

Media In Transition

David Thorburn, *series editor*

Edward Barrett, Henry Jenkins, *associate editors*

New Media, 1740–1915, edited by Lisa Gitelman and Geoffrey B. Pingree, 2003

Democracy and New Media, edited by Henry Jenkins and David Thorburn, 2003

Rethinking Media Change: The Aesthetics of Transition, edited by David Thorburn and Henry Jenkins, 2003

Rethinking Media Change

The Aesthetics of Transition

Edited by David Thorburn and Henry Jenkins

Associate Editor: Brad Seawell

The MIT Press
Cambridge, Massachusetts
London, England

P
90
-R38
2003

© 2003 Massachusetts Institute of Technology
All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

This book was set in Perpetua by Graphic Composition, Inc.
Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data
Rethinking media change : the aesthetics of transition / edited by David Thorburn and Henry Jenkins ; associate editor, Brad Seawell.
p. cm. — (Media in transition)
Includes bibliographical references and index.
ISBN 0-262-20146-1 (hc. : alk. paper)
I. Mass media—History. I. Thorburn, David. II. Jenkins, Henry, 1958— III. Seawell, Brad.
IV. Series.
P90.R38 2003
302.23'09—dc21

2002044447

10 9 8 7 6 5 4 3 2 1

Contents

Series Foreword	ix
1 Introduction: Toward an Aesthetics of Transition	1
<i>David Thorburn and Henry Jenkins</i>	
I <i>Media Changes</i>	
2 Web of Paradox	19
<i>David Thorburn</i>	
3 Historicizing Media in Transition	23
<i>William Uricchio</i>	
4 Re-Newing Old Technologies: Astonishment, Second Nature, and the Uncanny in Technology from the Previous Turn-of-the-Century	39
<i>Tom Gunning</i>	
5 How Users Define New Media: A History of the Amusement Phonograph	61
<i>Lisa Gitelman</i>	
6 Books Are Dead, Long Live Books	81
<i>Priscilla Coit Murphy</i>	
7 Help or Hindrance? The History of the Book and Electronic Media	95
<i>Paul Erickson</i>	

David Thorburn

elapse in a play instead of a few hours) but then to think that the entirety of sets, costumes, actors, audience—the whole environment of artifice—is not a far stronger cause for disbelief. We do not rush from our seats like Don Quixote to save the puppet-heroine because we understand and embrace the enabling convention of all drama: that its world is imaginary, a virtual site.

I find it instructive, I find it consoling to think about Jules Verne's Captain Nemo and *Star Trek's* Captain Kirk—of course they are also emblems for their audience, for book-readers and TV watchers—navigating unexplored and perilous universes even as they sit in the familiar confining safety of the captain's chair, on the captain's bridge, joystick ready, watching the screen.

3 *Historicizing Media in Transition*

William Uricchio

Introduction

In Book Two of *The Histories*, Herodotus digresses from his tale of Greece's struggle to defeat Persian aggression in order to describe his visit to Egypt.¹ His encounter with Egypt, its history, customs, and inhabitants, produced an epistemological vertigo of sorts. Herodotus, called by Cicero the "father of history," was confronted by the inescapable realization that not only was Greece not the center of the civilized world, but that Egyptian civilization, evidently thousands of years older, had provided the Greeks with the elements which they took to be identifying marks of their own civilization. Beyond serving to balance his larger narrative of the triumph Greek culture in the face of the marauding threat from the east, Book Two is striking for the manner in which it relativizes the author's assumptions regarding his own culture—the culture, after all, through which he perceived the world around him and told his tale.

I open this essay on writing media histories with reference to Herodotus' *The Histories* because his situation in Book Two speaks directly to our current predicament in media studies. My starting point is that the shift from medium-specific histories—film's history in particular—to media history, has induced something like the epistemological vertigo experienced by Herodotus. Familiar reference points, long-held assumptions, and the self-assurance that comes with an apparent monopoly on the truth have all been challenged, recontextualized, shaken. Film's own history and developmental trajectory, and its assumed agency with regard to "derivative" media such as television, have been recast in the light of an array of precedent technologies, practices, and notions of mediation. Given, for example, film's somewhat precarious position within the academy (not to mention the perception by many in the industry and academy alike of the looming threat posed by digital culture), this reordering of the taken-for-granted has created a sense of disorder, anxiety, and reaction. While these symptoms are not necessarily productive,

we should nevertheless remember that it was thanks to film scholars (among others) that this reorientation occurred in the first place. As we shall see, the paradigm shifts associated with the re-writing of cinema's early history in the 1980s, and the consequent efforts of a number of scholars who have continued to interrogate long-held truths, have been fundamental to the project of rewriting media histories generally.

Herodotus, both in Book Two and throughout his text, offers a second relevant entry point: central to his mode of historical inquiry is an insistence upon multiple causalities and co-existing interpretations. His own observations as a historian are usually seen as but one of several possibilities. This insistence upon the partiality of truth, upon its refracted and often contradictory nature, no doubt accounts for why generations of historians have parted ways with Cicero and dubbed Herodotus the "father of lies," but it also helps to explain his resonance (if not relevance) to the post-structuralist notion of history. I mention this not so much to reveal my own partiality to this brand of historiography, but rather to anticipate the multiple and sometimes contradictory causalities which I take to be characteristic of media's development. For the record, I understand media to be more than mere technologies, institutions, and texts—a statement I would think was obvious were it not for the substantial body of literature that holds otherwise. Instead, I see media as cultural practices which envelop these and other elements within a broader fabric offered by particular social orders, mentalities, and the lived experiences of their producers and users. Such a view is generationally inscribed, with students from different academic generations being apt to respond differently to these issues. As one of many who cut their teeth on Raymond Williams and the like, I have not yet lost my taste for this notion of media.² Such an admittedly full definition of media requires an embrace of multiplicity, complexity and even contradiction if sense is to be made of such a pervasive cultural experience. The comments that follow are built around two central points: the first concerns a very brief and somewhat biased history of how we got to the present point in writing media histories (for how better can a historian reflect upon his own trade?); and the second concerns an even more biased set of thoughts on the current construction of media history. Unless otherwise noted, my comments refer to developments within the Anglo-American world.

The State of Things

A few words are in order regarding the status quo in media historical writing. As an object of the historicizing gaze, the media have, not surprisingly, been subjected to dominant trends in historiography, but with curious institutional results. The long rule of

national-political histories and economic histories tended to relegate cultural history in general and media history in particular to the margins of historical study. Culture and media were instead institutionalized as specialized arts or humanities disciplines such as art history, literary studies, and musicology. Although outside the discipline of history proper, this cultural niche found ample support both within the walls of the academy and in strategic alliances with cultural institutions such as museums, galleries, concert halls, publishing houses, etc., helping to define hierarchies of expressive (i.e., aesthetic) media and to maintain, to invoke Bourdieu's phrase, the rules of art.³ But while important as a means of developing analytic and discursive frames for particular (that is, aesthetic expressions of) media, this constellation of interests tended to fetishize its objects and consequently was generally blind to media forms and texts perceived as popular, commercial, or multiple (thus, the greater part of mass media, often excepting photography—an interesting case unto itself). One of the many paradoxes to arise from this situation was, on one hand, the strict exclusion of mass media from the academic study of "art" media (recorded popular music found as little welcome in musicology as film found in the visual arts), while on the other hand, academics concerned with the study of mass media seized upon the arts as both the justification and critical framework for their study. Film, for example, when it finally entered the mainstream (U.S.) academy in the 1960s, did so as an "art" which generally meant favoring the often intersecting categories of historical, European, and avant-garde production, while at the same time marginalizing contemporary commercial film production. That the study of the film medium would center on the study of texts, and would borrow classification schemes from its sister arts (genre, authorship, style histories) makes perfect sense given the rationale for the film medium's initial inclusion in university curricula as a curious sort of modernist "high art" together with film scholars' own disciplinary aspirations.

While it would be unfair to say that culture was outside the agenda of historians proper (for there is a long history of exceptional and diverse historical voices which have spoken on the matter), it is particularly in the twentieth century with the emergence of the *Annales* historians⁴ and British historians of society and the working class⁵ that cultural practice appeared as an object of increasing historical interest. Not coincidentally, a number of historians in both groups showed a general interest in the forces of social cohesion in what might be termed a broadly Gramscian notion of hegemony, in which consensus and the means of its construction were central topics of interest.⁶ Culture was seen both as underlining the notion of consensus and as providing the evidence for national identity, values, and aspirations. Significant to these developments in historical approach was the

notion of culture as something much larger than the arts, something anthropological in definition. Given the particular functions of culture that were being explored—identity, cohesion, direction—media assumed increasing prominence.

Now, it might be argued that the timing of this interest (post-1930s) owed much to the fact that by the second decade of the twentieth century, three distinct mass media waves had swept across the western world in quick succession, fundamentally altering the exercise of state power, the construction of the citizen, and public memory itself. The cheap rotary press, film, and radio each organized data and the public in distinctive ways, and each was the subject of considerable political wrangling in ordeals that usually demonstrated the principle of “rationalization through regulation.”⁷ Indeed, one might even argue that the larger historiographic turn towards everyday culture and the life of everyman was a response to the widespread democratization apparent in many western nations by the early to mid twentieth century. Women’s successful bid for voting rights and the recognition of labor’s right to organize were due in part to these groups’ use of the new mass media, and in a larger sense, media occupied an increasingly significant part of the information infrastructure essential to the functioning of democratic governments and the capitalist system (consumer society in particular) upon which they were built. That said, we should not underestimate the incentive to look more closely at culture and media inspired by those nations such as Hitler’s Germany or Stalin’s Soviet Union which developed anti-democratic mass movements and uncharacteristic levels of state aggression. In the search for causal attribution, the mass media stuck out as an obvious factor, meriting careful study—and pathologization.

These factors, among others, help to account for the turn of mainstream attention to the history of cultural practices (media included) in the twentieth century, and the roughly parallel appearance of mass medium-specific university disciplines such as journalism by the turn-of-the-century and film studies by mid-century. The nexus of interest formed by cultural history and two medium-specific disciplines is worth briefly pursuing, since it helps to account for recent transformations in media historiography. In many of its incarnations, journalism has had a disciplinary status closer to that of law or medicine than to art history or literary studies, in the sense that from its inception, it has tended to function as a professional study, offering training for future journalists and maintaining close relations with the journalistic industry. Its functionalist research orientation (with an interest in effects, policy, etc.) made it instrumental in the definition of the “new” social science discipline of mass communications, where it was joined by radio and television, but not, with a few notable exceptions, film. Rooted in the late nineteenth cen-

tury development of sociology, mass communications tended to be far more concerned with the ‘present’ of testable hypotheses than in the precedent of the past (history)—a temporal orientation that continues to characterize the field.

Film studies by contrast, emerged with virtually no contact with the larger professional field. Indeed, in the United States, it initially defined its interests almost in opposition to commercial production, focusing instead upon the medium’s history, its aesthetic markers, and the development of a set of academic disciplinary terms and practices. These latter terms relied heavily upon the fields of art history and literary criticism, disciplinary environments where the archive or museum was far more relevant than design or publishing houses. I will not rehearse the history of the discipline, except to point to the moment in the mid 1970s when two very different but ultimately related discursive strands drew together to redefine the study of film, and with it television. One strand was to be found in the history discipline’s previously mentioned turn to cultural issues and “bottom-up” history.⁸ The other emerged from within literary studies and marked a (roughly parallel) shift from author-dominated or literary expert-dominated notions of textual meaning, to the meanings which literary texts actually encountered in the world of readers.⁹ The subsequent move from reader response and reception of the literary canon to the analysis of the full range of literary forms which readers encountered was both logical and profound. Film studies, as usual, took its lead from literary studies, and its shift away from the canon drew it both to popular film and to that moving-image medium most often encountered in the world—television. Television, long the cultural “other” whose mundane reality justified the serious consideration of film as art (at least avant-garde, historical, and “foreign” film), was suddenly rehabilitated by some in the film studies community as a key element of popular culture. Although television texts were approached in much the same way as film and literary texts (style histories, authorship, etc.), the emergence of cultural studies as an autonomous sphere of activity offered new and radical possibilities.¹⁰

Cultural studies, deriving from the cultural interests of historians, from a fascination with the ‘lived reality’ of cultural participants on the part of some within literary and film studies, and from redefinitions within the social sciences (anthropology and ethnography in particular), found itself in a position to broker diverse methodologies (from textual analysis to audience ethnographies to history), while at the same time focusing emphatically upon a politicized notion of popular cultural reception.¹¹ Cultural studies helped scholars in both the social sciences and the humanities to redefine their approaches to the media of film and television, focusing less on text-specific or institution-specific endeavors, and more on the

situation of producers, texts and readers in the world and their encounters with one another. Thanks to this confluence of events, television's history as something fuller than institutional history or textual analysis finally appeared on the research agenda.

One might consider this entire transformation from a slightly higher level of abstraction. For example, one might point to such factors as the changed demographics of post-war university attendance, where new populations drawn from a broad class and ethnic spectrum began to dominate higher education, bringing with them new cultural reference points and a broader array of interests than had previously been the case. Or one might point to shifting notions of disciplinarity, as academic fields defined in the mid- to late-nineteenth century began to give way to comparative and trans-disciplinary studies (American studies, women's studies, STS (science-technology-society), as well as new alliances between art history and anthropology, or economics and history, etc.). And, one might in particular point to the pervasive (if yet to be fully acknowledged) influence of post-structuralism that offered an intellectual framework for breaking from long-established taste categories, notions of academic disciplinarity, and explanatory master narratives of various sorts. But for our present purposes, we might also consider one further turn in media historiography since it has specific bearings upon the questions that are currently being asked, and the methods put forward for answering them. I refer to that aspect of the 1970s–1980s ferment in the field most specific to the writing of the film medium's history—research into early cinema.

The 1979 International Federation of Film Archives (FIAP) conference held in Brighton, England, signaled the emergence of a new generation of film historians.¹² Informed by the work of scholars such as Jay Leyda, Robert Sklar, and Garth Jowett, and to some extent reacting against the perceived excess of theory then vogue in the field, these historians focused on that most neglected aspect of the medium: early cinema.¹³ The dominant histories of the day described early film in strictly teleological terms as “primitive” cinema—a view fundamentally contested by these new historians. Moreover, traditional research strategies unwittingly tended to reinforce the vision of the film medium long held by dominant cultural institutions—the institutions which sought not only to regulate the medium in various ways, but which were also responsible for producing and saving much of what we have received as the surviving archival record. Thus, for example, the experiences of newspaper reviewers and censors survive, whereas those of ordinary viewers have been lost; the concerns of the fire insurance regulators live on, while those of film projectionists do not, etc.

Post-Brighton scholarship looked into production histories, stylistic trends, the period's reception, and so on, effectively breaking with the teleological trends of the past

by re-positioning this body of films simultaneously as the culmination of various nineteenth century representational efforts, and as a catalogue of unexpected possibilities for a yet-to-be disciplined medium.¹⁴ In this sense, it effectively embraced the notion of a media dispositif (a concept which links apparatus, the cultural imagination, and constructions of public), but radicalized the deployment of the notion by standing open to grounded speculation. This shift in perspective was profound, rupturing the taken-for-grantedness of the narrative of the medium's progress from simple black and white silent films, to today's virtual reality systems (or, for that matter, the parallel narrative of evermore refined techniques of ideological control). Instead, the medium was positioned within intertextual and intermedial networks, acquiring meaning and possibility through grounded historical positioning rather than hindsight.¹⁵ Scholars began to situate cinema within representational systems with longer histories than the cinema's such as the theater, the magic lantern and photography.¹⁶ Considerations of how publics constructed themselves around dime museums, fairgrounds, and scientific spectacles offered new insights into cinema's own modes of attraction.¹⁷ And at least one historian focused on the horizon of expectations that greeted cinema, arguing almost heretically that television (in the sense of a live or simultaneous moving picture medium) preceded the film medium by over a decade, rendering film the great compromise (rather than the great wonder) of the nineteenth century.¹⁸

The emergence of this new historical perspective was obviously informed by the developments discussed above (the rise of cultural studies, the turn to cultural history, etc.), but it included several notable characteristics that bear mentioning. First, it was marked by a profound shift in viewing position (something akin to Herodotus' insights in Egypt) with consequences for the whole of cinema history. Second, many scholars felt the need to re-theorize the process of “doing history.” That is to say, since the early cinema evidence record contained so many gaps (missing films, production records, audience responses) and deformations (ideologically weighted evidence supporting the views of certain social groups and suppressing those of others), film historians of necessity had to think through the consequences of how to account for absences and irregularities in evidence, how to compensate with creative alternatives, and how to make their cases. The result (enabled by the paucity of data and the short length of the films) included new techniques of textual analysis, and new approaches to extra-cinematic evidence (intertextuality, intermediality, and historical reception studies among them). Third, the development of an elaborate series of collaborations among scholars, film archives, and film festivals, helped to stimulate and guide the restoration of the cinematic evidence base (restoring films, getting them

William Uricchio

back into circulation, providing period documentation, etc.), while at the same time amplifying new perspectives on the medium's history. In a move not without serious conceptual dangers, this historical perspective effectively enabled the translation of historical insights and interpretations into historized artifacts (i.e., re-constructed or restored films), closing the loop between interpretation and text. The danger, of course, is that future historians will only have access to a particular period's notions of historical accuracy in the form of preserved films; but the alternative options for dealing with a perishable medium are few indeed. Whether considering the use of the many early color or sound systems, or the period's distinctions between fiction and fact, or alternate media systems that may have positioned expectations for the film medium, the results of this historical turn are (and will continue to be) profound.

Constructing Media Histories

The space between theory and practice is always a great one, but it seems particularly profound in the case of contemporary media history. Much ink has been spilt critiquing the historiographic efforts of the past, or establishing new parameters for the historians of the future, but rarely do such discourses embrace the mundane specificity of historical practice. Yet the latter realm, complicated by the stubbornness of data and the particularity of argumentation, yields some of the strongest insights. And it is this realm which accounts for my insistence on the plural form of history (histories), since historical practice is not unified by the abstractions of theory, no matter how well intended. As the work of such scholars as (among others) Kittler, Gumbrecht, and Zielinski in Germany, Ong, Douglas, and Marvin in the United States, and Flichy, Virilio, and Mattelart in France has shown, we are seeing an increasingly sophisticated (and eclectic) array of considerations of media's complex histories.¹⁹ Since the important work of these and other authors is available, in the remaining space I would like to make a few comments about what seem to me to be several central issues in the construction of media historical practice: focal points for historical investigation; a few central organizing topoi; and finally, a nod in the direction of historical specificity.

The media's transitional status is not only ongoing but multi-faceted. Changes in technology, signifying systems, cultural contexts and cultural practice have been pervasive and complicated by trans-national dimensions (adaptation, recycling, variant cultural meanings) and cross-platform/cross-audience dimensions (representational pressures, identity problems, moral panics). Nevertheless, some moments of change are more re-

vealing than others: the "birth" of media forms, when technological possibility finds systematic deployment as media practice; or the dramatic re-purposing of media systems (e.g., radio's shift from an individuated two-way communication system to a broadcast system); or the intermedial redefinition of media (e.g., digital technology's implications for the media of photography, film, and television). Such moments are usually accompanied by rich discursive evidence regarding perceived media capacities, anticipated use patterns, and intermedial relations.²⁰ But perhaps most importantly, such moments challenge the "taken for grantedness" that under normal circumstances tends to blind us to the possibilities inherent in a particular medium and the processes by which social practice gradually privileges one vision of the medium over the others. My own work, as but one example, has tended to focus on such periods, including a look at competing models for the medium of television (a case study of German television in 1930s and 1940s); or cinema's balancing act with mass popularity and cultural respectability (case studies centering on representation strategies and on debates over social space); or the post-1876 realization of the camera obscura in a notion of the "televisual" rooted in the telephone and magic lantern.²¹ Were I pressed for an explanation as to why these particular moments are of such interest, I would most likely conclude that these moments resonate in a particularly powerful way with a media present that is itself very much in transition . . . that I inhabit a moment of media instability, and that it has shaped my horizon of interests. But at the risk of extrapolating too far beyond my own speaking position, I would go on to assert that these moments of tension and instability offer particularly sharp insights into the construction of media form. While there is much that can be said for the quotidian (particularly if one's interest is in media texts), our understanding of media *as* text benefits greatly from moments of instability.

The notion of media as social practice pertains as much to the development of technological infrastructure and representational capacity (not to mention deployment), as it does to the "user," the human side of the equation. Communication studies have long privileged selected aspects of this situation, for example favoring notions of content transfer ("encoding and decoding" to recall Stuart Hall's formulation²²), or the extension and organization of social power (from political communication to political economy). The functionalist agenda implicit in these interests has generally favored a focus on the present, relegating historical framing to the margins (or to the critics of these traditions). As well, these functionalist studies have tended to be funded in accordance with the perception of their relevance, with the result that historically oriented work has usually had to content itself with less than a full share. Institutional realpolitik aside, however, one of

the greatest consequences of these tendencies has been the marginalization of research on the implications of media for the world of perceptual experience (the malleability of time and space so well chronicled by Stephen Kern²³), or for our notions of epistemological order, or for our sense of individual and collective memory. These rather broad categories help to highlight various long-term endeavors such as storage (from medieval “tally sticks” to Sony’s memory sticks) and liveness (telegraphy, telephony, radio, webcams), and long-term concerns with the audience (from effects and claims of demoralization to critical re-workings and assertions of empowerment). At the same time, these topoi provide a comparative frame, giving coherence to analytic shifts across media forms, historical times, cultural contexts, and levels of analytic specificity.

Obviously the media in question pose significant challenges to any imposition of neat conceptual categories on their development, and the triad perception, epistemology, and memory is but one of many possible ways to tackle the problem. That said, these elements and others like them offer a way to cope with the radical repositioning which seems increasingly apparent in the field. Media studies are very much in motion, despite having entrenched institutional interests. As previously mentioned, the academic repositioning of specific media (e.g., film) into a web of pre-existing, competing, and alternative media practices has done much to resituate the possible meanings that an isolated medium can generate. The ripple effects of the overdetermined “Brighton” moment are continuing to be felt in the ongoing redefinition of media studies disciplinarity. But an equally compelling factor is ‘external’ to the academic world and apparent from contemporary media practice. Digitization and convergence have redefined our present as a moment of media in transition. The ontological frameworks for various media forms have been challenged and redefined (consider the shifts within a medium such as film, once defined in terms of its photo-chemical base, but now edited on a magnetic medium [video] and displayed in digital formats [DVD]). As so often happens at moments of transition, the divisions between some media forms begin to erode and disappear. Convergence, too, has challenged old certainties. Whether we think in terms of the media corporations which now circulate texts among their various divisions, or in terms of the textual networks created as particular narratives or characters sweep across media forms, or in terms of the audiences constructed around cross-media notions of textuality, it is increasingly clear that old certainties are very much up for grabs.

Together, the efforts of historians to reconsider the taken-for-granted and the demands of the digital and convergent present have compelled a new view of media, one

which benefits from considering other moments of media in transition, and one which demands new sorts of conceptual focus.²⁴ At the same time, more than ever the embrace of the specific, of the detail, is essential if we are to deepen our appreciation of media as social practice. The ideological implications of evidence and argument are particularly compelling when considering mass media experiences that are located at contentious junctures in developmental and social history—like early cinema both defining itself as a functioning medium and as a medium in the midst of the struggle to reaffirm the place of the dominant classes in America (a tool in a larger ideological context).²⁵ But even if we step back and take a more abstracted look at media history (like history itself), our particular worldview or what we might call our ideological inscription, is always a factor. The difficulty is that this worldview is bound up with particular material practices, and thus much more accessible from the perspective of working history than historical theory. That said, I wish simply to draw on a publication that has recently appeared in German that (in part) takes on the problem of projectionists in the years before 1913, offering something in the way of a cross-platform text.²⁶ The early definition problems of this occupational category speak to the developmental problems of cinema more generally, and in turn, to the position of popular culture in the first decade or so of the twentieth century—a period of crisis at least in the United States.²⁷ Yet drawing upon the particularity of the projectionists as a way to understand the competing demands of regulation (both political and professionalization), identity and resistance is rendered difficult thanks to the sad realities of collective memory as reified in the archive (the projectionists’ experiences failed to find a place there).

As far as my coauthor on this project, Roberta Pearson, and I know, no projectionist recorded his impressions of his daily routine; the best approximation of the physical realities of the projectionists’ lives derives from reading the evidence of dominant institutions “against the grain,” that is, looking for unintended traces and evidence in remaining official records. This results in an historical procedure that some readers might dismiss as overly speculative, and while we acknowledge the limits of such speculation, we believe that it produces better historical understanding than a simple replication of the period’s own written evidence. Our essay openly acknowledges the fragmentary nature of the evidence that we use (it hardly conforms to the documentation standards taken for granted by many historians) in order to permit glimpses into the lives and motives of individual projectionists. In so doing, we seek to restore some sense of agency to the operators, even though the weight of evidence presented supports a Foucauldian vision of projectionists as subjects produced through disciplinary regimes.²⁸ Like Herodotus (though perhaps for

different reasons), we do not favor one of these interpretations over the other, instead permitting them to oscillate back and forth.

Such oscillation violates some of the fundamental precepts of conventional historiography. Wary as we are of constructing historians as a monolithic category, it seems that many historians are trained to weave evidence from various sources into a coherent narrative that they believe best represents the events and causality of the past. They are trained to believe that there are better and worse interpretations and better and worse stories to be made of the same evidence. As Robert Berkhofer says in *Beyond the Great Story*, "That two or more stories can be told about the same set of events deeply disturbs even sophisticated normal [non-postmodernist] historians."²⁹ Such historians resist the relativistic chaos precipitated by the oscillation between (among) two or more stories. Yet, as just argued, the evidence available for the study of early cinema history (and for many other potential histories as well), exhibits a pattern of selective survival and filtration that structures the stories that can be told. Historians' training might incline them to accept certain textual forms (city ordinances, records of fact) as solid, hard evidence, while dismissing other forms (the anecdote, the oblique reference or the structured absence) as questionable. The former texts, those endowed with institutional endorsement and "objectivity," seem frequently to represent the forces that reigned dominant within the period; they represent the views articulated by and later archived by dominant institutions. Historians' dependence upon these sources, and thus their tendency to reproduce dominant narratives, stems from several preferences and prejudices regarding the construction of history:

- the desire to establish hierarchies of consistency, preferring the more consistent to the less;
- the desire to avoid contradiction, seeking instead mutually reinforcing data and conclusions;
- the desire to see history as transparent rather than constructed; as an object rather than a text;
- the desire to engage in holistic analyses and construct integrated narratives.

In contrast to conventional historical practices, in our article (and the larger project of which it is a part), we tried to be sensitive to evidence, however scarce or inconsistent, that restores some agency to dominated factions and to construct a narrative that gives the dominated a voice. The nagging question of this approach's general applicability remains, particularly since we have based our argument upon evidence from the geographically

specific locale of New York City. But with historical topics that centrally involve socially marginalized subjects at moments of media instability, such an approach offers a means by which the readily available record of the dominant classes can be interrogated and complicated.

Conclusion

The processes of digitization and convergence together with the post-structuralist Zeitgeist have, I have tried to argue, given rise to something like the situation Herodotus describes in Book Two of his *Histories*. Long-held certainties have been shaken and knowledge frameworks, de-centered. At this profoundly transitional moment in media development, the working agenda for historians can quite productively make use of those earlier transition moments when related forms of instability threw into question media ontologies (and with them, issues of epistemology, perception, and memory). The task of researching and writing new media histories shows signs of invigoration, particularly as debates over appropriate questions and methods grow more forceful. My own work as well as that carried out with Roberta Pearson embraces these debates, and continues to benefit from close attention to the textures of the past informed by a sense of what has been structurally elided, by the "that which has not been said." Moreover, such specificity is a central means of restoring an ideological edge to the historical effort. As just noted, this sort of approach can be at odds with certain notions of traditional historiography, but it remains open to the play of plurality and alterity that so enlivened the historical practice of Herodotus and informs the work of a growing number of historians. We cannot extract ourselves from the cultures into which we are historically embedded, and to be sure, the range of contemporary debate is very much circumscribed by our historical moment. This is a limiting factor that we can ignore, pretending that our intellectual insights are free from this gravity (although even if we believed this, the realpolitik of the publishing business and its synchronicity with the dominant order of the present should give us pause . . .). Or it is one that we can embrace, using it as a compass in our search for a relevant precedent.

Notes

I wish to thank Henry Jenkins, Brad Seawell, Frans Jeursen, and the members of the media history seminar at Utrecht University for their comments on this essay. Portions of it have appeared in German as "Medien des Übergangs und ihre Historisierung," *Archiv für Mediengeschichte—Mediale Historiographien* (2001): 57–72.

1. Herodotus, *The Histories*, trans. A. R. Burn (New York: Penguin, 1972).
2. See in particular chapter one of Raymond Williams, *Television: Technology and Cultural Form* (New York: Schocken Books, 1974).
3. Pierre Bourdieu, *The Rules of Art: Genesis and Structure of the Literary Field* (Stanford: Stanford University Press, 1996).
4. See, for example, Fernand Braudel's *The Mediterranean and the Mediterranean World in the Age of Philip II* (New York: Harper & Row, 1972).
5. E. P. Thompson's work is here exemplary, as is Raymond Williams's. See, for example, Thompson's *The Making of the English Working Class* (New York: Pantheon Books, 1964); and Williams's *Culture and Society, 1780–1950* (New York: Columbia University Press, 1960).
6. Antonio Gramsci offered the term "hegemony" as a way to describe the broad consensus that helps to move social agendas, contrasting it with "political domination," by which he meant the overt force of the state. Culture plays a key role in the formation of willing consensus. See *The Prison Notebooks* (New York: Columbia University Press, 1992).
7. Social regulatory processes, encouraged by the state, and in the period referenced, capitalist interests, have tended to reduce the radical potentials of media forms through regulatory processes such as the allocation of frequencies or the enforcement of broadcasting practices in the case of radio. Part of film's struggle for respectability was related to this process, described in part by Max Weber's notion of "rationalization."
8. See E. P. Thompson.
9. For an overview of this shift, see Terry Eagleton, *Literary Theory: An Introduction* (Minneapolis: University of Minnesota Press, 1996). For more a more specific overview of reception theory, see Janet Staiger's summary in *Interpreting Films: Studies in the Historical Reception of American Cinema* (Princeton: Princeton University Press, 1992).
10. Now classic texts include Ien Ang's *Watching Dallas: Soap Opera and the Melodramatic Imagination* (London: Methuen, 1985); David Morley's *The Nationwide Television Studies* (London: Routledge, 1999); Henry Jenkins, *Textual Poachers: Television Fans and Participatory Culture* (New York: Routledge, 1992); see also Morley's *Television, Audiences, and Cultural Studies* (New York: Routledge, 1992).
11. Cultural studies, at least as I am using the term, must be credited to the British academic scene. Not only was the humanities/social science divide differently articulated than in the United States, but the strong qualitative tradition in sociology took the lead in studies of popular culture. Moreover, discussions of such concepts as ideology, power, and class interest were possible in Britain in ways that were off limits in the U.S. academy. That "American" cultural studies have tended to embrace the abstractions of post-modernity rather than considering the lived experiences of those that construct culture speaks to this difference.
12. The Brighton meeting of the International Federation of Film Archives was notable for its inclusion of film scholars in a group otherwise dominated by professional archivists. The Brighton Project, more formally a symposium entitled "Fiction Film, 1900–1906," inspired the investigation of the early cinema area. Some articles stemming from this conference may be found in the *Quarterly Review of Film Studies* 4, no. 4 (1979).
13. Jay Leyda's famed Griffith seminars at NYU in the 1970s helped to create a generation of early film scholars; Robert Sklar's *Movie Made America: A Cultural History of American Movies* (New York: Random House, 1974) and Garth Jowett's *Film: The Democratic Art* (New York: Little, Brown, 1976) marked important turns in writing about film history as social/cultural history.
14. Among many others, see Tom Gunning, *D. W. Griffith and the Origins of American Narrative Film* (Urbana: University of Illinois Press, 1991); Charles Musser, *High Class Moving Pictures: Lyman H. Howe and the Forgotten Era of Travelling Exhibition, 1880–1920* (Princeton: Princeton University Press, 1991); William Uricchio and Roberta E. Pearson, *Reframing Culture: The Case of the Vitagraph Quality Films* (Princeton: Princeton University Press, 1993); Richard deCordova, *Picture Personalities: The Emergence of the Star System in America* (Urbana: University of Illinois Press, 1991).
15. For example, Uricchio and Pearson; Miriam Hansen, *Babel and Babylon: Spectatorship in American Silent Film* (Cambridge, MA: Harvard University Press, 1991).
16. For example, Gunning; Roberta Pearson, *Eloquent Gestures: The Transformation of Performance Style in the Griffith Biograph Films* (Berkeley: University of California Press, 1992).
17. For example, Musser; Robert Allen, *Horrible Prettiness: Burlesque and American Culture* (Chapel Hill: University of North Carolina Press, 1991).
18. William Uricchio, "Cinema als Omweg: Een nieuwe kijk op de geschiedenis van het bewegende beeld," *Skrien* 199 (1994): 54–57; with a more developed argument, "Technologies of Time," in J. Olsson, ed., *Allegories of Communication: Intermedial Concerns from Cinema to the Digital* (London: John Libby/Bloomington: Indiana University Press, 2003).
19. Friedrich Kittler, *Discourse Networks 1800/1900* (Stanford: Stanford University Press, 1990); Siegfried Zielinski, *Audiovisions: Cinema and Television as entr'actes in History* (Amsterdam: Amsterdam University Press, 1999); Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer, *Materialities of Communication* (Stanford: Stanford University Press, 1994); Walter J. Ong, *Orality and Literacy: the Technologizing of the Word* (London: Methuen, 1982); Susan Douglas, *Inventing American Broadcasting, 1899–1922*, (Baltimore: Johns Hopkins University Press, 1987); Caroline Marvin, *When Old Technologies Were New: Thinking about Electric Communication in the Late 19th Century* (Oxford: Oxford University Press, 1988) Patrice Flichy, *Dynamics of Modern Communication: The Shaping and Impact of New Communication Technologies*, (London: Sage Publications, 1995); Paul Virilio, *The Vision Machine*, (London: British Film Institute, 1995); Armand Mattelart, *Networking the World, 1794–2000* (Minneapolis: University of Minnesota Press, 2000).

20. Wiebe Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change* (Cambridge, MA: MIT Press, 1995).
21. See for example, William Uricchio, "Television as History: Representations of German Television Broadcasting, 1935–1944," in *Framing the Past: The Historiography of German Cinema and Television*, ed. Bruce Murray and Christopher Wickham (Carbondale: Southern Illinois University Press, 1992), 167–196; Uricchio and Pearson (cited above); William Uricchio, "Technologies of Time" (cited above).
22. Stuart Hall, "Encoding, Decoding" in *Culture, Media, Language: Working Papers in Cultural Studies* (London: Routledge, 1992/1980).
23. Stephen Kern, *The Culture of Time and Space 1880–1918* (Cambridge: Harvard University Press, 1983).
24. See for example, Jenkins; the cites mentioned in note 19.
25. The years between 1906 and 1913 in the United States were, for example, formative years for the film industry; yet the young medium found itself situated in a series of struggles over ethnicity, citizenship and class that plagued in particular urban turn-of-the-century America. The dominant classes' association of the film medium with immigrant and working class patrons led in part to a series of repressive strategies (the 1908 closing of over 550 nickelodeons in New York City alone; censorship; audience age and ethnicity restrictions; police supervision, etc.). Some in the film medium sought to ally themselves with the agenda of the dominant class factions, in the process attempting both to reposition film as "respectable" and to serve the cultural interests of those "better" classes. See Uricchio and Pearson, and Pearson and Uricchio, *The Nickel Madness: The Struggle to Control New York City's Nickelodeons in 1907–1913*. (Berkeley: University of California Press, forthcoming).
26. William Uricchio and R. E. Pearson, "Filmvorführer in New York, 1906–1913," in *KINtop: Jahrbuch zur Erforschung des frühen Films 9* (2000): 91–108
27. The crisis I refer to was economic (a series of economic crises resulting in unemployment and food shortages), social (reactions to the influx of millions of new immigrants from southern and eastern Europe), and political (a consequence of both). It played out in a series of fundamental debates over culture, citizenship, and the meaning of "America."
28. Michel Foucault's larger project involved understanding the human subject as a creation of particular systems ("disciplinary regimes") that entailed social, behavioral, ideological, and institutional dimensions. A particularly clear instance of his thinking in this regard may be found in *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1979).
29. Robert Berkhofer, *Beyond the Great Story: History as Text and Discourse* (Cambridge, MA: Harvard University Press, 1995), 24.

4 Re-Newing Old Technologies: Astonishment, Second Nature, and the Uncanny in Technology from the Previous Turn-of-the-Century

Tom Gunning

Old and New: The General Line from Amazement to Habit

What can we learn from a cultural history of technology? Beyond chronicling the development, introduction and proliferation of specific technologies, what can we learn from investigating, to use Carolyn Marvin's revealing phrase, the time "when old technologies were new"?¹ Technology in the modern age has a direct relation to the phenomenon of innovation and novelty, and therefore to what makes the modern age modern. To imagine an old technology as something that was once new means, therefore, to try to recapture a quality it has lost. It means examining a technology or device at the point of introduction, before it has become part of a nearly invisible everyday life of habit and routine. But it also must mean examining this move from dazzling appearance to nearly transparent utility, from the spectacular and astonishing to the convenient and unremarkable. This transformation needs to be interrogated for the cultural myths of modernity it assumes and creates. The move from astonishment to a habitual second nature may be less stable than we think, and this instability may explain our fascination with rediscovering technology at its point of novelty. This essay, then, is perhaps more intimately involved with novelty than with technology, or rather with the intersection between them.

History deals not only with events but, primarily, and some would claim exclusively, with the discourses they generate and which record them. The introduction of new technology in the modern era employs a number of rhetorical tropes and discursive practices that constitute our richest source for excavating what the newness of technology entailed. The Universal Expositions that mark the latter part of the nineteenth and the early part of the twentieth centuries celebrated, represented and explained the agents and effects of the modern world. Their visual displays and verbal proclamations, protocols and practices, announced key aspects of modernity: an overcoming of space and time that allowed a new sense of the global in a world shrunken by new technologies of transportation and