The essays collected here, spanning 30 years, represent some of my efforts to answer questions about cinema from the standpoint of what I call film poetics. These efforts might be characterized as pushing a doctrine—most will call it formalist—but I think I'm doing something else. Granted, these essays put the film as an artwork at the center of study; they analyze form and style. But they also try to mount explanations of how films work, and why under certain circumstances they came to look the way they do. Those explanations invoke a wide range of factors: artistic intentions, craft guidelines, institutional constraints, peer norms, social influences, and cross-cultural regularities and disparities of human conduct.

Taken together, the essays are at once critical, in the sense of looking closely at movies, and historical, in the sense of trying to explain how they got the way they are. Are these essays also theoretical? They are, but not as theory in the academic humanities is currently understood. Here's what theory looked like as of December 29, 2005, when I received the following e-mail from the Visual Culture program of my university. The message announces an upcoming conference called TRANS.

This is a practical call to participate in an important transitional moment. After all the appeals to think beyond the "post" and the "inter," after all the gestures asking us to move beyond the divisions of history, theory, and art making, imagined and lived communities, scholarship and activism, area studies and the disciplines, the sciences, social sciences and humanities, deconstructive and reparative work, knowledge-production and critique, what kinds of knowledges are we producing, how, and to what ends? What methodologies, pedagogical techniques, curricular structures and programming agendas do we actually put into practice and toward what goals?

The conference takes the transsubstantiating [*sic*] challenge of the "trans" in Transdisciplinarity, Transgender, Transethnic, Transart, and Transracial not just as its theme but also as its point of departure. How might the cultural and

political processes of the "trans" in transplanting, transmitting, transculturating, and transferring mark not only hybridizing crossings but also the forging of structural transformations?

The event will be held in Transylvania.

Okay, I made up the last sentence, but the rest is exactly as I received it.¹ If this is theory, the essays that follow aren't.

Most humanists' conception of theory—or as we should call it, Theory, aka Grand Theory—is at once too broad and too narrow. It's too broad because it presumes that all human activity can be subsumed within some master conceptual scheme (even though some postmodernists advance the conceptual scheme that all conceptual schemes are fatally flawed). The current conception of Theory is too narrow because it presumes a limited conception of how one does intellectual work. The rise of Theory crushed *theories* and discouraged *theorizing*. Grand Theory created bad habits of mind. It encouraged argument from authority, ricochet associations, vague claims, dismissal of empirical evidence, and the belief that preening self-presentation was a mode of argument. Above all, it ratified what I call doctrine-driven thinking as the principal mode of humanistic inquiry. Proponents of Theory routinely play up the differences among theoretical positions, but they ignore what unites them—the idea that any program propelled by doctrines can be applied, via imaginative extrapolation, to one phenomenon or another. The cluster of doctrines isn't questioned skeptically; the effort goes into diligent application.

Or at least some of the effort. A lot, perhaps the bulk of it, goes into rhetoric of a peculiar kind. My TRANS instance, deadly serious and yet playful in a self-congratulating way, illustrates what Frederick Crews has called the "ponderous coyness" of this tradition. But there's an element of sheer obfuscation too.

Is the insistence that nature *is* artifactual not more evidence of the extremity of the violation of a nature outside and other to the arrogant ravages of our technophilic civilization, which, after all, we were taught began with the heliotropisms of enlightenment projects to dominate nature with blinding light focused by optical technology? Haven't eco-feminists and other multicultural and intercultural radicals begun to convince us that nature is precisely *not* to be seen in the guise of the Eurocentric productionism and anthropocentrism that have threatened to reproduce, literally, all the world in the deadly image of the Same?²

Catching us up in a jungle of catchphrases and vague and unsupported claims (you have to admire the bravado of "precisely"), this passage may make us forget that it's a pair of rhetorical questions, to which one can always answer, "No." It would take pages to untangle this rodomontade. We have lived with this writing for 30 years. Its limping cadences, convulsive syntax, and strategic confusions have dulled our senses. Very likely, no one in the history of English ever published prose as incomprehensible as that signed by Theorists.

The masses, Nietzsche once remarked, consider something deep as long as they cannot see to the bottom. Not just the masses, but also the Modern Language

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Association. Combine Hegelian ambitions for a world system of thought, patched together from a passel of incompatible doctrines, with prose that wants to strut and be evasive at the same time, and you have a trend that dodges the task to which we thought academics had pledged their professional lives: producing knowledge that is reliable and approximately true. There's a difference between getting a buzz and getting things more or less right.

It needn't be so. The best means to produce reliable knowledge, it seems clear, is the tradition of rational and empirical inquiry. By rational inquiry, I mean probing concepts for their adequacy as descriptions and as explanations of problems. Problems are stated as questions to be answered; the more concrete, the better. Empirical inquirynot "empiricism," as humanists have to be told over and over-involves checking our ideas against evidence that exists independent of our beliefs and wishes-not evidence delivered in pristine innocence, without conceptual commitments on the part of the seeker, and not facts that "speak for themselves." What is evidence? It's what is corrigible in the light of further information. And to those who believe that facts are inevitably relative to your standpoint, I'd reply that both concepts and evidence can cut across different research frameworks. Suppose we ask how to explain the accelerated cutting rates of films between 1908 and 1920. Some researchers will suggest looking to craft norms; others will point to wider cultural factors, like modernity; and some will suggest combining these or other causal inputs. But all researchers share to a high degree the concept of what a shot is, what a cut is, and what would count as a fair measure of accelerated editing pace. Film studies, like most of what is pursued in the humanities, is an empirical discipline. It isn't ontology, mathematics, or pure logic. A beautiful theory can be wounded by a counterexample.

So this collection isn't just critical and historical. It has one foot in film theory, but it doesn't conceive theory as an all-purpose explanation, a weltanschauung ready for exploitation. The essays center on middle-level questions. How do particular filmmaking traditions create normalized options for visual style, and how have creative filmmakers worked with these? What staging strategies do we typically find in CinemaScope films? What are the conventions of certain storytelling formats, like forking-path plots and network narratives, and how do they engage us? What regularities of film technique can we find in classic Japanese cinema or more recent Hong Kong filmmaking? Such questions urge us not only to forge concepts (that is, mount theories) but also to look closely (analyze films) and to study the contingencies of time and place (investigate history). Out of midlevel inquiries can ripple bigger issues, such as the degree to which popular culture can be artistically innovative, or the way in which our minds engage with narrative. Noticing minor things, like actors' eye movements, can lead us to broader conceptions of how films affect us. At the risk of looking fussy, I try to study manageable problems, but I also try to tease out some larger implications.

Some will say I'm actually aiming at "science." I'd say, rather, that I'm trying to join the tradition of rational and empirical inquiry, a broader tradition than what we usually consider to be science. This tradition includes historical research and a mix of inductive and deductive reasoning that tries to fit the answer to the question. My aim is to produce reliable knowledge, both factual and conceptual, about film as an art form, in the hope that this knowledge will deepen people's understanding of cinema.

Rational-empirical research programs have been undertaken by many other film scholars, perhaps more by historians than by critics and theorists, but I try to answer questions from a distinctive angle. That angle I call the poetics of cinema, and I explain what I mean in the first essay. Poetics seems to me to provide a good tool for probing some intriguing midrange problems about film as an art. It won't secure us against error, but it does help make our mistakes corrigible. Big Theory comes and goes, but imaginative inquiry of any sort, poetics based or not, that is grounded in argument and evidence remains our best route to understanding cinema, its makers and viewers, and its place in our lives.

Still, science does sometimes raise its head in the pages that follow. I occasionally invoke social-scientific studies and even evolutionary accounts as components of causal explanations, and I fear that these efforts will be greeted with the usual resistance from humanistic circles. There are good grounds to consider this resistance flat-out dogmatism. One of my female graduate students became interested in evolutionary psychology, spurred by distinguished feminists who argue that it should be part of any comprehensive investigation of sexism.³ The student found that her teachers in women's studies courses resolutely refused to let her write papers on the subject. If you don't like a one-off anecdote, consider this. Although university presses like MIT, Harvard, California, Chicago, and the like routinely publish books on evolutionary theory in the biological and social sciences, as of this writing none has produced a book on evolutionary theory of art and literature. That task has been left to less salient houses.⁴ The editors of a recent collection of essays, *The Literary Animal: Evolution and the Nature of Narrative*, found securing a publisher unusually difficult.

Time after time, the science editor of a given press would express great interest, only to encounter the resistance of the literary studies editor.... We therefore want to express our gratitude to Northwestern University Press for their courage—no other word will do—in publishing our volume.⁵

All the evidence indicates that poststructuralist humanists, who purportedly revel in a Bakhtinian play of discourses, have tenaciously resisted giving the floor to discussions of art in cognitive or evolutionary terms. When the Modern Language Association (MLA) was launching a study group in evolutionary psychology of literature, a well-known scholar in the area told me that it could have been started only by a graduate student. The MLA wants to encourage its junior members, but a senior scholar would have seemed to be leading a cabal. On a much smaller scale, 10 years ago a group of media scholars formed the Center for Cognitive Studies of the Moving Image, but as of this writing, none of the U.S. members teaches in a graduate program devoted to cinema studies. I have yet to hear that any department on the lookout for talent has decided that it needs a cognitivist to balance out its postmodernists, postcolonialists, and cultural studies adherents.

By and large, humanist intellectuals dismiss cognitive theory and evolution-based explanations because they distrust science. As the most visible instance of reliable

knowledge in our culture, scientific research has been a target for relativists who doubt all claims to authoritative knowledge (except those claims to authoritative knowledge made by the relativists themselves). In addition, many progressive people believe that egalitarianism is threatened by expertise, so science, in setting up standards of theory and proof, seems to be "policing" discourses. But of course expertise has proven itself more reliable as a source of knowledge than intuition, superstition, and political fiat. In addition, there's the danger that considering science "just another discourse" plays into ignorance and oppression. We in the United States are all too aware that religious faith can be whipped up to support dangerous political policies. Any progressive person ought to deplore the results of a 2005 poll finding that two thirds of Americans believe that humans were directly created by God, and two fifths claim to believe that "living things have existed in their present form since the beginning of time."⁶ Whatever your politics, it's better to act from accurate information and coherent ideas than from lies and mistakes.⁷ That means acknowledging that the tradition of rational and empirical inquiry, however subject to error, is our most reliable path to reliable knowledge, which can be used for progressive ends.

Too often, humanists recoil from science because of its social uses. Science, many feel, is to blame for many of our current woes, from pollution to the threat of nuclear war, and its sins include eugenics and the ghastly experiments in the Nazi camps. Undoubtedly scientists have sometimes been recruited to immoral enterprises, and like all knowledge, scientific knowledge doesn't automatically confer virtue. Still, science as a communal endeavor can better the human condition. Many humanists justifiably believe that racial inequality, class prejudice, and global warming are threats to civil society. Who offers the compelling evidence that young Black men are the United States' most at-risk population and that working-class citizens have suffered most under Republican regimes? Not professors of literature but sociologists, economists, anthropologists, and political scientists. Attorneys, legal researchers, and forensic scientists have used DNA evidence to free unjustly imprisoned people. Warnings about global climate change come from the united efforts of biologists, geographers, geologists, and other experts. Medical professionals struggle to eradicate HIV and cancer, and some risk their lives to inoculate children in the inferno of war. It's shameful for comfortable academics to believe that these heroes labor under a flawed epistemology.

In any event, despite what Theorists say, they don't believe it. A postmodernist who gets the flu hurries to the doctor as fast as anybody else. The doctor's diagnosis, backed up by the research of thousands of specialists in the life sciences, is relied on, not dismissed as a culturally biased interpretation or a text to be read under suspicion. "Show me a cultural relativist at thirty thousand feet," notes Richard Dawkins, "and I'll show you a hypocrite." Only in the seminar room (and the pulpit) is science deeply suspect.⁸

In subscribing to the antiscientific stance of Theory, film studies risks remaining provincial. Reading the Theory pick hits of the 1970s and 1980s, you wouldn't know that Chomskyan, not Saussurean, linguistics was revolutionizing the study of language, or that cognitive psychology and neuropsychology were teaching us more about the mind

than Lacan could imagine (and he had a capacious imagination). Film studies, even with its professed "historical turn," continues to emphasize "methods" over questions, catchwords over concepts, and doctrines over free-ranging inquiry.⁹ Too many film scholars promote a limited conception of interdisciplinarity, borrowing ideas only from trends that fall within the Continental hermeneutic tradition (theories of literary interpretation, Lacanian psychoanalysis, postmodern anthropology, and the like). By asking questions from a broader purview, we open ourselves to ideas from comparative narratology, cognitive psychology, Darwinian theoretical programs, network theory, and other progressive trends in the human sciences. We needn't look to them for ultimate answers—we don't need another dogmatism—but we should canvass widely in seeking out help in answering the research questions we pose.

Most of the essays collected here have appeared in print before. All have been revised, some a lot. Now I appreciate why so many authors prefer reprinting old articles to recasting them. It's harder to patch up an old piece than to weave a wholly new one. Although I haven't tried to summarize developments in any exhaustive way, a few essays in this book include codas that develop some themes in the light of recent research. New to this volume are "Poetics of Cinema," "Three Dimensions of Film Narrative," "Mutual Friends and Chronologies of Chance," and "CinemaScope: The Modern Miracle You See Without Glasses," although the first and last have their roots in older pieces.¹⁰ Further reprints of essays will, I hope, be appearing on my Web site, http://www.davidbordwell.net, along with new material from time to time.

In assembling this collection, I was helped by Eric Crosby and Brad Schauer, who took care of text matters, and Jake Black and Kristi Gehring, who prepared the illustrations. Many institutions have helped shape the original essays, notably the University of Wisconsin-Madison, which helped my research in a generous variety of ways. I must also thank several people at film archives, most notably the late Jacques Ledoux and Gabrielle Claes of the Royal Film Archive of Belgium; Pat Loughney and the late Kathy Loughney of the Motion Picture and Recorded Sound division of the Library of Congress; Charles Silver and Mary Corliss of the Museum of Modern Art; the late James Card, Chris Horak, and Paolo Cherchi Usai of George Eastman House; Bob Rosen, Charles Hopkins, and Eddie Richmond of the UCLA Film and Television Archive; Schawn Belston of the Twentieth Century Fox Film Archive; Mike Pogorzelski of the Academy of Motion Picture Arts and Sciences Archive; Elaine Burrows of the National Film and Television Archive of London; Ib Monty, Karen Jones, Dan Nissen, and Thomas Christensen of the Danish Film Institute Archive; Matti Lukkarila and Antti Alanen of the Finnish Film Archive; Okajima Hisashi of the Japan Film Center; and Chris Horak, Stefan Droessler, and Klaus Volkmer of the Munich Film Museum. My thanks extend as well to the helpful people staffing all these archives.

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Finally, I must single out Bill Germano, a friend of long standing who made this anthology possible, and Kristin Thompson, whose loyalty and love have sustained me for even more years than this collection spans.

Notes

Introduction

- 1. The whole text is now available at "Trans: A Visual Culture Conference at the University of Wisconsin–Madison," http://www.visualculture.wisc.edu/Conference/call.htm.
- 2. Donna Haraway, "The Promises of Monsters: A Regenerative Politics for Inappropriated Others," in *Cultural Studies*, ed. Lawrence Grossberg, Cary Nelson, and Paula Treichler (New York: Routledge, 1992), 297.
- 3. Examples are Sarah Blaffer Hrdy, The Woman That Never Evolved (Cambridge, Mass.: Harvard University Press, 1981); Sarah Blaffer Hrdy, Mother Nature: Maternal Instincts and How They Shape the Human Species (New York: Ballantine, 1999); Alison Jolly, Lucy's Legacy: Sex and Intelligence in Human Evolution (Cambridge, Mass.: Harvard University Press, 1999); Anne Campbell, A Mind of Her Own: The Evolutionary Psychology of Women (New York: Oxford University Press, 2002), especially 1–33; and Griet Vandermassen, Who's Afraid of Charles Darwin? Debating Feminism and Evolutionary Theory (Lanham, MD: Rowman & Littlefield, 2005).
- 4. Examples of work in this tradition are Ingo Rentschler, Barbara Herzberger, and David Epstein, eds., *Beauty and the Brain: Biological Aspects of Aesthetics* (Basel, Switzerland: Birkhäuser Verlag, 1988); Joseph Carroll, *Evolution and Literary Theory* (Columbia: University of Missouri Press, 1995); Joseph Carroll, *Literary Darwinism: Evolution, Human Nature, and Literature* (New York: Routledge, 2004); Ellen Dissayanake, *Homo Aestheticus: Where Art Comes From and Why* (Seattle: University of Washington Press, 1995); Ellen Dissayanake, *Art and Intimacy: How the Arts Began* (Seattle: University of Washington Press, 2000); Robert Storey, *Mimesis and the Human Animal: On the Biogenetic Foundations of Literary Representation* (Evanston: Northwestern University Press, 1996); and Brett Cooke and Frederick Turner, eds., *Biopoetics: Evolutionary Explorations in the Arts* (Lexington, Ky.: Paragon House, 1999). For overviews, see Joseph Carroll, "Adaptationist Literary Study: An Emerging Research Program," *Style* 36, no. 2 (Winter 2002): 596–617; and Brian Boyd, "Literature and Evolution: A Bio-Cultural Approach," *Philosophy*

and Literature 29 (2005): 1–23. See also Boyd's "Reduction or Expansion? Evolution Meets Literature" (keynote address at the International Society for the Empirical Studies of Literature Conference in Edmonton, Alberta, August 7, 2004).

- 5. Jonathan Gottschall and David Sloan Wilson, "Introduction: Literature—a Last Frontier in Human Evolution Studies," in *The Literary Animal: Evolution and the Nature of Narrative*, ed. Jonathan Gottschall and David Sloan Wilson (Evanston: Northwestern University Press, 2005), xiv. See also, in the same volume, "From Lacan to Darwin," in which a confirmed Lacanian recalls his fruitless search for an academic venue in which the master's ideas could be examined critically (44–45).
- Laurie Goodstein, "Teaching of Creationism Is Endorsed in New Survey," New York Times, August 31, 2005, sec. A, 9. See also "Evolution and Schools: Intelligent Design Rears Its Head," The Economist, July 30, 2005, 30–31.

Americans' staggering ignorance on the subject of evolution might have one benefit if it wakes up humanists to the stakes in the game. The assault of intelligent design (ID) proponents on school boards might encourage academics to lose enthusiasm for notions of "situated knowledges." For who is to say that the beliefs about the origin of life held by fundamentalist Christians in small towns are less valid than creation stories told by Navajos? Don't both need to be respected as authentic expressions of local culture? Perhaps academics look more charitably on superstitions when they're entertained by more exotic cultures. The prospect of ID insinuating itself into suburban biology courses might kindle a new recognition that beliefs, no matter how strongly clung to, aren't tantamount to knowledge.

- 7. For a swift and entertaining rebuttal to relativistic claims, see Ophelia Benson and Jeremy Stangroom, *Why Truth Matters* (New York: Continuum, 2006), 45–64.
- 8. Most humanists' rejection of science's claims to truth appears to stem from an undergraduate reading of Thomas Kuhn's 1962 book, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962), and little since. There is a vast tradition in the philosophy of science of arguing with Kuhn; recent critiques can be found in Philip Kitcher, *The Advancement of Science: Science Without Legend, Objectivity Without Illusions* (New York: Oxford University Press, 1993); Lewis Wolper, *The Unnatural Nature of Science* (Cambridge, Mass.: Harvard University Press, 1993); Roger G. Newton, *The Truth of Science: Physical Theories and Reality* (Cambridge, Mass.: Harvard University Press, 1997); Peter Carruthers, Stephen Stich, and Michael Siegal, eds., *The Cognitive Basis of Science* (Cambridge: Cambridge University Press, 2002); and Susan Haack, *Defending Science—Within Reason: Between Scientism and Cynicism* (Amherst, N.Y.: Prometheus, 2003).
- 9. See my "Film and the Historical Return," http://www.davidbordwell.net/filmhistorical-return.htm.
- 10. For a complete bibliography, see http://www.davidbordwell.net/cv.php.

Chapter 1

 René Wellek and Austin Warren, *Theory of Literature* (New York: Harcourt, Brace, 1949); and Stanley Edgar Hyman, *The Armed Vision: A Study in the Methods of Modern Literary Criticism* (New York: Knopf,