: University of California Press, 2005), David Bordwell studies how the filmmaker uses staging and frame composition to guide the viewer’s scanning of the shot.

A great deal of psychological research has been devoted to how we scan images. Apart from Tim Smith’s experiment with *There Will Be Blood*, mentioned in our chapter, one of the most famous instances was created by Daniel Simons, who studies “inattentional blindness.” The fact that we literally don’t see something displayed for us suggests that the focus of our attention roams across the entire display, according to our purposes or interests of the moment. See Simons’ book, written with Christopher Chabris, *The Invisible Gorilla: How Our Intuitions Deceive Us* (New York: Broadway, 2011) and its accompanying website [http://theinvisiblegorilla.com/](http://theinvisiblegorilla.com/). The gorilla video, along with many more related to filmic perception, is at
http://www.youtube.com/user/profsimons. We have an entry on eye-scanning and pictures at http://www.davidbordwell.net/blog/2011/02/06/the-eyes-mind/.

Websites

http://www.youtube.com/watch?v=edf8ITXsX5M Interview with Joe Alves, production designer for Jaws and Close Encounters of the Third Kind.


http://clothesonfilm.com/ A lavishly produced website on film costume, with many illustrations and video clips.

http://www.costumedesignersguild.com/cdg-magazine/ Website for Costume Designers Guild, with access to articles in the guild magazine.

http://www.makeupmag.com/ Website for Make-Up Artist Magazine, professional journal for film and television workers; has some online articles.

http://www.cybercollege.com/makeup.htm Instructions for making up faces for film and television.


http://www.brendandawes.com/project/cinema-redux/ Artist Brendan Dawes experiments with sampling a film at one-second intervals and then spreads out the frames in a grid. The ravishing result shows how the film’s color design follows a pattern of development and variation.
http://theabyssgazes.blogspot.com/2010/03/teal-and-orange-hollywood-please-stop.html An entertaining rant against a common color scheme in American films of recent years. Color graders defend their decisions at


http://people.psych.cornell.edu/~jec7/pictures_film.htm Distinguished psychologist James E. Cutting gathers many years of his research into how we watch movies. The articles are available as PDF files.
Chapter 5 WHERE TO GO FROM HERE

General Works


Cinematographers can be articulate about their craft. See the conversations in Vincent LoBrutto, *Principal Photography: Interviews with Feature Film Cinematographers* (Westport, CT: Praeger, 1999); Pauline Rogers, *Contemporary Cinematographers on Their Art* (Boston: Focal Press, 1999); Benjamin Bergery, *Reflections: Twenty-One Cinematographers at Work* (Hollywood, CA: ASC Press,
Ace cinematographer Andrew Laszlo recalls working for film and television in *Every Frame a Rembrandt: Art and Practice of Cinematography* (Boston: Focal Press, 2000).

In the Rogers collection, Dean Cundey recalls that the camera movements in *Who Framed Roger Rabbit?* posed problems for adding animation. “If Roger was to go from one part of the room to another, hopping onto a chair, we had to find a way for the camera operator to track that movement. We developed full-size rubber characters to stage the action. The operator could then see movement in real time. He would associate movement with dialogue.”


**Color versus Black and White**

Today most films are shot on color stock or in color digital formats, and most viewers have come to expect that movies will be in color. At many points in film history, however, color and black-and-white film have been used to carry different meanings. In 1930s and 1940s American cinema, color tended to be reserved for fantasies (for example, *The Wizard of Oz*), historical films or films set in exotic locales (*Becky Sharp, Blood and Sand*), or lavish musicals (*Meet Me in St. Louis*). Black and white was then
considered more realistic. But now that most films are in color, filmmakers can call on black and white to suggest a historical period (as witnessed by two such different films as Straub and Huillet’s *Chronicle of Anna Magdalena Bach* and Tim Burton’s *Ed Wood*). Such rules of thumb as “color for realism” have no universal validity; as always, it is a matter of context, the function of color or black-and-white tonalities within a specific film.


Film theorists have debated whether color film is artistically less pure than black and white. One argument against color may be found in Rudolf Arnheim, *Film as Art* (Berkeley: University of California Press, 1957). Arnheim’s argument is disputed by V. F. Perkins in *Film as Film* (Baltimore: Penguin, 1972).

**Special-Effects Cinematography**

Part of the reason that major film studios tout themselves as “magic factories” is that special-effects cinematography demands the complexity and expense that only a big firm
can support. Special effects require the time, patience, and rehearsal afforded by control over mise-en-scene. It is, then, no surprise that Méliès, the first person to exploit fully the possibilities of studio filmmaking, excelled at special-effects cinematography. Nor is it surprising that when UFA, the gigantic German firm of the 1920s, became the best-equipped film studio in Europe, it invested heavily in new special-effects processes. Similarly, as Hollywood studios grew from the mid-1910s on, so did their special-effects departments. Engineers, painters, photographers, and set designers collaborated to contrive fantastic visual novelties. In these magic factories, most of the history of special effects has been made.

But such firms were not motivated by sheer curiosity. The costs of elaborate back projection and matte work were good investments. Expensive as they were, such tricks often saved money in the long run. Instead of building a huge set, you could photograph the actors through a glass with the setting painted on it. Instead of taking players to the desert, you could film them against a back projection of the pyramids. Just as important, special effects made certain film genres possible. The historical epic—whether set in Rome, Babylon, or Jerusalem—was unthinkable unless special effects were devised to create huge vistas and crowds. The fantasy film, with its panoply of ghosts, flying horses, and invisible or incredibly shrinking people, demanded that superimposition and matte processes be improved. The science fiction film genre could scarcely exist without a barrage of special effects. For the major studios, the “factory” principle was responsible for the “magic.”

A good survey of the subject is Richard Rickitt’s sumptuously illustrated *Special Effects: The History and the Technique*, 2d ed. (New York: Billboard, 2007). Pascal

Studies of predigital effects include Mark Cotta Vaz and Craig Barron’s *The Invisible Art: The Legends of Movie Matte Painting* (San Francisco: Chronicle Books, 2002). This extensive and well-illustrated history includes a CD-ROM with examples of matte paintings. Stan Winston was a master of physical effects, in particular puppets and creature creation; see Jody Duncan’s *The Winston Effect: The Art & History of Stan Winston Studio* (London: Titan Books, 2006).


### 3D Cinema

Nearly every aspect of film technology—color, synchronized sound, widescreen imagery—emerged in the early years of the medium, and 3D is no exception. Artists and photographers in the early 19th century created 3D still images, and people enjoyed looking at them through the handheld viewers known as stereoscopes. Eastman Kodak manufactured 3D still cameras for amateurs, while lecturers employed stereoscopic photographic slides.

In the 1920s, stereoscopic films began to be made fairly regularly, and the format has never completely disappeared, although it has gone up and down in popularity. Its first wave of popularity came in the early 1950s, when some major feature-length 3D movies were released, like *House of Wax*. 3D returned on a wide scale with *Chicken Little* (2005), which also helped popularize digital projection in multiplex theatres. By 2011, over thirty major U.S. releases were shown in the format, and six of them were in the year’s top ten box-office hits. New software allowed 2D films like *The Lion King* and *Titanic* to be retrofitted for 3D theatrical re-release.

Today’s stereoscopic systems go beyond the familiar red-green cardboard glasses that became the icon of 3D. The most common systems use polarization, a process that filters out selected wavelengths so that images are sent rapidly first to one eye, then to the

**Aspect Ratio**

The aspect ratio of the film image has been debated since the inception of cinema. The Edison-Lumière ratio (1.33:1) was not generally standardized until 1911, and even after that other ratios were explored. Many cinematographers believed that 1.33:1 was the perfect ratio (perhaps not aware that it harks back to the “golden section” of academic painting). With the large-scale innovation of widescreen cinema in the early 1950s, cries of distress were heard. Most camera operators hated it. Lenses often were not sharp, lighting became more complicated, and as Lee Garmes put it, “We’d look through the camera and be startled at what it was taking in.” Yet some directors—Nicholas Ray, Akira Kurosawa, Samuel Fuller, François Truffaut, and Jean-Luc Godard—created fascinating compositions in the widescreen ratio. The systems are exhaustively surveyed


During the 1980s, two variants on traditional film gauges were designed in response to widescreen demands. One innovation was Super 35mm, which expands the image area within the traditional 35mm format. It allows filmmakers to make a release print at either 2.40:1 (anamorphic) ratio or 1.85:1 matted. For small-budget projects, there was Super 16mm, which can be blown up to make 35mm release prints more easily than from normal 16mm. Super 16mm provides 40 percent more image area and creates a wider frame that can be matted to the 1.85:1 aspect ratio favored in 35mm exhibition.

Recent films made in Super 16mm include *Old Joy*, *Black Swan*, and *The Hurt Locker*.

**Widescreen Welles**

The 2000 DVD release of Orson Welles’s *Touch of Evil* created a controversy among admirers of the film. The film had originally been shot in 1.37, but by 1957, the widescreen revolution had made that format rare. Most films were shown in a wider ratio, such as 1.66 or 1.85. The producers of the DVD version of the film settled on 1.85 as the appropriate one. They explained that Welles would have expected the full-frame images to be cropped in projection and that he would have seen and approved the work print in that standard format.

But many observers argued that Welles didn’t want his images cropped, having declared his distaste for widescreen formats. Many complained that the compositions looked too confining, and some older viewers recalled seeing the film in theaters in 1.37.

The controversy reached its peak when a new DVD box set was released in 2008. The debate can be followed online, at a website hosted by critic Dave Kehr ([http://www.davekehr.com/?p=127](http://www.davekehr.com/?p=127)) and at a site largely devoted to Criterion releases ([http://www.criterionforum.org/forum/viewtopic.php?f=4&t=4223&start=150](http://www.criterionforum.org/forum/viewtopic.php?f=4&t=4223&start=150)).

Welles’s published comments on widescreen have been reprinted at [http://www.wellesnet.com/?p=155](http://www.wellesnet.com/?p=155). His remarks about *Touch of Evil* in a 1958 letter are ambiguous:

> Nowadays the eye is tamed, I think, by the new wide screens. These “systems” with their rigid technical limitations are in such monopoly that any vigorous use of the old black-and-white, normal aperture camera runs the risk of seeming tricky by comparison. The old camera permits use of a range of visual conventions as removed from “realism” as grand opera. This is a
language not a bag of tricks. If it is now a dead language, as a candid partisan of the old eloquence, I must face the likelihood that I shall not again be able to put it to the service of any theme of my own choosing.

Welles registers his preference for the “normal” (1.37) aperture, but he indicates that it is now “dead.” He also says that he won’t be able to employ it “again.” But does “again” mean, “after having employed it in Touch of Evil,” or simply “since the widescreen revolution of the early 1950s”?

After consulting with Welles experts James Naremore and Jonathan Rosenbaum, we have decided to reproduce the Touch of Evil frames in this book in the wider aspect ratio. But the matter is far from settled.

The Subjective Shot

Sometimes the camera, through its positioning and movements, invites us to see events through the eyes of a character. Some directors (Howard Hawks, John Ford, Kenji Mizoguchi, Jacques Tati) seldom use the subjective shot, but others use it constantly. As 5.135 indicated, Samuel Fuller’s Naked Kiss starts with shocking subjective shots:

We open with a direct cut. In that scene, the actors utilized the camera. They held the camera; it was strapped on them. For the first shot, the pimp has the camera strapped on his chest. I say to [Constance] Towers, “Hit the camera!” She hits the camera, the lens. Then I reverse it. I put the camera on her, and she whacks the hell out of him. I thought it was effective. (Quoted in Eric Sherman and Martin Rubin, The Director’s Event [New York: Signet, 1969], p. 189)
Filmmakers began experimenting with the “first-person camera” or the “camera as character” quite early. *Grandma’s Reading Glass* (1901) features subjective point-of-view shots. Keyholes, binoculars, and other apertures were often used to motivate optical point of view. In 1919, Abel Gance used many subjective shots in *J’accuse*. The 1920s saw many filmmakers taking an interest in subjectivity, seen in such films as E. A. Dupont’s *Variety* (1925), F. W. Murnau’s *The Last Laugh* (1924) with its famous drunken scene, and Abel Gance’s *Napoleon* (1927).

Some believe that in the 1940s, the subjective shot—especially subjective camera movement—got completely out of hand in Robert Montgomery’s *Lady in the Lake* (1946). For almost the entire film, the camera represents the vision of the protagonist, Philip Marlowe; we see him only when he glances in mirrors. “Suspenseful! Unusual!” proclaimed the advertising. “YOU accept an invitation to a blonde’s apartment! YOU get socked in the jaw by a murder suspect!”

The history of the technique has teased film theorists into speculating about whether the subjective shot evokes identification from the audience. Do we think we are Philip Marlowe? The problem of audience identification with a point-of-view shot remains a difficult one in film theory. A useful discussion is Edward Branigan’s *Point of View in the Cinema: A Theory of Narration and Subjectivity in Classical Film* (New York: Mouton, 1984).

**Real Time and the Long Take**

When the camera is running, does it record real time? If so, what artistic implications follow from that?
André Bazin argued that cinema is an art that depends on actual duration. Like photography, Bazin claimed, cinema is a recording process. The camera registers, photochemically, the light reflected from the object. Like the still camera, the movie camera records space. But unlike the still camera, the movie camera can also record time. “The cinema is objectivity in time. . . . Now, for the first time, the image of things is likewise the image of their duration, change mummified as it were” (What Is Cinema? vol. 1 [Berkeley: University of California Press, 1966], pp. 14–15). On this basis, Bazin saw editing as an intrusive interruption of the natural continuity of duration. He praised long-take directors such as Jean Renoir, Orson Welles, William Wyler, and Roberto Rossellini as artists whose styles respected concrete moment-to-moment life.

Bazin should be credited with calling our attention to the possibilities latent in the long take at a time when other film theorists considered it theatrical and uncinematic. Yet the problem of real time in film seems more complicated than Bazin thought. For one thing, software programs allow filmmakers to blend separate shots into what seems to be a long take on the screen can be built up out of separate shots.

Virtually everything we see in a single long take can be assembled either photographically or digitally. In The War of the Worlds, a shot of the hero and his children fleeing along a highway in a minivan lasts for 2 minutes and 22 seconds. As the family talks, screams, and shouts at each other, the camera circles the van, filming them through the windows. Yet in reality, the actors were performing in a studio against a bluescreen. The exteriors—the landscapes, people, and vehicles seen outside the van windows—were originally shot by eight cameras mounted on a Jeep that drove along a stretch of highway. In addition, a camera circling the van on that same highway was
mounted at times on the side of the vehicle and at other times on another vehicle that
could pull quickly backward for long-shot views. Animators assembled all these elements
into a single shot, using the upright frames of the windows as transition points where
elements could be joined unnoticeably. To top it off, the glass of the windows, which
reflects the vehicles and lampposts whizzing by, were added digitally. (See Joe
Fordham’s “Alien Apocalypse,” Cinefex 103 [October 2005]: 76.)

Bazin’s claims about real time are also undermined by the fact that screen time
does not always equal story time. For example, a five-minute long take may not present
five minutes in the story. The shot that tracks the protagonist of Notting Hill through
changing seasons lasts about 100 seconds on the screen, but it covers about a year of
story time. The 91-minute shot that constitutes Russian Ark shifts the viewer backward
and forward through Russian history. Mise-en-scene cues can override the camera’s
recording of real duration, giving the film a flexible time frame. As usual, the
filmmaker’s choices create an overall formal context, and this coordinates the techniques
to have a particular effect.

Websites

http://www.theasc.com/ The official site of the American Society of Cinematographers,
tied to this association’s activities and its journal, American Cinematographer.
Includes many online articles about current productions.

http://www.icgmagazine.com/wordpress/ The site hosting ICG, the magazine of the
International Cinematographers Guild, provides articles and interviews covering
current releases.
http://www.studiody daily.com/filmandvideo/ Contemporary problems and projects involving professional cinematography and editing.

www.cinematography.net/ An extensive forum on professional cinematography.

http://www.studiody daily.com/filmandvideo/ A site devoted to professional production, with much information on cinematography.

http://www.stereoscopynews.com/ Links articles, interviews, and videos about 3D filmmaking.

www.widescreenmuseum.com/ A vast site (950 pages, 3,000 images) devoted to widescreen processes, past and present, as well as color and sound technology.


http://www.in70mm.com/ A site devoted to the history and current practice of 70mm and other film formats.

http://www.youtube.com/watch?v=EjNk-nxHjfM An extract from a DVD supplement for Children of Men: How director Alfonso Cuarón sustained long-take filming without digital effects.
Chapter 6 WHERE TO GO FROM HERE

What Editing Is


As usual, even if we’re not professional filmmakers we can learn a lot from solid handbooks. A good guide to editing is Gael Chandler’s *Cut by Cut: Editing Your Film or Video* (Los Angeles: Michael Wiese, 2004). See also Ken Dancyger, *The Technique of Film and Video Editing: History, Theory, and Practice*, 4th ed. (Boston: Focal Press, 2007) and “The Art and Craft of Film Editing,” *Cineaste* 34, 2 (Spring 2009): 27–64.

Walter Murch, one of the most thoughtful and creative editors in history, provides a rich array of ideas in *In the Blink of an Eye: A Perspective on Film Editing*, 2d ed. (Los Angeles: Silman-James, 2001). Murch, who worked on *American Graffiti*, *The Godfather*, *Apocalypse Now*, and *The English Patient*, has always conceived of image and sound editing as part of the same process. He shares his thoughts in an extended dialogue with prominent novelist Michael Ondaatje in *The Conversations: Walter Murch and the Art of Editing Film* (New York: Knopf, 2002). Ever the experimenter, Murch tried using an inexpensive digital program to edit a theatrical feature. The result is traced in detail in Charles Koppelman, *Behind the Seen: How Walter Murch Edited Cold*


Documentary films characteristically rely on editing, perhaps more than fictional films do. A set of cutting conventions has developed. For example, it is common to intercut talking-head shots of conflicting experts as a way of representing opposing points of view. Interestingly, in making *The Thin Blue Line*, Errol Morris instructed his editor, Paul Barnes, to avoid cutting between the two main suspects. “He didn’t want the standard documentary good guy/ bad guy juxtaposition. . . . He hated when I intercut people telling the same story, or people contradicting or responding to what someone has just said” (Oldham, *First Cut*, p. 144). Morris apparently wanted to give each speaker’s version a certain integrity, making alternative accounts roughly equal in emphasis.
Dimensions of Film Editing

Very little has been written on graphic aspects of editing. See Vladimir Nilsen, The Cinema as a Graphic Art (New York: Hill & Wang, 1959), and Jonas Mekas, “An Interview with Peter Kubelka,” Film Culture 44 (Spring 1967): 42–47.

What we are calling rhythmic editing incorporates the categories of metric and rhythmic montage discussed by Sergei Eisenstein in “The Fourth Dimension in Cinema,” in Selected Works, vol. I, pp. 181–94. For a sample analysis of a film’s rhythm, see Lewis Jacobs, “D. W. Griffith,” in The Rise of the American Film (New York: Teachers College Press, 1968), chap. 11, pp. 171–201. Television commercials are useful to study for rhythmic editing, for their highly stereotyped imagery permits the editor to cut the shots to match the beat of the jingle on the soundtrack.

The Kuleshov experiments have been variously described. The two most authoritative accounts are in V. I. Pudovkin, Film Technique (New York: Grove Press, 1960), and Ronald Levaco, trans. and ed., Kuleshov on Film: Writings of Lev Kuleshov (Berkeley: University of California Press, 1974), pp. 51–55. For a summary of Kuleshov’s work, see Vance Kepley Jr., “The Kuleshov Workshop,” Iris 4, 1 (1986): 5–23. Can the effect actually suggest an expressionless character’s emotional reaction? Two film researchers tried to test it, and their skeptical conclusions are set forth in Stephen Prince and Wayne E. Hensley, “The Kuleshov Effect: Recreating the Classic Experiment,” Cinema Journal 31, 2 (Winter 1992): 59–75. During the 1990s, two Kuleshov experiments, one complete and one fragmentary, were discovered. For a description and historical background on one of them, see Yuri Tsivian, Ekaterina

**Continuity Editing**

For a historical discussion of continuity editing, see Chapter 12 and the chapter’s bibliography.

The hidden selectivity that continuity editing can achieve is well summarized in a remark from Thom Noble, who edited *Fahrenheit 451* and *Witness*: “What usually happens is that there are maybe seven moments in each scene that are brilliant. But they’re all on different takes. My job is to try and get all those seven moments in and yet have it look seamless, so that nobody knows there’s a cut in there” (quoted in David Chell, ed., *Moviemakers at Work* [Redmond, WA: Microsoft Press, 1987], pp. 81–82).


**Contemporary Editing and Intensified Continuity**

Taught in film schools and learned on the job by beginning filmmakers, the principles of continuity editing still dominate cinema around the world. However, there have been some changes in the system. Shots tend to be shorter (*The Dark Knight* contains over 3,100) and framed closer to the performers. The medium shots in older filmmaking traditions display the hands and upper body fully, but intensified continuity concentrates on faces, particularly the actor’s eyes. Film editor Walter Murch says, “The determining factor for selecting a particular shot is frequently: ‘Can you register the expression in the
actor’s eyes?’ If you can’t, the editor will tend to use the next closer shot, even though
the wider shot may be more than adequate when seen on the big screen.”

There’s some evidence that today’s faster cutting pace and frequent camera
movements allow directors to be a bit loose in matching eyelines. In several scenes of
Hulk, Mystic River, 8 Mile, and Syriana, the axis of action is crossed, sometimes
repeatedly. If viewers aren’t confused by these cuts, it’s perhaps because the actors don’t
move around the set very much and so the overall spatial layout remains clear. More
complex spatial layouts may require more cutaways and sound cues, as editor Alan Heim
explains with respect to one scene in The Notebook. See the Editors Guild website at

For more on intensified continuity, see David Bordwell, The Way Hollywood
Tells It: Story and Style in Modern Movies (Berkeley: University of California Press,
2006), pp. 117–89.

Alternatives to Continuity Editing

Eisenstein remains the chief source in this area. A highly introspective filmmaker, he
bequeathed us a rich set of ideas on the possibilities of non-narrative editing; see the
essays in Selected Works, vol. 1. For further discussion of editing in October, see the
essays by Annette Michelson, Noël Carroll, and Rosalind Krauss in the special
more general view of Eisenstein’s editing, see David Bordwell, The Cinema of Eisenstein
(Cambridge, MA: Harvard University Press, 1993). The writings of another Russian,

**Websites**

https://www.editorsguild.com/Magazine.cfm A webpage for *Editors Guild* magazine, with many articles and interviews discussing editing in current films.

http://www.cinemetrics.lv/ Want to study cutting rhythms in a movie of your choice? This nifty software allows you to come up with a profile of editing rates.

http://thefinecut.blogspot.com/ Editor Steven Santos posts short films analyzing editing techniques.


http://www.macvideo.tv/editing/interviews/?articleid=100958 In a series of video interviews Walter Murch traces the recent history of editing, in which software and digital cutting replaced physical work on film, with scissors, glue, Scotch tape, and even paper clips. “People then would boast, ‘I can make a cut in twenty seconds!’”
Chapter 7 WHERE TO GO FROM HERE


David Lewis Yewdall’s *Practical Art of Motion Picture Sound*, 3d ed. (Boston: Focal Press, 2007), is an excellent overview of sound in production and postproduction. It includes an instructive DVD. Other outstanding production handbooks are Tomlinson Holman’s *Sound for Film and Television*, 3d ed. (Boston: Focal Press, 2010), also with a DVD, and Hilary Wyatt and Tim Amyes’s *Audio Post Production for Television and Film*, 3d ed. (Boston: Focal Press, 2004).


### The Power of Sound

The psychologists’ term for our spontaneous merging of information from different senses is “cross-modal perception.” It has been observed in newborn babies and in children as young as four months. Joseph D. Anderson, *The Reality of Illusion: An Ecological Approach to Cognitive Film Theory* (Carbondale: University of Illinois Press, 1996), chap. 5, provides a compact introduction to how our bias toward cross-modal pickup shapes our understanding of films.


The artistic possibilities of film sound are discussed in many essays. A comprehensive anthology is *The Oxford Handbook of New Audiovisual Aesthetics*, ed.


As the Letter from Siberia extract suggests, documentary filmmakers have experimented a great deal with sound. For other cases, watch Basil Wright’s Song of Ceylon and Humphrey Jennings’s Listen to Britain and Diary for Timothy. Analyses of sound in these films may be found in Paul Rotha, Documentary Film (New York: Hastings House, 1952), and Karel Reisz and Gavin Millar’s Technique of Film Editing (New York: Hastings House, 1968), pp. 156–70.

Stephen Handzo provides a wide-ranging discussion of systems for recording and reproducing film sound in “A Narrative Glossary of Film Sound Technology,” in Belton and Weis, Film Sound: Theory and Practice. An updated survey is available in Gianluca Sergi, The Dolby Era: Film Sound in Contemporary Hollywood (Manchester: Manchester University Press, 2005).


Walter Murch is as important to the history of American sound design as he is to the history of editing. There are many interviews with him on the Web. A selection of videos is here: http://designingsound.org/2009/10/walter-murch-special-interviews/. An engrossing transcript of an interview discussing the history of sound recording and
reproduction, as well as his work on *The Godfather* and *The English Patient*, is at
http://www2.yk.psu.edu/~jmj3/murcfq.htm.

**Silent Film Versus Sound Film**

It’s long been assumed that cinema is predominantly a visual medium, with sound forming at best a supplement and at worst a distraction. In the late 1920s, many film aestheticians protected against the coming of talkies, feeling that synchronized sound spoiled a pristine mute art. In the bad sound film, René Clair claimed, “The image is reduced precisely to the role of the illustration of a phonograph record, and the sole aim of the whole show is to resemble as closely as possible the play of which it is the ‘cinematic’ reproduction. In three or four settings there take place endless scenes of dialogue which are merely boring if you do not understand English but unbearable if you do” (*Cinema Yesterday and Today* [New York: Dover, 1972], p. 137). Rudolf Arnheim asserted that “the introduction of the sound film smashed many of the forms that the film artists were using in favor of the inartistic demand for the greatest possible ‘naturalness’ (in the most superficial sense of the word)” (*Film as Art* [Berkeley: University of California Press, 1957], p. 154).

Today we find such beliefs far-fetched, but we need to remember that many early sound films relied simply on dialogue for their novelty; both Clair and Arnheim welcomed sound effects and music but warned against chatter. In any event, the inevitable reaction was led by André Bazin, who argued that a greater realism was possible in the sound cinema. See his *What Is Cinema?* vol. 1 (Berkeley: University of California Press, 1967). Even Bazin, however, seemed to believe that sound was
secondary to the image in cinema. This view is also put forth by Siegfried Kracauer in *Theory of Film* (New York: Oxford University Press, 1965). “Films with sound live up to the spirit of the medium only if the visuals take the lead in them” (p. 103).

Today, many filmmakers and filmgoers would agree with Francis Ford Coppola’s remark that sound is “half the movie . . . at least.” One of the major advances of film scholarship of the 1970s and 1980s was the increased and detailed attention to music, dialogue, and effects. Correspondingly, modern sound tracks are worked in fine detail, and sound reproduction has become a point of interest for audiences and home-theatre aficionados. See Mark Kerins, *Beyond Dolby (Stereo): Cinema in the Digital Sound Age* (Bloomington: Indiana University Press, 2010).


**Film Music**
Of all the kinds of sound in cinema, music has been the most extensively discussed. The literature is voluminous, and many recorded film scores have become available.


For sensitive analyses of film music, see Graham Bruce, *Bernard Herrmann: Film Music and Narrative* (Ann Arbor: University of Michigan, 1985); Kathryn Kalinak,

The Scarecrow Press has launched a series devoted to particular film scores, with, for instance, Charles Leinberger, Ennio Morricone’s The Good, the Bad, and the Ugly: A Film Score Guide (2004), Ben Winters, Erich Wolfgang Korngold’s The Adventures of Robin Hood: A Film Score Guide (2007), and Annette Davison, Alex North’s A Streetcar Named Desire: A Film Score Guide (2009). David Julyan’s discussion of scoring The Prestige can be found at http://www.aintitcool.com/node/31031.

Dubbing and Subtitles

People beginning to study cinema may express surprise (or annoyance) that films in foreign languages are usually shown with subtitled captions translating the dialogue. Why not, some viewers ask, use dubbed versions of the films—that is, versions in which the dialogue has been rerecorded in the audience’s language? In many countries, such as Germany and Italy, dubbing is very common. Why, then, do most people who study movies prefer subtitles?

There are several reasons. Dubbed voices usually have a bland studio sound. Elimination of the original actors’ voices wipes out an important component of their
performance. (Partisans of dubbing ought to look at dubbed versions of English-language films to see how a performance by Katharine Hepburn, Orson Welles, or John Wayne can be hurt by a voice that does not fit the body.) With dubbing, all of the usual problems of translation are multiplied by the need to synchronize specific words with specific lip movements. Most important, with subtitling, viewers still have access to the original sound track. By eliminating the original voice track, dubbing simply destroys part of the film.

For a survey of subtitling practice, see Jan Ivarsson and Mary Carroll, Subtitling (Simrishamn, Sweden: TransEdit, 1998).

**Recommended Websites**

http://www.filmsound.org The most comprehensive and detailed website on sound in cinema, with many articles, interviews, videos, and links to other sites.

http://www.mixonline.com The site for Mix Magazine, devoted to all aspects of film and video sound production. Offers many free articles and original Webcontent, including video interviews.

http://designingsound.org/ A collection of blogs, news, and articles, with in-depth interviews with sound designers, some of whom answer readers’ questions.

http://usoproject.blogspot.com/ Unidentified Sound Object is a site devoted to electronica and sound experiment, with many interviews with film sound designers.

http://www.widescreenmuseum.com/sound/sound01.htm A review of the history of sound systems, illustrated with original documents.
http://www.filmmusic.com News of current releases, along with interviews with composers and music crew.

http://www.filmscoremonthly.com/daily/index.cfm An informative fan site, including articles, videos and a regular feature “Did They Mention the Music?,” which lists current reviews that refer to a film’s score.

Chapter 8 WHERE TO GO FROM HERE

The Concept of Film Style

Sometimes the concept of style is used evaluatively, to imply that something is inherently good. (“Now that’s got real style!”) Throughout Film Art we use the term descriptively. From our perspective, all films have style. That’s because all films make some use of the techniques of the medium, and those techniques will be organized to a considerable degree. Style, as our quotation from the Coen brothers suggests, is the result of hundreds of creative decisions made by the filmmakers.


For essays on a wide variety of styles and films, see Lennard Højbjerg and Peter Schepelern, eds., Film Style and Story: A Tribute to Torben Grodal (Copenhagen: Museum Tusculanum Press, 2003). Several articles on film style are gathered in a special issue of the journal Style 32, 3 (Fall 1998). For a survey of the different ways in which


An entire book has been written on the production of *Citizen Kane*, and it sheds light on how its style was created: Robert L. Carringer’s *The Making of Citizen Kane* (Berkeley: University of California Press, 1985). Among other things, Carringer reveals the degree to which Welles and his collaborators used special effects for many of the film’s scenes. A tribute to the film, and a reprinting of Gregg Toland’s informative article on the film, “Realism for *Citizen Kane*,” is available in *American Cinematographer* 72, 8 (August 1991): 34–42. For a *Life* magazine article on how Toland publicized deep-focus technique, scroll to pages 110–16 here: http://books.google.com/books?id=h0wEAAAMBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.

Chapter 9 WHERE TO GO FROM HERE

Genres and Society


Another conception of a genre’s social function holds that genre films are centrally concerned with social groups—particularly women and racial minorities—that are oppressed and feared by many in a society. The genre’s stories and iconography portray those groups as threatening the majority’s way of life. The film’s action will then work to contain and defeat these elements. One argument for this approach can be found in Robin Wood, “An Introduction to the American Horror Film,” in Bill Nichols, ed., *Movies and Methods*, vol. II (Berkeley: University of California Press, 1985), pp. 195–220. For a criticism of this otherness theory, see Noël Carroll’s *The Philosophy of Horror; or, Paradoxes of the Heart* (New York: Routledge, 1990), pp. 168–206.

Specific Genres


Genres familiar from American cinema often exist in other nations as well. One example is examined in Robin Buss, *French Film Noir* (London: Marion Boyars, 1994). The horror film has a broad international appeal, as demonstrated in Steven Jay

**Websites**

[http://www.filmsite.org/genres.html](http://www.filmsite.org/genres.html) Wide-ranging discussion of many genres, including historical summaries and key examples.


Chapter 10 WHERE TO GO FROM HERE

Documentary Films


Alan Rosenthal presents case studies of several important film and television documentaries, including Barbara Koppel’s Harlan County, U.S.A., in The Documentary Conscience: A Casebook in Film Making (Berkeley: University of California Press, 1980).

On Roger and Me

On its release, Roger and Me was hailed as one of the best films of 1989, winning large audiences in the United States and abroad. It seemed a likely contender for an Academy Award until a series of articles pointed out that the film diverged from the actual chronology of events. Accordingly, there was a question of whether the massive worker layoffs at a General Motors plant damaged the community in all the ways that the film indicated. The major claims appeared in Harlan Jacobson’s interview with director Michael Moore (“Michael and Me,” Film Comment 25, 6 [November–December 1989]: 16–30). This often-heated conversation explores different conceptions of documentary accuracy.

When challenged by Jacobson about the order of events, Moore granted that “the chronology skips around a bit. That’s why I don’t use dates in the film” (p. 111). He claimed that he had sought to portray the entire 1980s and that the chronology of the film was not intended to be exact. Moore also said that rearranging events made the film more
entertaining and allowed him to condense a decade down to a manageable viewing length.

The controversy is discussed in Carley Cohan and Gary Crowdus, “Reflections on Roger and Me, Michael Moore, and His Critics,” Cinéaste 17, 4 (1990): 25–30. Roger Ebert defended the film as an angry satire and quoted another documentarist: “You get the best footage you can, and put it together to make the best point you can. If everything had to be in chronological order, there aren’t many documentaries that could pass the test.” Ebert’s article is available at


Websites on Documentary

http://www.documentary.org/ Site of the International Documentary Association, with news, extracts, interviews, and articles from Documentary magazine. An interview with Les Blank is on the site at


http://documentary.net/ A large collection of documentaries, amateur and professional, available for free online viewing. Similar sites are


**Experimental Films**


Several books focus on particular aspects of experimental cinema. Found-footage film is discussed in William C. Wees, *Recycled Images* (New York: Anthology Film Archives, 1993), and Cecilia Hausheer and Christoph Settele, eds., *Found Footage Film*

Several of the experimental filmmakers mentioned in this book have been the subjects of studies. On Maya Deren, see Bruce R. McPherson, ed., *Essential Deren* (Kingston, NY: Docutext, 2005). See also Peter Boswell, Joan Rothfuss, and Bruce Jenkins, *2000 BC: The Bruce Conner Story Part II* (New York: Distributed Art Publishers, 1999). (In keeping with Conner’s sense of humor, there is no Part I.) The work of Andy Warhol in various media has received extensive coverage, but the books most directly focused on his films include Michael O’Pray, ed., *Andy Warhol: Film Factory* (London: British Film Institute, 1989), and J. J. Murphy, *The Black Hole of the Camera: The Films of Andy Warhol* (Berkeley: University of California Press, 2012).


Websites on Experimental Film
http://www.dmoz.org/Arts/Movies/Filmmaking/Experimental A portal to several websites on experimental cinema.


Animated Films

A good place to start studying film animation is Maureen Furniss’s *Art in Motion: Animation Aesthetics* (Sydney: John Libbey, 2007). Good general introductions to the various techniques of predigital animation are Roger Noake’s *Animation: A Guide to Animated Film Techniques* (London: MacDonald Orbis, 1988) and Kit Laybourne’s *The Animation Book* (New York: Three Rivers, 1998).

As for digital animation, Andrew Chong’s *Digital Animation* (Lausanne, Switzerland: AVA Publishing, 2008) presents a survey of techniques employed to make films and games, with many excellent illustrations. Isaac V. Kerlow’s *The Art of 3D and Computer Animation and Effects, 4th ed.* (Hoboken, NJ: Wiley, 2009) contains a historical introduction and explains how the techniques we discussed in Part Three, such as lighting and camera movement, are simulated with software. The most widely used CGI animating program, Maya, is explained (including an instructional CD-ROM) in *The Art of Maya, 4th ed.* (Sybex, 2007).


Another nation’s important contribution is examined in Richard Neupert’s *French Animation History* (Chichester, UK: Wiley-Blackwell, 2011).

Specific methods of animation are dealt with in Robert Russett and Cecile Starr, ed., *Experimental Animation: An Illustrated Anthology* (New York: Van Nostrand

As the boundaries between animation and digital special effects dissolve, it’s helpful to have a website like Animation World Network (http://www.awn.com) that covers both. Animation and effects expert Bill Desowitz posts regularly at http://www.awn.com/users/bdesowitz/, often providing behind-the-scenes interviews with filmmakers. He also blogs on *Immersed in Movies* at http://www.billdesowitz.com/.

Animators’ websites tend to be prettier and crazier than most. For samples, visit the home pages of Bill Plympton (http://www.plymptoons.com/index_main.html), Sally Cruikshank (http://funonmars.blogspot.com/), and Nina Paley (http://blog.ninapaley.com/).

On Jan Svankmajer, director of Dimensions of Dialogue, see Dark Alchemy: The Films of Jan Svankmajer (Trowbridge, UK: Flicks, 1995), ed. Peter Hames, especially Hames’ essay, “The Film Experiment” (pp. 7–47) and his “Interview with Jan Svankmajer” (pp. 96–118). The Brothers Quay, animators themselves, have paid tribute to the Czech master in a short film, The Cabinet of Jan Svankmajer: Prague’s alchemist of Film. Svankmajer’s website is at http://www.jansvankmajer.com/.

Japanese Anime

Although many countries have made animated films, the worldwide commercial market was long dominated by American cartoons, particularly those from the Disney studio. Until quite recently, theatrical animation was so expensive that only large companies could support it. In the 1970s, however, small Japanese companies emerged as rivals to Hollywood firms. They began producing hundreds of what came to be known as anime (pronounced AHnee-may), which quickly became part of the world’s film culture.

The films came in many genres. Science fiction efforts such as Macross, Gundam, and Fist of the North Star proved particularly popular, as did postapocalyptic cyberpunk
sagas, most notably *Bubblegum Crisis* and *Akira*. There were also fantasy comedies (*Urusei Yatsura, Ranma ½*), serious dramas (*Grave of the Fireflies*), and children’s films of a quiet charm rarely achieved by the brash Disneys (notably Hayao Miyazaki’s *Kiki’s Delivery Service* and *My Neighbor Totoro*). Some anime defies description, including the nutty *Project A-Ko* and the erotic-mythical *Urotsukidoji: Legend of the Overfiend*.

Lacking the funding of the big U.S. companies, Japanese animators learned to do more with less. They couldn’t duplicate the incessant bustle and flashy depth effects that Disney preferred, so they worked with static shots enhanced by slight motions: winds rustling a dress, a tear rolling down a cheek, even just the shimmer in a character’s eyes. Directors also concentrated on *mecha* figures—robots and giant machines, which with their chunky outlines and stiff movements are easier to animate than the flexible human body. When required to animate humans, the Japanese often encased them in hard-body space suits (in effect turning them into robots) or rendered them as fairly flat shapes, as in comic strips. And many works of anime explore subtle changes in color produced by light, liquid, mist, and reflections—all easier to depict than a landscape teeming with figures.

Some TV anime, such as *Speed Racer*, made their way to television in Europe and North America, and *Akira, Ghost in the Shell*, and *Pokémon: The First Movie* had successful English-language releases. Still, videotapes and DVD have been the sources of anime for Western *otaku* (obsessive fans), who hold conventions and go online to discuss their favorites. For historical background, see Helen McCarthy’s *Anime! A Beginner’s Guide to Japanese Animation* (London: Titan, 1993) and *The Anime Movie Guide* (London: Titan, 1996). McCarthy has also written a detailed study of the creator of Kiki,

**Animation Websites**


http://www.keyframeonline.com Provides information on various aspects of the current animation industry.

http://www.portalbrain.com/anime/ Animation portal directing you to many anime sites.


http://www.michaelbarrier.com/ Animation expert Michael Barrier has a large website with articles, interviews, and scans from rare publications and primary documents.
http://www.pixar.com/index.html. Pixar’s website contains many simple demonstrations of the techniques used to make the studio’s 3D films.
Chapter 11 WHERE TO GO FROM HERE

Examples of Film Analysis


Collections of film analyses include Peter Lehman, ed., *Close Viewings: An Anthology of New Film Criticism* (Tallahassee: Florida State University Press, 1990); Jeffrey Geiger and R. L. Rutsky, eds., *Film Analysis: A Norton Reader* (New York:

The British Film Institute publishes a series of short books analyzing individual films, called “Film Classics.” A list is the Filmstore at http://filmstore.bfi.org.uk/acatalog/BFI_Filmstore_Books___Magazines_5.html.

We have posted several other sample analyses in pdf format at http://www.davidbordwell.net/filmart/index.php. These, from earlier editions of Film Art, analyze other films along the lines laid out in Chapter 11.

Classical narrative and style: The Man Who Knew Too Much (1934), Stagecoach (1939), Hannah and Her Sisters (1985), Desperately Seeking Susan (1985)

Nonclassical approaches to storytelling: Day of Wrath (1943), Last Year at Marienbad (1961), Innocence Unprotected (1968)

Animation: Clock Cleaners (1937)

Ideology: Tout va bien (1972)

Documentary form and style: High School (1968)

Background on Films Analyzed in This Chapter


*North by Northwest.* François Truffaut’s famous marathon interview, published as *Hitchcock* (New York: Simon and Schuster, 1967), remains one of the best sources of information on the director. *North by Northwest* is mentioned frequently throughout and discussed in a more sustained way on pages 190–95. Many of the ideas discussed elsewhere in the book are also relevant to this film. Production background, including on-set photographs and material used for planning the “crop-dusting” scene, is provided in Bill Krohn’s *Hitchcock at Work* (London: Phaidon, 2000), pp. 202–17.


**Chungking Express.** In *Wong Kar-wai: Auteur of Time* (London: British Film Institute, 2005), Stephen Teo traces the influence of Japanese novelist Haruki Murakami on the space-time dynamics of the film (pp. 47–64). Peter Brunette’s *Wong Kar-wai* (Urbana: University of Illinois Press, 2005) devotes a chapter to *Chungking Express* (pp. 45–57) and includes a lengthy interview with Wong (pp. 113–33). David Bordwell’s *Planet Hong Kong: Popular Cinema and the Art of Entertainment*, 2d ed. (Madison: Irvington Way Institute Press, 2011) examines Wong’s career and focuses on *Chungking Express* (pp. 180–85). This e-book is available at [http://www.davidbordwell.net/books/planethongkong.php](http://www.davidbordwell.net/books/planethongkong.php). Wong’s films are widely discussed on the Web, and a search will turn up many critical essays. A wide-ranging fan site is [http://www.wongkarwai.net/](http://www.wongkarwai.net/).

**Man with a Movie Camera.** Vlada Petrić’s *Constructivism in Film: The Man with the Movie Camera: A Cinematic Analysis* (Cambridge: Cambridge University Press, 1987) describes the film’s historical context and analyses its form and style in considerable detail. Vertov’s writings are available in English in (1984) *Kino-Eye: The Writings of*


**Online Film Analysis**


We also analyze films on “Observations on film art.”
Most analysis these days is done using DVD copies. But not all films are on DVD; older ones are often available only in archives. In one blog entry we write about studying an archival print on 35mm; see

Chapter 12 WHERE TO GO FROM HERE

General


Websites

http://www.onlineschools.org/2009/11/08/100-free-online-archives-for-film-students-and-enthusiasts/ Many archives have posted films here, mostly older ones in the public domain.
http://mediahistoryproject.org/ The Media History Digital Library provides collections of newspapers, magazines, journals, and books from across film history, ideal for historical research projects.

http://www.latrobe.edu.au/screeningthepast/ Screening the Past is an online journal of film history.

**Silent Cinema**


Dibbets, Karl, and Bert Hogenkamp, eds. *Film and the First World War*. Amsterdam: Amsterdam University Press, 1995.


**Silent Cinema Websites**


[http://www.silentfilm.org/](http://www.silentfilm.org/) San Francisco Silent Film Festival, an annual event in a restored picture palace.


**Classical Hollywood Cinema**


**German Expressionism**


Hudson, David. “German Expressionism,” *Green Cine*,


---

**French Impressionism**


Soviet Montage


**The Classical Hollywood Cinema After the Coming of Sound**


---

**Italian Neorealism**


Rohdie, Sam. *Rocco and His Brothers (Rocco e I suoi fratelli).* London: British Film Institute, 1992.


**The French New Wave**


**French New Wave Websites**

http://www.newwavefilm.com/ Also covers “new waves” in other parts of the world.

http://frenchnewwave.blogspot.com/ A detailed blog focusing on the directors of the New Wave, with information on books, reviews, and screenings.

**The New Hollywood and Independent Filmmaking**


**American Independent Film Websites**


**Contemporary Hong Kong Cinema**


**Websites on Hong Kong Cinema**

http://hkmdb.com/db/search/noauto/index.mhtml?display_set=eng The Hong Kong Movie Database: Credits and release information for Hong Kong films.

http://lovehkfilm.com/about_site.htm Reviews and articles about Hong Kong films old and new.