2011

The structural transformation of the televisual public sphere

Daniel Conover Faltesek

University of Iowa

Copyright 2011 Daniel Conover Faltesek

This dissertation is available at Iowa Research Online: http://ir.uiowa.edu/etd/2697

Recommended Citation


Follow this and additional works at: http://ir.uiowa.edu/etd

Part of the Communication Commons
THE STRUCTURAL TRANSFORMATION OF THE TELEVISUAL PUBLIC SPHERE

by

Daniel Conover Faltesek

An Abstract

Of a thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Communication Studies in the Graduate College of The University of Iowa

December 2011

Thesis Supervisor: Associate Professor Timothy Havens
This dissertation poses that the digital transition is best understood as simultaneously a technological and cultural phenomena. As a physical change in the means of distribution, transmission, and reception of media content, the digital transition is an important factor in changing technological, aesthetic, and legal norms. As a cultural form, the digital is positioned as a moderator between continuity and discontinuity. Through a reading strategy inspired by Walter Benjamin this dissertation reads the physical and cultural implications of the digital transition in television in the United States through political categories. The chapters are case studies in the adoption of digital televisions for home use, digital television production technologies, digital transmission technologies, and digital distribution systems. Each case study examines the tenuous production of publics in the context of the dialectical pressures of the digital. By taking this approach I intend to contribute to the rhetorical dimension of television studies, the digital turn in rhetorical and public sphere studies, and the legal and aesthetic dimensions of production studies. The dialectical approach to the digital allows the study of television to theorize the trajectory of emerging media and the political implications of that movement.

Abstract Approved: ____________________________
Thesis Supervisor

____________________________
Title and Department

____________________________________
Date
THE STRUCTURAL TRANSFORMATION OF THE TELEVISUAL PUBLIC SPHERE

by

Daniel Conover Faltesek

A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Communication Studies in the Graduate College of The University of Iowa

December 2011

Thesis Supervisor: Associate Professor Timothy Havens
This is to certify that the Ph.D. thesis of

Daniel Conover Faltesek

has been approved by the Examining Committee for the thesis requirement for the Doctor of Philosophy degree in Communication Studies at the December 2011 graduation.

Thesis Committee:

Timothy Havens, Thesis Supervisor

Kembrew McLeod

David Hingstman

Sasha Waters Freyer

G. Thomas Goodnight
This dissertation is dedicated to my wonderful wife Emily, and my daughter Elvisa.
ABSTRACT

This dissertation poses that the digital transition is best understood as simultaneously a technological and cultural phenomena. As a physical change in the means of distribution, transmission, and reception of media content, the digital transition is an important factor in changing technological, aesthetic, and legal norms. As a cultural form, the digital is positioned as a moderator between continuity and discontinuity. Through a reading strategy inspired by Walter Benjamin this dissertation reads the physical and cultural implications of the digital transition in television in the United States through political categories. The chapters are case studies in the adoption of digital televisions for home use, digital television production technologies, digital transmission technologies, and digital distribution systems. Each case study examines the tenuous production of publics in the context of the dialectical pressures of the digital. By taking this approach I intend to contribute to the rhetorical dimension of television studies, the digital turn in rhetorical and public sphere studies, and the legal and aesthetic dimensions of production studies. The dialectical approach to the digital allows the study of television to theorize the trajectory of emerging media and the political implications of that movement.
# Table of Contents

**The Digital Turn: Television, Publics, and Dialectics**

- Convergence Culture .................................................. 6
- The Organization of the Public Sphere ................................ 9
- Television Studies ...................................................... 14
- Reading Strategies ...................................................... 16
  - The Arcades Project ................................................. 16
  - The Dialectical Image ................................................ 17
  - Radical Democracy .................................................. 22
  - Bricolage .................................................................. 24
- The Question of the Digital ........................................... 25
- Notes ........................................................................... 27

**Parlor, Living Room, Learning Center: The Rhetoric of the Flat Panel Television**

- A Short History of the Living Room .................................. 35
  - Hangars, Silos, and Dream Houses ................................ 35
  - Hippies and Reaganauts ................................................ 41
- Surrealism and Studies of Everyday Life ............................... 48
- The Late Romantic Life of the Baby Boomer: 1998-2000 .......... 52
- Toward a Democratic Design: 2001-2002 ............................ 59
- The Emotional Public Sphere: 2003-2005 ........................... 61
- Fat-Screen: 2005-2008 ................................................... 63
- BHG Best Tip – Get a TV: 2008-2011 ................................. 65
- “The IKEA Nesting Instinct” ............................................ 67
- Digital Ubiquity ................................................................ 71
- Notes ........................................................................... 76

**Film, Video, Metadata: Time-Axis Manipulation After the Linear Medium**

- The Early History of Editing ............................................ 86
- The Microcomputer Revolution: A Short History of Non-Linear Editors ................................................... 88
- The Digital Intermediary and the Archive ......................... 107
- Reading Final Cut Pro ..................................................... 110
  - The Server Bin ............................................................... 112
  - Online Resource Sharing ............................................. 115
  - Integration with parallel technologies ................................ 117
- The Arrival of HD processing ........................................... 120
- The Genie is Out of the Bottle – De-Democratizing the Non-Linear ............................................................ 122
- X Doth Protest Too Much ................................................ 126
- Digital Reproduction Killed the Film School Star .................. 127
- Notes ........................................................................... 134

**Engineering, Finance, and the Law: Dialectical Imaginaries and the Economics of the Digital Transition**

- Legal Surrealism ............................................................. 147

- iv
THE DIGITAL TURN: TELEVISION, PUBLICS, AND DIALECTICS

Every epoch, in fact, not only dreams the one to follow but, in dreaming, precipitates its awakening. It bears its end within itself and unfolds it — as Hegel already noticed—by cunning. With the destabilizing of the market economy, we begin to recognize the monuments of the bourgeoisie as ruins even before they have crumbled.

Walter Benjamin, Paris Capital of the Nineteenth Century (Exposé of 1935)

Modernism and postmodernism are not chronological eras, but political positions in the century-long struggle between art and technology. If modernism expresses utopian longing by anticipating the reconciliation of social function and aesthetic form, postmodernism acknowledges their nonidentity and keeps fantasy alive. Each position thus represents a partial truth; each will recur “anew.” So long as the contradictions of community are not overcome.

Susan Buck-Morss, The Dialectics of Seeing

The transition from professional television news production to graduate study in media was an instant digital transition. In the world of news, analog cameras transmitted low-resolution images of fading sets with wrinkled backdrops and a certain air of authority. This was the local television news, a prestige position in the most urban part of North Dakota. Compared with the technology available for graduate students to check out at the University of Iowa, the equipment at Fox Fargo was dated, at best. Instead of analog cameras that might makeup for less than beautiful sets, high definition cameras made everything and everyone look ugly. The analog provided a certain familiar glow, the integration of the interlacing video fields spared our eyes from the harsh truth — local news people are not movie stars. What the digital production of graduate school lacked in high-energy coverage of sporting events, it made up for in new technology. Entering graduate school was my digital transition. This dissertation is the story of the digital transition of television in the United States.
In the late 1980s, the United States Federal Government officially began the transition from the broadcast of analog to digital over-the-air television. Transitioning from analog to digital signals required changes in how programs are produced, how the data is encoded, and how the signal is reproduced in a viewable form. By the time that analog broadcast signals were suspended in June 2009, the material system of television had been revolutionized. Ubiquitous objects with their peculiar attachments such as televisions, cameras, and computers had to be updated to enter into the digital world.

Before the transition, the latest development in the photography market was the availability of cheap disposable cameras. The film advance ratchet of a cardboard Kodak camera was commonplace. A decade later cheap, durable, digital cameras were almost always included as a part all consumer electronics, like phones and music players. The click of the ratchet produced by a tiny speaker even though there was no film.

In this dissertation I argue that the transition from analog to digital television technology is a key site of a larger shift between positions that could be thought of as an analog and a digital public culture. The central finding of this dissertation is that the digital transition is important because of the act of declaring something to be digital, rather than digital technology itself. Understanding the transition through the ambivalent concept of the structural transformation of the public sphere is productive because the technological, regulatory, and economic structures involved in the transition are tied to the rhetorical and aesthetic approaches to the digital as an idea. Building the history of the digital transition around the physical story alone would be folly. The digital transition is just much about the continuation of the analog as the arrival of the digital. Often the digital transition is read as a mono-directional story of progress, which depends on the
idea that the digital is new and different enough to be different from what has come before. This dissertation finds that the digital relies on the conceptual resources of the analog, and further may in some important instances be an extension of analog politics, economics, and aesthetics.

The idea that the digital transition is fundamentally connected to the analog allows this dissertation to avoid the apocalyptic and utopian representations that characterize many studies of the digital. In many academic works, the digital transition is taken as cause for celebration or condemnation: this move all too often mistakes the rhetorical and aesthetic position of the digital for material fact. By working dialectically through the idea of the structural transformation of the public sphere; the rhetorical, aesthetic, economic, regulatory, and technological aspects of the transition can be considered apart from any judgment of the digital in the first instance. Getting distance from the spectacular story of the transformation allows this dissertation to feature a variety of arguments, which demonstrate the continuity and discontinuity of the digital. Understanding the relationship between continuous and discontinuous systems offers an entry into understanding the function of the digital.

The distinction between continuous and discontinuous systems is a function of quantization, the process by which a decision is made to break a single mass in to standardized units, which then would be reduced to simple binary code. The problem of quantity encapsulated in by Bateson as the relationship between counting tomatoes and water:

Between *two* and *three* there is a jump. In the case of quantity, there is no such jump and because the jump is missing in the world of quantity it is impossible for any quantity to be exact. You can
have exactly three tomatoes. You can never have exactly three gallons of water. Always quantity is approximate.\(^1\)

Digital technology works by the same principle of counting tomatoes, quantization. Analog technology would use a microphone to capture mechanical energy to be relayed, amplified, and reproduced without quantization. The electrical signal retains traces of the input for signal production. Digital technology depends on quantization to produce discrete values. The signal that comes through the wire is composed of streams of binary pulses of on and off. Any linkage to the physical world on the encoding side is lost. By reducing the profile of the thing that moves through the wire down to a simple code the sure volume of data that can be transmitted dramatically increases. This is not simply a curious bit of electrical engineering. Digitality appears repeatedly as a figure where discontinuity produces continuity.

Digital cultures use technologies that are dependent on discontinuous forms of information, which facilitate cultural practices that are no longer tied to a continuing cultural flow. Evangelists of digital culture emphasize that the end of continuity increases the editability and reproducibility of content, both of which are features of the increased level of detail that is made possible by the technology.\(^2\)

In literature and the arts, discontinuity is a charge leveled against failures of internal narrative rationality, dropped plot points, inconsistent camera placement, and other failures. This form of discontinuity had been frowned upon, as it would present as a jarring experience for the viewer, however the early twenty-first century has seen these kinds of presentation appear regularly and they are even celebrated. The return of stereo-optical movie presentations sacrificed the smooth aesthetic experience of the film for the artificially crafted aura of the machine.\(^3\) Michel Foucault used the concept of
discontinuity to theorize the changes in the episteme over time, notably the reasons why some discourses continue to operate across time, while others fade. This view of epistemic discontinuity is cultural: there is not a stable system of discourses that move between time periods or even within them.

Resolving to find continuity in discontinuity is a way of deferring aesthetic judgment, which is also a strategy for deferring political judgment. Aesthetics are rightly political, but as Benjamin was right to fear in his seminal essay on the reproduction of art, the aestheticization of politics is a path toward political terror. Although theorists of the public sphere would like to insulate public discourse from the emotional and aesthetic concerns of the lifeworld, the influence of emotional and aesthetic political strategies is undeniable. The trajectory of aesthetic change from the late analog era to the digital era is a central concern for reading the transition. Aesthetics are important, and the speech acts we use in judgment of aesthetic acts in the public sphere offers a site for analysis of the public that cannot be found in a reading of material relations alone.

This introduction will have three sections. In the first section, I will identify the ongoing debates in the field that this dissertation will intervene into. I will discuss debates about the future of distribution mediums, convergence culture, and the figuration of the televisual public sphere. In the second section, I will go into detail about my reading strategies and archive selections. In the third section, I will outline the chapters that will comprise the dissertation. I hope this dissertation project will show how the digital functions as a speech act that conceals, elides, and erases, just as it compels, produces, and evokes. The digital sits in a curious place between the utterance of rhetoric and the physical configuration of the bourgeois world.
Convergence Culture

Media studies investigations of the early twenty-first century have taken place under the sign of convergence. Henry Jenkins described the propensity for digital technology to overcome the divisions between platforms and devices as convergence, and the cultural formations enabled by these technologies as convergence culture. Chris Anderson describes convergence phenomena in more detail as the three forces of the long tail. The first force was that of digital technology increasing awareness of the products, the second was the proliferation of digital technology, which democratized production, and the third force for Anderson is that of a technology that could connect the awareness of the market with the new products that are being produced. The diffusion of technology would allow consumers to become active audience members who might produce cultural content, just as they find it.

Digital technology simultaneously disunifies the field of cultural goods, just as it provides a strategy for their reunification. What is striking about convergence driven analyses is the seeming lack of references to the features of macro-politics in which they are embedded. In Convergence Culture, September 11 appears only as a feedstock for the active audience, with short vignettes about the democratic power of citizens considering using the Internet to track down terrorists and sharing images of Osama Bin Laden being mutilated.

David Golumbia has argued that this assumption of technological mastery is largely a bourgeois fiction, and that the idea that public would have made the transition from consumers to hacker/makers of culture is problematic at best. It is far more likely that we would witness the rise of forms of reactionary political authority associated with
the self-satisfaction of mastery of digital technologies. In a less pessimistic reading, the arrival of digital technology would not seem to present the transformation of audience behaviors, but the need to find new centralizing mechanisms that could remake the fundamental quality of televisual flow. There is no reason to believe, or evidence to support, the idea that the average user of television has abandoned the use of television as a filler of spaces, a banal technology if ever there was one.

We have already had an introduction to the idea of convergence as a dominant cultural trope in the early twenty first century, however this not an undisputed category. There are a few specific debates about convergence that I will focus on: the relationship between media business convergence and technological convergence, and the relationship between technological convergence and convergence cultures. Eileen Meehan has argued that these positions are rarely mixed.9 This barrier can explain some of the problems that are identified with the work. The criticism often leveled against Jenkins is that his view of convergence greatly overestimates the propensity for the public to become engaged in media production and hacking.10 Theories of convergence that focus on the ways that technologies allow business consolidation become mired in pessimism, since the organization of media companies would eclipse the behaviors of media users.11 The question in this ongoing debate is about agency.

The literature from mass communication and business research provides insight into the current state of research on convergence as consolidation. Thornton and Keith have argued that media industry back-end convergence (electronic news gathering and news partnerships) has entered a period of decline, with decreasing levels of corporate convergence.12 A central reason for the collapse of convergence between media
companies has been the convergence of technologies, for example newspapers have ended their partnerships with television stations because they have been able to effectively deploy their own employees to capture video and audio.\textsuperscript{13} This is not to argue that vertical integration is not an ongoing process in neoliberal economies, but partnerships that would thrive on specific competencies decay because of convergent of devices.

On the business consumer side, first adopters are far less common than the device production industries would like to believe. Many early attempts at convergence took the idea of rapid adoption for granted, which offers important insights into the collapse of the web bubble at the turn of the twenty first century.\textsuperscript{14} It took newspapers several years to adopt the use cameras, which explained their partnerships with television stations in the mean time. The convergence of media businesses is a feature of financial structures. Continuing the linkage between consolidation and convergence into the future seems to be a risky move since the behaviors of corporations do not seem to match those of the ideal consolidators seen in the literature.

Technology as a producer of convergence cultures also has ongoing issues with describing the world. Han, Chung, and Sohn have shown that consumer preferences for products that have multiple functionalities is lower than was initially anticipated, with the public being far more willing to accept innovation after several generations.\textsuperscript{15} Convergence does not operate the cusp of creativity, but on the decidedly uncreative terrain of standardization. When David Golumbia argues that the interface styles of digital systems are far more likely to produce a cultural form of authority than creativity, he is arguing this point.\textsuperscript{16} Kevin Robins and Frank Webster argue that the forms of
power produced the web cannot be disconnected with the ways in which the web produces certain kinds of social formations, especially the ways in which educational programs appear to be part and parcel of a neoliberal project to produce a post-Fordist workforce. This will be discussed at length in chapter three in relation to the deployment of non-linear editing software. Technology education in this sense may never even rise to the level of a Bin Laden mutilation video.

A response from Jenkins can be found in his work on behalf of the MacArthur Foundation, where the development of adequate public education programs to close the digital divide could democratize the public sphere both in terms of production and cultural circulation. After convergence culture, Jenkins work has turned to increase the attention given to underprivileged youth gaining access to the web. It would be difficult to intervene into this debate without accounting for the nested visions of social organization incumbent in these approaches, which I turn to in the next section.

The Organization of the Public Sphere

Sustaining a discussion of the analog-digital transition would seem to call for the assignment of cause to technology, regulation, or a version of the public will. It is also possible to describe the digital transition as being without cause, the emergent property of an incredibly complex system, a self-organizing public sphere. Emergence supposes that complex systems can produce results that are more than the sum of their parts. The human brain for instance is capable of much more than any individual neuron. Communication theory has recognized the importance of this property in theories flow and symbolic convergence among others. It would not be a great leap to argue that the humanities address questions of complexity and emergence as their home turf. There are
two purposes for this section – to explain why I turn toward theories of the public when they have been so thoroughly critiqued, and to explain why I treat the forces that produce the digital public sphere through material and historical, rather than emergent terms.

First, I want to be clear about how the public sphere is theorized in this book so as to avoid misunderstandings. In his seminal work, *The Structural Transformation of the Public Sphere*, Habermas proposes that the semblance of a connection between government and the people is the result of the historical progression of technologies of publicity. These technologies operate both through the printing and distribution of texts as well as through the cultivation of a public that might have the capacity to receive them. The idealized figure of public life appeared as a series of debating societies that were organized geographically, where texts might be exchanged and judged by critical rational criteria. Many scholars have pointed out how this conception of an idealized public sphere is in fact counter-factual. Among the most persuasive objections to the theory are that Habermas’ descriptions of a potentially idealized case for the emergence of the public sphere is actually a normative advocacy of those conditions. Unfortunately, this has caused a great deal of consternation for communication scholars.

Melanie Loewhing and Jeff Motter present a reading of Habermas that offers the provocation for the development of a robust theory of publics and counter publics. The public sphere rather than being the ideal for what all social relations should be appears as a possible site for the connection between publics. By shifting the public sphere to a mediating role, Habermas choice to focus on new social movements, and later religious movements attempts to engage the public sphere appear not that these groups should aspire to be rational in the ways that Habermas would prefer, but that the idea of the
institutions is adequately flexible to accommodate a variety of warranting patterns and needs. Mechanisms of the public sphere are held to be separate from those using them. Ideographic enactments such as the <the people> or <survival> are not inherent to the structure of governance, but to particular movements. As an antidote to the Foucaultian conception of governmentality Habermas would create the framework that would allow for a robust analysis of the strategic reversibility of power relations. Loewhing and Motter thus conclude that Habermas presents a point where we might take up Frasier’s challenge to engage actually existing democracies.

A second common problem for communication scholars is reading Habermas as providing a narrative for the decline of the public sphere, with no hope. G. Thomas Goodnight and David Hingstman take up Habermas’ work along similar lines, arguing that the declinist narrative of the earlier Habermas has been replaced with a more sophisticated theory of a public sphere in contestation.22 Their review of the literature shows the importance of Habermas’ work for creating a discussion of the conditions by which public life comes into being. Goodnight and Farrell situate the challenge of argumentation after the cold war through his injunction to “get a lifeworld.”23 A particularly good reason why scholars would have taken Habermas to be providing a rational ideal is his conception that the public sphere could be unified by something that affects the entire public. Nuclear war, pandemic disease, and environmental disaster are the only real things that might affect the entirety of human society. These struggles call for a sustained effort unified around apocalyptic images. This provided the ideal feedstock for cold war criticism, which while a viable academic industry was complicit in an image politics that erased the margins.24 The cold war provided an artificially stable
conception of the lifeworld and a clear set of stakes for research. Repeating this kind of research would be folly. Getting a lifeworld would entail recovering the actually existing public sphere and the public culture and lifeworld that interplay with it. Goodnight additionally notes the ever-increasing skepticism inherent in public culture for the narratives of the cold war. In any case, the stability of the cold war is long gone. This is not to say that the public sphere is in decline or has been reinvigorated, but that it requires an attention to what it actually is. Often, this means an attention to skepticism itself.

Although a great deal of doubt has been introduced into the overly idealistic versions of the model, the overall utility of the idea of the public remains. Post-modernism has demonstrated fragmentation, but not total dissociation, and post-structuralism reminds us that we cannot transcend history, even for the grand narrative of fragmentation itself. The idea of the public endures, as a figure it recurs regularly.

At this point I turn to the question of emergence. The oldest positions find the origin of the public sphere in material relationships, while the newest simply assume that the public will spontaneously appear. In the early Habermasian public sphere, the energy of the public came from the material configuration of society, such as the sharing of pamphlets and discussion societies. In Howard Rheingold’s formulation, the public is self-organizing, becoming what he would call smart mobs. Smart mobs theory contends that Internet will decentralize the educational power of academics to allow access throughout the network, and thus the public could become organized toward particular ends. It should be noted that Henry Jenkins uses Rheingold’s theory, but with an important modification, the mobs that might form are organized to creatively redeploy materials from the existing macro-public. This is an important step forward because it
opens the possibility for a conception of agency that depends on connection to a communication network. As a representative of contemporary counter public theory, Michael Warner works in the productive space between radically distributed agency and the circulation of symbols. Since counter publics can form by attention alone, the focus on circulation can introduce a stronger focus on the flows of meaning rather than their spontaneous creation. Material conditions prime the world for the emergence of publics, but only the connection to a mechanism of publicity can actually bring one to life. At stake here is the distinction between a vision of public agency that sees creativity as being a feature of the material infrastructure and a vision of agency that is akin to the eighteenth century theory of vitalism, where a mysterious life force would generate publics.

If this were staged in the context of the aesthetics of continuity, the question appears somewhat differently. Theories like Habermas’ are essentially continuous, while Rheingold’s are discontinuous. In simple terms, Habermas theorizes that you might come to Starbucks to trade books and engage in spirited, rational debate, Reingold theorizes that you and twenty-five other people like you will spontaneously appear at Starbucks in route for a protest. An approach between these positions would seem to be the most theoretically interesting, and empirically valid. In this approach people would come to Starbucks to talk to their friends about celebrity gossip, and occasionally politics by the virtue of The Daily Show. I focus on television rather than the Internet because of the ongoing prospect of mass circulation that comes with television. Simultaneously, television is also a site of ongoing convergence with the Internet, making it an active player in the digital age. In both the analog and digital stories there is a role for the
emergent property of media systems. In the literary public sphere the production of
literary reflexivity as a capacity is more than the sum circulation of manuals, in the digital
public sphere a similar property animates the production of publics. What unites both
theories of the public sphere is the importance of the medium for creating a durable
circulating medium, and the subjective engagement with the lifeworld for creating a deep
well of reflexive content that could eventually engage with the public.

**Television Studies**

There has been an ongoing scholarly debate regarding the disciplinary trajectory
of the study of television. There are a few pronounced themes that characterize the study
of television today. From the outset I should be clear that the versions of television
studies emphasized in this section are often framed by concerns outside the television text
itself. Some scholars like Jeremy Butler have characterized the study of television as a
critical/cultural approach to mass communication research. Others like Lynn Spigel take
the approach that television should be read through a similar set of theoretical positions
as art history or cinema studies.\(^3\)\(^0\) Another version of the artistic approach involves the
study of “Quality TV” which is a term used by scholars like Kristin Thompson and Jason
Mittell to justify the artistic and theoretical investigation of upper class art objects.\(^3\)\(^1\) The
fan studies tradition, which is informed by British Cultural Studies and the work of John
Fiske, focuses on popular media texts and the audience’s creative uses of these texts.\(^3\)\(^2\) There is also a strong tradition of industrial television studies, Michael Curtin and
Amanda Lotz, among others, focus on the ways in which spatial, temporal, and economic
structures of television production and distribution lead to certain kinds of texts.\(^3\)\(^3\) Between these sub-fields there are relatively stable stasis points for debate. Quality TV
theories would clash with the proletarian leanings of fan studies scholars. The artistic orientation of art historical theories would not be compatible with the approach to the production of texts used by industrial scholars.

What is lost in this set of theoretical debates is the rhetorical tradition in television studies. Bruce Gronbeck, Samuel L. Becker, Leah VandeBerg, and other scholars in the 1980s and 1990s used an explicitly rhetorical vocabulary to read television programs. Rhetorical questions about genre, style, and publics have fallen out of discussion. The great strength of the rhetorical approaches to the study of television is their ability to balance a reading of the speaker, the audience, and the rhetorical situation. My concern with fan-oriented approaches is that they allow the audience, and their subjectively produced rhetorical moment to eclipse the speaker and the objective situation of the medium. Industrial approaches risk-losing contact with publics. Auteur theories lose both the public and the audience. The distance between the positions prompted one scholar to call for a new interest in theorizing the gap between encoding and decoding, as if an interest in public transmission was a new development in the communication field. Rhetorical perspectives can borrow from these other approaches, and can offer insights about argumentation and publics that have been lost. I am not arguing that we should simply add rhetoric and stir to produce a better sort of television studies, but that a study of the preferred readings of program production through a rhetorical vocabulary would offer a perspective that charges the political. While this dissertation does not read a television program as a primary source, the theoretical commitments of this dissertation: the focus on publics, power, texts, and the lifeworld, are an outline for a return to a rhetorical version of television studies.
Reading Strategies

There are two ways in which I intend to read the primary materials I have collected for this dissertation. The first section will discuss the ways in which I intend to read bourgeois dream, or dialectical images. This reading of Walter Benjamin’s work will connect with ongoing theoretical discussions of allegory, mimesis, evental rhetoric, and speech act theory that will be developed through the chapters. In the second section, I develop my position on articulation, borrowing heavily from Laclau and Mouffé’s *Hegemony and Socialist Strategy*. This section on reading strategies is intended to provide an overview of the theoretical approach to reading texts. There are surely additional insights that could be gleaned about the connections between Adorno and Benjamin. At no point can any of these theoretical approaches be without the others, by working between multiple archives and reading strategies I hope to gain more traction than by reading through one approach alone.

The Arcades Project

The most popular starting point for a reading of Benjamin’s work is the essay on the mechanical reproduction of art. The thesis of the essay is not as straightforward as is often claimed – the reproduction of a work of art liquidates the aura of that work, and democratizes that work at the same time. The cult value of the work is dispelled, but the circulation of that work, and the potential for making more works comes into being. The mechanical reproduction of art will be a central theme in chapter three, but is not emphasized in the other chapters. What I want to do in this section is to describe the larger theoretical project Benjamin developed in the *Arcades Project*, and the *Paris,*
Capital of the Nineteenth Century essays, to clarify the importance of this project for studies of digital media. There are going to be three themes that I take from the Arcades Project: Benjamin’s idea of a dialectical image, the prospect of this theory as offering an alternative to dialectical materialism, and the arche-digitality of the organization of the project itself.

The Dialectical Image

Although The Arcades Project is famous for being a creature of many folders or convolutes of clippings and other materials, the theoretical perspective on the unconscious dream world offers is a unique starting point for analysis. Each convolute presents an investigation of a different topic, with a theoretical approach appropriate for the material at hand. Even with the richness of this variety, the importance of themes of waking, and of dialectical history remains. In short the dialectical image refers to the idea of reading historical texts and technologies through political categories, using historical materials as elements for constructing a larger critique, rather than as things to be collected. To explicate this theory, I will outline Benjamin’s critique of the allegorical mode of history, and then I will describe the dialectical alternative.

Allegorical approaches can either take the form of the creation of authoritative collections of materials, or the collection of a limitless archive. This approach to history is relatively straightforward, collect the facts and stabilize them for the future. Allegorical histories in the first sense are written by those that Benjamin would call ponderers, their focus is the creation of an authoritative version of what happened with the goal of thinking about how things were at that point. In a second sense, Benjamin called historians looking to collect in perpetuity collectors. Librarians would appreciate the
commitment to preservation in the allegorical approach. Creating allegorical collections of material is an emerging concern in media studies as many of the new and social media that are shaping the early twenty first century are just as transient as live television broadcasts before non-metallic magnetic tape. While collections of Tweets, Retweets, and Google hangouts may be interesting, the context of their production is lost in the collection. Social media work because of a sense of energy—people Tweet because they are engaged in a form of discontinuous contact with others. Each advance in social media is never just a single instance of communication; it is embedded in a flow of communications, relationships, and moments that are saturated with possibilities. The vise of both positions is that they read the past through the lens of the past.

Beyond losing the energy of the communicative act, the allegorical image has an unfortunate history as a conservative cultural medium as wood cut morality plays and collections of exotic artifacts. Difference becomes a noun rather than a verb. Creativity is lost in the artificial stability of the allegory, perception erased in favor of completeness. The allegorical image either turns fetishistically toward the past or toward the impulse to build the collection.

Benjamin’s dialectical image emerges in his understanding of waking being. The dialectical method consists of reading both the object itself as well as the interest in that object in its time period. Placing the object in the context of interests places it in the present-time, and frames the rhetorical dimension of the production of the image of the object with the object itself:

In regard to such a perception, one could speak of the increasing concentration (integration) of reality, such that everything in the past (in its time) can acquire a higher grade of actuality than it had in the moment of its existing. How it marks itself as higher actuality is determined by the image as which and in which it is
comprehended. And this dialectical penetration and actualization of former contexts puts the truth of present action to the test. Or rather, it serves to ignite the explosive materials that are latent in what has been (the authentic figure of which is fashion). To approach, in this way, means to treat it not historiographically, as heretofore, but politically, in political categories.\(^36\)

The historical view can be more active than a view of the object itself once it recognizes that it is our current reading of the object that matters in the first place. It is the relation that the critic makes between the present and past context that is the source of potentiality. In this move to make the engine of history the agency of the critic Benjamin abandons the Marxist theory of progress – there is nothing inevitable or natural about the movement of history that comes from objects.

At the time, Benjamin’s approach was understood to be a push against orthodox Marxist theory. The pressure from Benjamin’s colleagues to include more traditional Marxist analysis can be seen in their letters to Benjamin and his responses. In a particularly telling letter from Adorno to Benjamin in 1938, Adorno attempts to persuade Benjamin that although his work is a fantastic materialist analysis, his work would be enriched by the power of Marxist categories. Adorno’s concern is that “mediation through the social process is missing.” Benjamin is not a sociologist, just as there is not a role for a pre-discursive conception of progress, there is not a conception of the social force – a combination of the effects of the materials themselves and our images of those materials produces the effect we call history. In this sense Benjamin has strayed too far from the project of the Institute for Social Research, his reading strategy clearly prefers Proust and Nietzsche to Engels and Marx.\(^37\)

Benjamin provides the grounds for a critical theory that is not wedded to the historical specificity of class conflict, but is tied to the condition of being human. The
fundamental violence of language and the necessary closure of possibility incumbent in life as a languaged being are the horizon of critique, rather than an immanent possibility of producing more effective class struggle.

We can see Benjamin responding to a similar, yet different objection raised in a letter from Horkheimer. Horkheimer had written to Benjamin emphasizing the completeness of history, using the example that the murdered are murdered; the grave is a determinate fact. History in this sense is a concrete thing, rather than a text. Benjamin’s answer was to reassert the power of reflection that he finds in Proust. If history can only have a register in the form of the remembrance, then the way in which the text of reality is read and reassembled is the only meaningful register of materiality. In the context of the murder, we know that the dead are gone in remembrance, a discursive mediation.

In addition to offering a theoretical alternative to an allegorical history and conventional dialectical materialism, the format of the Arcades Project can be seen as a cursory guide for writing about the digital. The great power of the digital is to produce continuity through discontinuous means. Since the dialectical image is structured around the capacity of human consciousness to perceive both objects and their images, writing would need to be structured to attempt coverage both of the physical digital things, as well as the meanings that push those structures forward. Since it would impossible to hold all the digital things in our minds at the same time we must select items for the archive. In this dissertation, the selected items are intended to serve as a critique. If we were to attempt to formulate our scholarship around the completeness of the archive there would never be an ending. While this dissertation is not as comprehensive as the Arcades Project it is written with a similar emphasis on a collection of meaningful elements of the
digital transition. There is no way that I could write a dissertation that would deal meaningfully with the digital transition in a continuous, linear way. I scarcely believe I could do this with five volumes. Instead this dissertation is structured around a few dialectical themes from the digital transition – reading the influence of the materials of history as well as their meaning in their time and place. The dissertation is read from the perspective of the present through my move to politicize the categories of the digital, and in this sense it demonstrates a great deal of continuity.

The examples and archival materials on the other hand, are discontinuous, and that discontinuity has a value in itself. In a very concrete sense, treating one technology as another would be dubious. Governments, markets, advertisers, executives, and everyday people make decisions about what technologies will be deployed at any given time. Technologies, and their adoption often come as a sudden change or a paradigm shift, be this anxiety, aesthetics, or something more nefarious. The break comes through discursive, rather than mechanical means. Consider the variety of articles that historicize forms of new media: showing the historical roots of a new formation is treated as a scholarly end in itself. What is revealed in showing the old elements of new media is that there is a substantial rhetorical impact to declaring something to be new. The declaration of the new can in many ways speed the adoption of a technology or practice. Discontinuity allows continuity to flourish. By deriving my writing style and strategy from the Arcades Project, I can take full advantage of the continuity and discontinuity of the digital transition. Instead of resolving technological, economic, and agentic determinisms into a wash of qualifiers, they can be deployed with their full original, persuasive power.
Radical Democracy

There are substantial portions of this dissertation that read institutional discourses. The conceptual structure of institutional discourses are distinct from bourgeois dream images in that they involve juridical decisions about distribution, as well as cultural ways of being that are produced in dialectical images. It is useful to review Laclau and Mouffe’s conception of radical democracy as a starting point for the development of the theoretical thrust of post-structuralist rhetorical critique.

*Hegemony and Socialist Strategy* was written against the backdrop of the exhaustion of Marxist theorizing. The idea of the intractability of class struggle and the coming emergence of class difference driven politics had lost descriptive power. Laclau and Mouffe’s project reconceived Socialist politics as a series of struggles to obtain dominance within a constantly changing system of articulations. At no point was class the first, or even a necessary starting point for a political movement. The only constant in this system is change. There is no point where the discourse configuration will stabilize; there will be continuing struggles by different interest groups to attain hegemony, if only for a short period of time.

It is important to note that this theory describes the interaction between social actors in the public sphere, which has constraints, discourses, and technologies that both constitute and are constituted by a movement. Some of these technologies are things like deadlines, elections, and budgets; hegemonic groups that have taken control of the juridical apparatus make decisions. This is the contribution of Carl Schmitt to contemporary democratic theory -- providing a constant reminder that there will be a moment of decision and that winners will be selected. Deliberation takes place over a
historical trajectory punctuated by decision points. In this way radical democracy reads the past through the present. Teasing out the ways in which the current political moment is produced by a long-standing chain of articulations is the crux of this reading strategy.

Articulation in the case of radical democracy comes from cultural studies, meaning the connection between ideas. They take this a step further by reading these connections through Lacanian psychoanalytic terms. A point de caption describes the operation of a key term, whereby an entire discursive system is grounded retroactively in material terms. In a less abstract sense, a point de caption has been called a quilting point. Reading public discourse requires finding the quilting points and detailing the ways in which those terms and speech acts produce and are produced by power relations. In the context of this dissertation, this requires both reading the major discourses used in juridical settings and how they produce figures that retroactively justify themselves in material relations.

Radical democracy is the name given to a form of political organization that fully accepts the intractability of the struggle between regimes of circulating meanings. This precludes viewing the public as a creation of a natural or historical process. Laclau and Mouffe describe their approach thusly:

Our approach is grounded in privileging the moment of political articulation, and the central category of political analysis is, in our view, hegemony. In this case, how – to repeat our transcendental question – does a relation between entities have to be, for a hegemonic relation to become possible?

They continue:

This is the point at which, for our analysis, a notion of the social conceived as a discursive space – that is, making possible relations of representation strictly unthinkable within a physicalist or naturalistic paradigm – becomes of paramount importance.
This view provides a point to engage the ongoing debates in the field of digital media. The questions asked in the debates section about the status of the digital public sphere often revolve around the source of energy for public organization. Radical democratic theory would require shifting the debate about the genesis of the public sphere into discourse and the particular articulations that hail individuals to participate in social structures. Areas of this dissertation that would be concerned with the design of equipment, electrical engineering, or business transactions would be focused on the discursive interplay of those objects, not the objects themselves. Public culture can be understood by reading the dream images of the bourgeois, which produce the affective resonance of particular rhetorical constructions that are operative in public culture.

Bricolage

While it would be convenient to use Laclau and Mouffe to provide a reading strategy through chains of equivalence and points de caption, these mechanisms are not particularly well suited to read the texts in this dissertation. Instead of attempting to fit analytical tools suited for new social movements to the study of images of televisions in magazines, each chapter develops a critical vocabulary that would allow a more robust reading of the artifact at hand. For televisions in the home, a surrealist rhetorical theory of everyday life is explored. For production technology Kittler’s provocative thesis on time-axis manipulation and media determinism come into contact with actor-network theory. For the study of regulation and distribution, new directions in critical legal studies are added to the toolbox of the digital rhetorician. In each case, Benjamin is the inspiration. The conception of progress and history, along with the rejection of the mainstream Frankfurt school version of dialectical materialism are central to this
dissertation. This collection of theories and artifacts is inspired by Benjamin himself, to undertake a reading of public culture and the public sphere along the lines of the *Arcades Project* through a single theoretical edifice would be inadequate. The connections between the dream world, lifeworld, and the public require reading strategies for each linkage.

**The Question of the Digital**

This chapter opened with the idea that the meaning of the digital is often left open. It is a technology, and a cultural form – a form that is associated with ruptures in the structure of bourgeois life and with the continuation of bourgeois culture. To conclude the introduction I want to pose a few questions that guide the rest of the dissertation.

Using the production, distribution, and consumption of television in the analog as a base line, how has the digital effected a structural transformation of the public sphere? The great strength of Habermas’s approach is that he tells the story of the evolution of the public, with a discontinuous theory of agency produced by material change. By putting the question of the public sphere in the foreground, the chapters attempt to update elements of public sphere theory with digital details.

In that case, what is the digital? The distinction between the analog and the digital will be used both in the concrete sense to describe the change in signal processing, and in the figural sense to describe what the image of objects. In chapter two for instance, the idea of the digital as a cultural form will take the lead, in chapter three the digital is treated as a technology. In chapters four and five, the digital becomes an analogy for a
pattern of legal and financial reasoning. The question will be revisited throughout this dissertation.

What does this conclusion say about the possibility of politics in digital modernity? Benjamin’s dialectical theory works by framing historical questions in political terms, this dissertation endeavors to do just that. The use of political categories is distinct from the implementation of politics by digital means. In the concrete sense politics occurs in the relationship between the material design of systems and their idealized images – the union of the conditions of possibility and the political imaginary. The digital appears throughout this dissertation as an open question. The digital is caught between the physical and the figural -- describing the technology in either set of terms exclusively would be in error. In each chapter, the digital is described through both sets of terms, and impacted through political categories.

The question of the digital will not be resolved in this dissertation, the best I can hope for is that the exploration of the dialectic will allow the political capacity of the dialectic to surface in a more direct, more liberating way.
Notes

1 Gregory Bateson, “Number is different from quantity,” *CoEvolution Quarterly*, (Spring 1978), 44-46.


5 This is clearly a reference to Walter Benjamin’s Work of Art in the Age of Mechanical reproduction.


10 Ibid. See also, Golumbia, *The Cultural Logic of Computation*, 224.


18 Henry Jenkins, *Confronting the Challenges of Participatory Culture*, (2006), digitallearning.macfound.org


20 An expansive and preferred list can be found in the Goodnight and Hingstman article.


26 Although I am less that generous with David Gray Carlson’s (see the footnotes of chapter four) attempts to accuse Schlag of forming a hermeneutical circle, the accusation does have merit against the post-modernism of the mid-1980s that used a grand narrative to disclaim grand narratives. This is a post-structuralist, rather than a post-modern dissertation project.


28 Howard Rheingold, *Smart Mobs*, (Cambridge, Persus Group, 2002).


32 The key follower here is Henry Jenkins.


34 Their edited volume was key. A similar volume that takes a position that is similarly rhetorical is Allen’s *Channels of Discourse*. Robert Allen (editor), *Channels of Discourse Reassembled*, (New York: Routledge, 1992).

35 Scholar to remain nameless, at SCMS 2009.


37 This should also be understood to be my response to actor network theory. Although we exist in networks with agency, the agency of the critic should be foregrounded. Surrealism as a political force is at its strongest when we formulate it according to legitimated categories. ANT should not be understood to call for a fetishistic attachment to the small things but an attention to the connections between people and power that would be meaningful in itself.

38 Ibid, N8,1.

39 I am thinking bribery or other dubious practices.

40 Agentic determinism is intended to refer to the hypertrophy of agency in some versions of convergence theory.
PARLOR, LIVING ROOM, LEARNING CENTER: THE RHETORIC
OF THE FLAT PANEL TELEVISION

It’s hard to look at things directly. They are too bright and too
dark. Sometimes we need to look at things through a screen. On
one side, memories fade. On the other, they glow forever.

– Agent 006, The Department of Human Sanitation

Position diffuse, low-watt lighting, sconces with frosted glass
shades or table lamps with dimmers, behind and slightly to the side
of your TV. Your eyes will experience less strain as the picture
shifts from light to dark.

– Suzanne Katrina, tecilicious.com, for Better Homes and
Gardens

In his dazzling 2007 short film, There’s Only One Sun, Wong Kar Wai unified the
gritty passion of a cyberpunk film noir with stunning, colorful images. Our femme fatal,
Agent 006, was blinded by the department of human sanitation so that she might defeat
Light, a suave agent of evil. Only by sacrificing her sight could she avoid being dazzled
by his appearance. The last image she would ever see was the only known image of the
fugitive, Light. She gets her man in compelling story of chase and seduction, killing him
with a revolver at point blank range.

When asked by a curious yet dubious barkeep if her blindness was lonely, she
replied that she never felt alone. The film ends with a beautiful montage, showing how
she shot Light, yet did not kill him. He is dead, yet is everywhere? Broken free of a frail,
human form, his aura can finally fully captivate her as it permeates her entire world with
colorful light that she somehow can see, coming from an incredible Philips television.
The last minute of the film finds Agent 006 groping about a beautifully lit set, her
intimacy a screen underscoring the emotional resonance of the moment. She is not alone
because the light from the set is always filling her world. The film is a perfect fusion of a
cyberpunk noir and an orgiastic celebration of new technology.

This optical feast was produced by Philips to introduce a line of flat-screen
televisions. These new machines would translate the image on the screen into a sea of
ambient light that would fill a room, projected by an array of light emitting diodes along
the sides of the machine. Instead of simply seeing a woman a red dress on the screen, the
red would be projected out into the room. Viewers would experience it as if they were in
a theatre, their now dark, empty, white semi-gloss living room a visual echo chamber, a
later day cave with flickering forms.4

Wong Kar Wai and Philips have presented one of the most elegant formulations
of the digital sublime, where the department of human sanitation has killed the
anthropomorphic form of the television at the same time as they have erased vision
itself.5 After the ugly, space consuming box is dead we can be free to have a real, total
relationship with television. Television for the Aurea campaign is an event that can only
be meaningfully described with a film whose technical and aesthetic merits exceed
television programming. Sacrificing the singular theatrical televisual form makes
television everywhere and completely satisfying, orgiastic and eventually banal.6

In this chapter, I argue that the representations of televisions and television
installations represent a public common place for sharing aesthetic knowledge. The
choices made by advertisers and editors about how televisions would be presented gives
us an insight into how the experience of viewing television is understood by the public,
and works as a register into the potentially troubled terrain of the broader public
relationship with media.
Philips didn’t offer *There’s Only One Sun*, in isolation. The film was concealed in a rich flash website, seducedbylight.com. On *Seducedbylight* the visitor was not first presented the film itself, but a “making of” video featuring corporate talking heads, telling us about their decision making process in producing the video and about the mechanics of building the set for the commercial that would feature the television, playing the short film that Wong Kar Wai would direct. What is striking is the emphasis on reflexivity. Philips first priority was to tell the viewer the meta-story and to show people performing their awe over this accessorized television. This film is not a one-off project – Philips has commissioned several films from famous directors with increasing levels of self-reflexivity, even reflexive interruptions so that the customer would know exactly what they were seeing and why it mattered.

More interesting still, this advertising campaign was never fully intended for audiences in the United States. Aurea and a host of other technologies of this sort are hosted on the Philips website, but are unavailable if you choose United States as your country. Although Philips made these particular televisions available in the United States, consumers never accepted them into their homes. Somewhere in the slippage between cultures, successfully solid global television events became incommensurable with everyday American television. While this chapter does not endeavor to be a cross-cultural comparative media study, it is important to note that there is something distinctive about the interior of the American living room that would not invite the latest technology in. Television in the American living space is not meant to be an all consuming media event, but a moderately ambient experience that fulfills another functions.
The digital appears in the home initially as a signal processing technology; the arrival of the digital television, and the anxiety that it might cause is a distinctly different situation than simply soldering a different chip onto a circuit board. The digital television is not like what has come before. Where there was one a large magnetic tube there is now a flat picture. The new digital signal processors allow for new distribution arrangements for television programming. In an economic sense, digital display devices are a necessary step for the distribution of digital content. Without the flat screen television, there is no demand for material that might be distributed through high definition and IP-centric channels. The changes in the distribution channels and how those inflect the life world provide an added complexity in the discussion of the transition to the digital flat screen television. In this chapter the dialectical position at stake is between the romantic vision of the continuous family and creeping rationalism.

In order to more fully understand the position of the interior, and particularly the living room, the first section of this chapter will attend to the history of the living room presented by Walter Benjamin. The second section will address the relationship between Benjamin’s scholarly position and contemporary rhetorical criticism. Third, I will read primary texts that document the transition in home screen selection. Finally, I will explore the emerging relevance of Danish modernism and the meaning of the rhetorical privilege of function over form.

I will be reading advertisements for and articles advising consumers about the placement of flat screen televisions and set-top boxes, especially ads that introduced new technology. One of the most common reading strategies in other studies of television in everyday life have used advertisements that introduce or promote a technology as a
starting point for getting at the ideal use cases for a technology. Following the
Benjaminian reading strategy described in the first sections of this chapter and in chapter
one, in the segments that are historically oriented my use of examples and advertisements
will be driven by the need to highlight key features of aesthetics and design. In the
analysis on the other hand, I will focus almost exclusively on advertisements for
particular technologies that express ideal use cases for those technologies. In both cases,
the subject at hand is the ideal type and the normative recommendation. My choice of
reading publicly accessible texts for the circulation of aesthetic knowledge is inspired by
Lynn Spigel’s work both on the placement of televisions in the home, as well as the way
in which television in the 1970s circulated aesthetic education to the public writ large.

My archive consists of images from every issue of Better Homes and Gardens,
picturing every article or advertisement that included an image of a television from 1998-
2011. A grand total of thirty thousand pages screened. The key in reading these was to
look at how the television was represented. Was there an attempt made to hide it? What
authority claim if any was made regarding what the function of the TV in the household
would be? Is there a larger system governing the placement of the television in the
advertisement? The number of appearances of televisions in this review is not
particularly large. Months could pass between mentions of a screen, much less a picture.
The absence is telling. While the television is marginalized it appears most frequently as
an example of social ill, once accepted the television is pictured far more frequently.

I intend to read the aesthetics of this period by comparing the dispersion of flat
screen TV technology to the changes in aesthetics as presented in women’s magazines
and in the popular source of aesthetic knowledge, IKEA. The reason for including both of
these features is that the magazines provide an ideal image of what a bourgeoisie household might look, and IKEA through the in-store experience provides a look into the built environment. I want to treat *Better Homes and Gardens* as a trailing indicator that tells us how aesthetic practices are, and IKEA as a forerunner, that shows what aesthetics will be.

My history will focus on the specific way that televisions and their placement in the home was simultaneously informed by television and informed television. There are some elements of television history that are intentionally omitted here – the economics of the industry, the politics of program creation, the texts of specific television programs, and the regulatory environment. Although these elements are surely important, my review history of over fifty years of television is intended to set the stage for a reading of contemporary discourses that inform the production of aesthetics of everyday life, not to provide a comprehensive history of television.

### A Short History of the Living Room

Before a discussion of the reading strategies to be employed in the service of the dialectical image a discussion of the history of the living space and technological innovation will help ground the idea of continuous change over time. The central metaphors that I will draw out of these historical sections will be important in reading the contemporary materials. While the politics may be somewhat different, the political positions are surprisingly similar over time.

### Hangars, Silos, and Dream Houses

“Almost all new houses have gas today; it burns in their inner courtyards and on the stairs, though it does not yet have free admission to the apartments. It has been allowed into the
antechamber and sometimes even into the dining room, but it is not yet welcome in the drawing room. Why not? It fades the wallpaper. That is the only reason I have run across, and it carries no weight at all.11 – Walter Benjamin, *The Arcades Project*

The romantic pretension is clear, even in as much as it is arcane to the observer that Benjamin is quoting: the parlor, or possibly drawing room, is not meant for everyday use, or even really any household use that would require more than a modicum artificial light. This pre-living room is intended for display, not for living. Rooms were made from materials that would in no way be suitable for everyday life. For Benjamin Dream Houses are not places that one lives in, but places that index bourgeois aspirations. Dream houses might include wax museums, shopping malls, and surely the front rooms of middle class houses.12 The reference to the non-functionality of the parlor is an early passage in the convolute of the Arcades entitled Interiors, which in conjunction with the convolute on Iron Construction tell the story of the rise of the modern home. Producing the form of the bourgeois life would be far more important than maintaining a functional living space. The ornate living spaces of the late Victorian period did not hold, at least not in their current form. The living room could be seen as the outcome of the end of the romantic parlor.

A Google Ngram analysis reveals that the word living room finally overtook the term parlor in English literature in 1945.13 The term parlor was nearly unknown until the mid the nineteenth century, and living room appears as a functionalist response in early twentieth century women’s magazines. Karen Haltunnen traces the transition from parlor to living room in late nineteenth and early twentieth century women’s magazines, where the parlor and drawing room became symbols of a bygone era.14 This conception of the transition from the parlor to the living room is aesthetic, rather than functional.15 At the
turn of the twentieth century, Victorian decorating advice was working feverishly to respond to the rise of the living room, claiming that the end of the parlor or reserved hall for guests was tantamount to the colonization of the lifeworld, Haltunnen quotes from Victorian sources, “They wrote that a proper hall served as “the introduction to the living-room of the house… like a public square in relation to the private houses around it.” The parlor provided a prophylactic against any number of infectious agents accessing the house. According to an 1895 decorating manual by Wharton and Codman the ideally decorated bourgeois house would employ classical aesthetics. This manual, The Decoration of Houses is a particularly important as it was a seminal work. Their conception of clutter: “Modern decorating has called a varnished barbarism: a definition that might be applied to the superficial graces of modern decoration.”

Haltunnen’s theory of the rise of the living room connects the rise of the romantic individual artistic persona to the rise of the living room – the aesthetic sensibility that created the living room as the central locus of the house is really about communicating the decorators personality to their guests, and producing a space that is tied to that personality. The advice publications of the 1910s positioned the choice between personality decorating and Victorian moral decorating in rhetorical terms. Designing a living space was about making an argument, and would ideally be thought of as a language. Haltunnen summarizes her position on the living room as both a cause and sign of the modern:

In short, the hidebound horsehair-and-black-walnut parlor did not merely express the ideal of character, it actually shaped character. And the cheerful cozy, hospitable living room emerged along with the new concept of personality as a crucial mechanism for its development.
In one sense this quote is a response to Veblen as the overwrought parlor is not a creation of the advertising, but can clearly be seen in the consumptive aesthetics of the Victorian period. Character shaping spaces for Christian urbanites needed to be made of only the most expensive materials. Purchasing the right things that adequately describe the inner-self characterizes the twentieth century culture of consumption, just as it describes the Victorian use of black walnut.\textsuperscript{23} Wharton and Codman frame the potential of personality decorating in even more direct terms:

\begin{quote}
There is no absolute perfection, no communicable ideal; but what is much more empiric, much that is confused and extravagant, will give way before the application of principles that based on common sense and regulated by the laws of harmony and proportion.\textsuperscript{24}
\end{quote}

The romantic conception of the individual author has appeared repeatedly. In one sense the romantic, genius author is the originary metaphysical figure of copyright law. A brilliantly inspired writer/painter/musician is imagined to sit down to create a work that expresses their innermost thoughts and feelings, and that this work would be the original creative activity.\textsuperscript{25} Expressivism in literature would carry this position through as a style, or in a more familiar position for rhetorical theory, as sentimentalism.\textsuperscript{26} Edwin Black saw the romantic sentimentalist style in Kodak commercials that feature weddings and other family events.\textsuperscript{27} The sentimentalist style is at once evasive for Black as it is constructive for Haltunnen. What is important in readings that work in either direction is that the style operates most successfully when it is at the threshold of recognition. Sentimentalism and expressivism breakdown when the author and the nostalgic identification play too strongly. The failure of the Victorian home design to evolve and to
create its own ethos through anything other than propriety alone is much akin to an
author who tries a bit too hard to prove their connection to their topic matter. Consider
the failure of James Frey with the Oprah book club – the audience’s deep hunger for
personal stories served him well, until the fabrication of important details came out.\textsuperscript{28}
Since this market produces an incredible demand for wildly detailed personal stories, the
audience being repeatedly taken by hucksters is understandable. Retained in both the
formulation of the home as the personal and the home as the everyday representation of
high culture is the idea the genius of the author even as the author is tied to instructional
texts in the first place.\textsuperscript{29}

Constructing a functional, expressive house with contemporary materials was a
matter of some greater difficulty. Techniques that one might use to build structures made
of glass and steel took decades to develop. In an early version of the \textit{Arcades Project},
Walter Benjamin included more than his normal collection of text fragments. In addition
to the text, Benjamin included the plates for publishing pictures from a 1923 collection of
Le Corbusier articles, including pictures of hangars and silos – structures that resolve
fundamental problems in the phenomenology of architecture, “In the first third of the last
century no one yet had an inkling of how one must build with glass and iron. This
problem has long since been resolved by hangars and silos.”\textsuperscript{30} Le Corbusier’s work is
foundational in the development of an architectural sensibility that privileges making of
things that are functional. His vision is liberatory in that it would make the city rational in
the sense that it would be democratic.

This reading of Le Corbusier would be satisfying for Benjamin early in the
Arcades project, but as Buck-Morss argues, this sort of connection would be increasingly
tenuous for Benjamin as the 1930s rolled on. The periodicity of Benjamin’s work should not be underestimated.\textsuperscript{31} Consider that the entire convolute on Baudelaire was completed during the final phase of the project, the same phase in which his refusal to adopt the explanatory utility of exchange relations became clear in his correspondence with Horkheimer and Adorno, as it became increasingly clear that emancipatory politics would come not from the ownership of the means of production, but from an Angel.\textsuperscript{32} The rise of the darkly aesthetic Benjamin goes hand in hand with his Proustian boast, and the \textit{Work of Art Essay}.\textsuperscript{33} Earlier Benjamin tends to emphasize the chance for rationality to lead to emancipation and productivity; the later Benjamin is increasingly sure that any new politics would come from outside the material world. The later Benjamin attributes to angles what the earlier Benjamin might attribute to material.\textsuperscript{34}

Materials like iron, steel, and glass have the promise of the synthesis of entirely new architectural styles.\textsuperscript{35} Shapes and forms that were once limited by the travel of a plane or the heft of a stone were no longer tied to the physical world of building materials. Modernist train stations and Arcades take center stage in the early phase of the convolute on iron construction techniques. The end of the convolute features the stories of the first wood working strikes, and the rise of the use of glass and iron in the homes of even poor Parisians.\textsuperscript{36} While access to materials may have been universalized, the aesthetics of homes are still quite clearly marked for class.\textsuperscript{37} Poor houses had simple iron railings; rich houses had highly decorative railings.

Benjamin’s interior is quite similar to Haltunnen’s in that it is the expression of a personal that is also quite rightly public. Even as more robust apparently modern techniques and technologies appear, the question of how to format interior spaces turned
to aesthetic reference of upper-class symbols.\textsuperscript{38} The new design for the home appears as the emergence of modern living into what had been before a pre-modern environment. In both time periods the ideology of visible consumption is retained, and in the transition from the Victorian parlor to the living room or from the early living room to the functional living room, the possibility of change is presented as being very much alive.

**Hippies and Reaganauts**

Introducing a new technology that fundamentally changed the nature of an everyday practice, listening to the radio, received marginally ambivalent if not an openly hostile response. Still weary from the depression and very aware of surveillance, the public was not rushing out to buy televisions. Even in the early 1950’s women’s magazines already decried the power of television to harm children. Spigel in a particularly fantastic example cites a magazine editorial from 1948 that goes as far as to claim that the spread of television had already had greater consequences than the use of the atomic bomb.\textsuperscript{39} At the same time, the programming on television was seen as a strategy to emasculate the already fragile position of the father figure in post-War life.\textsuperscript{40} This narrative for the culture of the late 1940s stands in opposition to the story of a triumphant post-war culture. Times before the war were not simply forgotten; the baggage from failed ideas remained quite real. The 1930s were a time of national trauma. The promise of technological forms had been upset by the failure of modern institutions.\textsuperscript{41} The roar of the roaring twenties came from technical rationality. When that rationality imploded, technological development faced a legitimation crisis.\textsuperscript{42} Technical management failed in the 1930s, which can be most clearly seen in the rise and fall of Herbert Hoover as engineer and chief.\textsuperscript{43} The strategy for recovery would depend on
finding ways of talking about technology that would heal the wound of the depression and the perception that technology destroys jobs, not the technology itself. The deterministic vision of the late 1920s would need to be replaced by something more comforting and familiar than another technological utopia.

Shifting the public zeitgeist on the use of the television required a move to make the television an object to control. Spigel frames this as a generative moment in the “sociosexual division of space.”44 Problems with children watching television were framed in terms of managing how much and what kinds of programs would be watched. Problems with teenagers were managed by creating spaces for them to hangout.45 Problems with program selection were solved with two smaller television sets.46 This strategy of creating spaces would allow the masculine male to manage his own television viewing, to create a more humane space for a homemaker through daytime soap operas and to render the technology banal made the television acceptable. Spigel put it quite effectively, “Indeed, at least for the housewife, television was not represented as a passive activity; rather it was incorporated into a pattern of everyday life where work is never done.”47

The production of the living room as a concept is itself telling. Early advertisements suggest the TV room as the playroom, a space meant for the pleasures of the spectacle of the public world. This would serve the role of the parlor, rather than the family room. In the case of the teenager, the playroom could stand-in for a place in public for social gatherings.48 This room functions as a nexus created both by the spatial management of masculinity and a particular kind of publicness created by programming that sustained the vision of a safe, decent world. From the beginning, the strategy to sell
the television to the public was predicated on the logic of control. Discourses about the placement and purchase of televisions were essential for managing the palpable public anxiety and creating the possibility for a mode of organizing life around carefully controlled pleasures and identifications. The location and control of the television promises the bourgeoisie the chance to produce the romantic world that they seek. The idea of restoring the parlor through the television has almost Victorian overtones. By the 1960s, the rhetorical project to legitimize the television as a form of family entertainment had accomplished a great deal, many people owned and watched televisions.

In the compressed time of just over twenty years, the television went from a luxury item to a ubiquitous household appliance. In one sense the television would enact both extremes of the characterization of the technology – the unifying potential of a medium that could bring modernity to everyone and the risk of producing the Imperial Presidency of the Regan era. Juxtaposing FCC Chairman Newton Minow’s conception of television as a “vast wasteland” in 1961, to FCC Chairman Mark Fowler’s conception of television a “toaster with pictures” in 1987 would reveal just how natural the television had become. In just twenty-five years, the television had been transfigured from an apocalyptic technology destroying the American lifeworld into a ubiquitous technology that is as second nature as breakfast.

The popular historical narrative of the 1960s as a time of radical change has great currency and the success of the civil rights movement, the visibility of counter culture groups, and powerful media events dominate the story of that decade. Sneaking in plain sight alongside this trajectory, media institutions and the major networks had embraced their role both as a transmitter of aesthetic priorities as well as a critical reference point
for the production of art in the 1960s. Spigel terms this flow of aesthetic information into the home as “everyday modernism.” At stake for Spigel and media studies scholarship generally is the story that is told about the relationship of art to television, with the critical theory move characterizing the television as destroying high art and the media museum gesture to treat the television itself as art. Both of these views, critical theory and the media museum, treat art and television as separate; Spigel argues on the other hand that the relationship is a circulation model. The vision of modernist art was both replayed through television as well as being informed by television. In the context of everyday life, this circulation of aesthetics fundamentally informed the production of consumer goods.

The Smothers Brothers and Dennis the Menace were key texts for families that had begun to watch network television rather than engage in other forms of entertainment. Spigel’s latest book makes the case that early 1970s network television should be considered a form of high culture. Spigel is clear from the outset that her work is not a foray into what she terms a “taste war” – the phrase she uses to describe the political ramifications of television on the Presidency, or as a marker of the struggle between the theory of Quality TV and low culture discussed in chapter one. Her book instead is devoted to examining the material relationships involved in broadcasting. Network television is particularly important since it is used to imply a large, undifferentiated audience. For Spigel, CBS was engaged in public service, as she argues that their programming in this time period was a critical source of art education. Her appreciation of the programming is complimented with the public lament of the loss of a media directed toward the mass public.
For Spigel, redeeming the television of the early 1970s as high culture would place it clearly as a site where we learn about the public sphere. If the programming that CBS ran in the early 1970s really were a form of high culture art education, then the development of public culture through television would have a real tangible historical root. This would pare well methodologically with her work on the acceptance of television technology in the United States in the late 1940s and early 1950s. Michael Curtin does similar work in his landmark history of the television documentary. In *Redeeming the Wasteland*, Curtin argues that the high point for the television news documentary as the early 1960s, when news content was nearly a third of the total material produced by the major television networks. Curtin concludes by arguing against lamenting the end of the documentary, instead offering his work as an analysis of the conditions of possibility for the production of television documentary. One of the more notable conditions for the success of a documentary is to connect to the “struggles” of the time period. The news documentary served an important function to legitimize the networks as custodians of the public good, the answer to the charges against television would be to affirm the idea that television could bring socially productive messages to the population, a theory of cultural uplift. It would seem that the 1970s would see uplift come not exclusively from news programs, but from art education as well.

The 1980s saw the rise of the home theatre. Home theaters featured glass doors and exposed technologies that both facilitated easy use and displayed the savvy of the owner. Everyday life in the 80s quickly included tapes, both purchased and rented, as well as a host of new media activities that were not possible before the introduction of
home video technology. Key early adopters of these technologies would have been aspiring young urban professionals, or yuppies, flush with creativity, capital, and just a hint of conformism. Jane Feuer argues in her influential work on the 1980s that the baby boomers that might be called yuppies were gathering a post-modern aesthetic from the programming of the period. Just as the women’s magazines of the 1960s were a paratextual supplement for the everyday use of television for Spigel, Feuer notes the production of paratexts for yuppie television, such as the *thirtysomething* book, marked a point where viewers could finally fully integrate the show into their daily lives. Barbara Klinger frames the emergence of the home theatre of the VCR and later the emergent DVD culture as a critical site for amplifying the feedback loop between mass media aesthetics and the aesthetics of the lived environment. The deployment of machines would provide a trace for the digestion of figures. Perhaps the “thousand-points of light” in George H.W. Bush's 1988 re-election campaign, were big screen television sets.

Just as we begin to celebrate how un-uptight the yuppies might seem with their televisions, middle and lower class society retained ambivalence toward the medium, at least in public. Ellen Seiter noted in her ethnographic account of day care providers, that those women presenting themselves as upwardly mobile would under-represent their television viewership. The move to minimize the role of television in the imaginary living room makes sense here, as it would fit with the need of the audience to ignore television to secure class advancement. The great irony of this deception is that it is self-deception, the non-television watching bourgeois individual is a fictional character.

The thing we should take away from this history is the underlying circulation model that connects television through the decades. People place televisions in their
homes, informed by their use of television programming. In the theoretical terms we have established, the uptake of high art concepts into everyday living was an essential element of social mobility. At the same time, the existential crises of American life and the politics of control continue through the same media that deliver world-making possibilities. In Lefebvre’s terms the lives of women in home environments for those forty years were a form of art. The baby boom retains this dialectical tension between the romantic and the rational/democratic. Daniel Quinn Mills conducted a sociological study of baby boomer attitudes that became an important work in psycho-demographic research in advertising, that suggested that baby boomers were both democratic in that they sought greater transparency, deliberation, and critique, while they were radically individualistic. A similar relationship can be seen in Robert Bork’s evaluation of the baby boom, where the individualism of the boomers seemingly generated a new cultural milieu that would gut the aesthetic tradition that Bork would find necessary for western culture. For Sarah Pike, the romantic tendencies of baby boomers set the stage for neopaganism as something good and spiritual must have been available in the past. What is striking is that for all the bluster of Bork or the financially tinted optimism of Mills, the continuous political swing between decisionism and populism continues, much like the swing between enlightenment and romanticism. While the continuity of physical objects is not total, the position of the romantic self is retained.

**Surrealism and Studies of Everyday Life**

This chapter could be read as an investigation of the politics of everyday life, a field with a rich literature base. In this section, I argue that a core positional conflict in studies of the everyday can contribute to a Benjaminian project, and further how the
surrealist roots of everyday life studies contributes lead to complementary relationships between initially dissimilar positions.

Two key of the thinkers in the development of cultural studies in recent years have been Michael de Certeau and Henri Lefebvre. Both thinkers share an interest in everyday life and the ways in which the experience of being in the world produces affective investments that could be understood to inform the ontological positions of publics. To put it more simply, de Certeau and Lefebvre provide scholars a starting point for investigating the relationship between the experience of everyday life and the political. Henri Lefebvre’s argues in *Everyday Life in the Modern World* that French society in the mid-twentieth century was controlled through the cultivation of demand for consumer products. The human condition as formulated by Lefebvre is obscured by attempts to resolve the problems of the social with additional communication:

Thus we have a society that is obsessed with dialogue, communication and participation, integration and coherence, all the things it lacks, all the things it misses…Zero point is the lowest point of social experience, a point that can only be approached and never reached, the point of total cold, it is made up of partial zero points – space, time, objects, speech, needs…In fact zero point defines everyday life – except for desire that lives and survives in the quotidian.

Lefebvre’s zero point both accounts for the lack of communication as well as the proliferation of meaning making exercises. The appearance of a zero point that is beyond the attempt to impose closure of everyday phenomena functions almost as a form of vitalism, where the energy of the everyday would bubble up and produce activity without an agent. Structured attempts to create energy would be tainted. Lefebvre surely would appreciate the idea of producing a world with a more democratic impulse. This is not to say that there are not possibilities for action and meaningful communication, it is just that
they are only found in the lived experience of the inadequacies of everyday life.

Although quotidian is difficult to define, it has a certain character, it is everyday life but it is unrefined. Quotidian life is defined through micro-practices, yet the affective content of that life exists beyond and cannot be controlled, processed, or managed by the system. This perspective has a certain appeal as it invokes a positive view of human experience to stand in the place of negativity. Emphasizing the power of structure allows Lefebvre to avoid a cascade of agency that would make any sense of the public sphere incoherent. The cliché “you had to be there” apparently can be the foundation for a philosophical system.

What Lefebvre inflected cultural studies would call quotidian, a Habermasian might call the life world, or even civil society in as much as those experiences are articulated to the non-governmental circulation of cultural forms. The cultural experience for Lefebvre would have a fundamental gap; it would in the first instance be produced by a leap to create meaning where there is only emptiness. At the same time, this should not be taken as a full advocacy of a theory of meaning that is predicated on lack, rather than abundance.69 Both positions of abundance and lack can be reduced to finding a rationale for the provision of rhetorical creativity.

On the other hand, de Certeau focuses on the creative power of the individual in discourse in as much as that individual might poach and produce a world. Power is far less dangerous in this way of thinking that it might be for Lefebvre. De Certeau describes the important moment where the desire to become apart of the whole is directly tied to rhetoric. De Certeau writes:

The intertextuation of the body corresponds to the incarnation of the law; it supports it, it even seems to establish it, and in any case
it serves it. For the law plays on it: “Give me your body and I will give you meaning, I will make you a name and a word in my discourse.” The two problematics maintain each other, and perhaps the law would have no power if it were not able to support itself on the obscure desire to exchange one’s flesh for a glorious body, to be written, even it means dying, and to be transformed into a recognized word.\textsuperscript{70}

This is the essential formulation of the credibility of a discourse, which for de Certeau would roughly map onto ethos. The relationship between the material construction of the home and discourse is circular. A discourse gains credibility when it can offer meaningful material effects and it gains material effects when it gains enough force to be practiced. The crux of the quote above is the move to intertextualize the body through reference to an idealized vision of the self. Here the relationship is positioned as transubstantiation, the body is literally made something else through language.\textsuperscript{71}

In \textit{The Practice of Everyday Life}, de Certeau’s most influential book on media studies, explicitly rhetorical terms are employed. Notably, de Certeau has a rich discussion of speech act theory, as well as a sustained discussion of the credibility of speakers in public discourse.\textsuperscript{72} The bond that sustains the public, driving public life forward, is a dialectical position on the law observed in the first block quote of material from de Certeau. The force of law, both religious and secular depends on visibility. Contrary to theories of counter publics that allow mere reception to constitute an effective communication, de Certeau would focus on the affective connection between individuals and social systems when they can be connected.\textsuperscript{73} His position is distinct both in kind and degree. To truly be a persuasive discourse, action must be articulated to reception. In his definition of credibility, de Certeau establishes a circuit between bodies and discourses:
The credibility of a discourse is what first makes believers act in accord with it. It produces practitioners. To make people believe is to make them act. But by a curious circularity, the ability to make people act – to write and to machine bodies – is precisely what makes people believe.\textsuperscript{74}

Doing effective rhetoric for de Certeau requires that movement be attached to speech. Comparing this theory of rhetoric as the affective modulation of people in relation to nodal points to those of cultural studies with an active audience reveals an overtly political backdrop, punctuated with a revolutionary spirit. In short, de Certeau cared about the physical realities of publics operating in visible spaces. The television might spread the underlying faith in a social institution or an idea, while the means of production for social change would be distributed to the public through the net.\textsuperscript{75}

Actualizing de Certeau’s theory would require social mechanisms where by information could be circulated, these are what Ron Greene has termed “postal services.”\textsuperscript{76} Although power and creativity depend on bottom-up social relations, these cannot be effectively imagined without a connecting apparatus, a place of strength for Lefebvre, and a connecting point between both thinkers and Benjamin.

Angela McRobbie presses the case that Benjamin is a key resource for cultural studies in that his dialectical approach works between the positions that all too often neutralize cultural studies.\textsuperscript{77} Michael Sheringham takes a slightly different turn by arguing that the turn toward surrealism, ethnography, and the everyday that are present in contemporary cultural studies are at least dependent if not inspired by Benjamin.\textsuperscript{78} In this sense, Benjamin’s legacy has not been detached from cultural studies, but has been quietly integrated through French intermediaries. Contextual differences make the appropriation of theoretical concepts through French secondary sources difficult as the
context in which statements are made, or structures abstracted do not necessarily resemble those that authors are accustomed to in the United States. Since Lefebvre and de Certeau are setting the agenda for an active academic life in the 1960s they provide more directive ways of thinking about the grammar of the connection between home life and the public symbolic reservoir.

The Late Romantic Life of the Baby Boomer: 1998-2000

In this first section I address issues of Better Homes and Gardens from the last few years of the 1990s. In the late 1990s televisions were clearly tucked away, with two distinct visual strategies for minimizing the visibility of the machine. First, in several images, small televisions with built in VCRs are placed in very high or very low positions in kitchens, and pictures of living rooms lack televisions. Second, the few television related advertisements were for wood-paneled hutches that would conceal the television to fit a feeling of country living. Throughout 1998-1999, televisions are placed either inside of things or in terrible positions for viewing. Beyond the visual marking of the television as unimportant, the pseudo-scientific tone of parenting articles warns against allowing the television to be an “attention sponge,” in an article on vacation advice, the television itself is blamed as a reason why one might take a vacation. Leaving the television turned off might somehow maintain the mood of the trip after it has ended. The television, rather than a lack of family cohesion, poor dietary practices, or the structure of the human psyche causes conflict.

Advertisements in this first period offer additional evidence for tying the present to the past. Television storage furniture offers directly to the reader the chance to hide their television and peripheral technologies. In a particularly pressing advertisement
from January 1998, Broyhill advertised a home entertainment center that could
“accommodate up to four VCR or laser disc players.” Even by this point, the laser disc
player was an obsolete technology and the home entertainment center was in a living
room that could best be described as country living style. Wood, earth tone colors, and
collections prevailed. Sauder offered a series of advertisements over several years for
entertainment centers. The featured centers were always made of wood and promised
to effectively contain the sprawl of the television, cable, and media with antique
sophistication.

The television, or “tube” as it is often referred to in this magazine in this time
period, is a form of pollution. Contagion is not implied -- it is overtly claimed,
“excessive TV viewing turns brains and bodies to mush.” From the tone of the article
one would infer that any television viewing would be excessive. The advice in this article
is to sell your televisions due to the grave public health threat posed by the machine.

Where televisions are represented as something other than a form of pollution the
common form of advice is to move them out of sight, or at least to conceal them. In an
April 1999 image, a television is hidden in an elaborate system of cabinets that “resemble
an elegant sculpture” when the doors are closed. In a June article on kitchen design a
television is placed inside a cabinet well above eye level. When pictured, the television
screen shows two older white men engaged in some sort of serious policy discussion. In
what is the seeming opposite strategy to that found in retail, showing sports or action on
the television, the live screen is represented as brining political fare to the kitchen. The
function of the television was not ignored, but was shifted; a television would not be a
central aesthetic feature of the room, but a necessary inclusion. In an article on how to
downscale to fit into a smaller room, the author contends that an entire section of seating might be directed to face the television. The exigency of downscaling provides the cultural permission to allow a television to be displayed. Yet the claim is instantly undercut by the sure enormity of the family room in question, which at six hundred and fifty square feet is hardly downscaled.

In these years the only image of a person watching television came in an advertisement with a woman illuminated by the glow, sitting enjoying a bowl of chocolate ice cream, her sleeping husband in soft focus in the background. The title for this scene, “the cozy feeling of doing nothing.” It is not that she isn’t doing anything, but that the act of feminine media consumption is not valorized. Her smile the proof that this time is for enjoyment rather than productive work. Watching television and smiling is doing nothing, watching a stodgy rerun of the McLaughlin group is productive work.

A similar relation can be seen in an article on “Country Casual,” which describes the television viewing habits of Polly and Tom Minton of Georgia who “combine a collector’s appreciation for the past with a minimalist’s eye for open space and pure form.” The article on the couple opens by describing their “modern lifestyle” which in the morning would find Polly sitting on the couch knitting and watching television. She is not watching Good Morning America, but financial reports. This is purposeful viewing, as a person should only enjoy television in as much as it might convey information. In perhaps the most apropos line of the article, she relates how she started knitting to reduce her anxiety from watching her children play sports, with her love of financial programming. It is unclear if the financial programming came first, or if the reduction of anxiety in other areas of her life pushed her toward the stock market.
Blueprint 2000: Televisions from 2000-2001

The turn of the millennium featured the inclusion of technology related articles, and a regular technology column called Tech @ Home, which was written from the perspective of the editor, Jean LemMon as she approached retirement. Tech @ Home was intended to help people who were not “techies” to use their terms to accept new devices into their lives. The first millennium for television and the home ends in an installment of the article series Tech @ Home entitled “The Future is Now,” which offers us a look at the technologies of the future that might be possible in the near future from Better Homes and Gardens Blueprint 2000 concept house, and how one might implement these in the new millennium without building the house of the future. An ideal future house includes Ethernet cables and coax in every room; the compromise is to use dial-up Internet. An ideal future house includes a flat-screen television, but as these cost fifteen thousand dollars and have unsightly cables and “control boxes,” the real home of the new millennium should purchase a thousand dollar thirty-two inch conventional television. The final future world includes sophisticated security systems and household automation, which can also be accomplished with home automation kits. What is so unsettling about these future compromises is that the ideal future proposed in the concept for the Blueprint 2000 house has come to be realized. Tech @ Home’s relatively low bar for the technological future comes through in almost every instance of the column, the tech proposed is not new or unique, but already ubiquitous.

“Mindful that living in the 21st century will be ever more complex than living in 2000…” Blueprint 2000 is a concept house designed by Better Homes and Gardens and built near Chapel Hill, North Carolina. To facilitate complex lifestyles the concept house
includes a television at eye level in the kitchen for watching cooking shows, and seeming recreates the historical distinction between the living room and the parlor. The living room in Blueprint 2000 has no television, and bares the ornate trappings that one might see in a magazine from the turn of the twentieth century, including an oil painting. Since the living room would be scarcely livable, they “invented a whole new room” that they call the learning center.  

The learning center is full of computers and televisions, a room intended for the entire family to use collectively. The author goes out of their way to make a distinction between the learning center, which is for “just family,” and the flex suite at the other end of the house, which would become the office of the run from home business. Both of these sites are intended for heavy technology use, but are separated by purpose. Home offices are intended for labor time, while learning centers have taken the place of the living room as a site for leisure. The romantic vision of late modern family life would bear a striking resemblance to the romantic vision of learning to read from the early nineteenth century. In that not so distant past a mother might whisper the words into the ear of the child who is all too eager to learn, in the not too distant future the mother guides the hand of the child on the mouse as they surf the web.  

A seat by the digital hearth overwhelms the publicness of the Internet and the television. Time that is spent in this learning center would protect both from the politics of visibility inherent in the living room and the potential for labor in the media environment of the kitchen or the home office. This bourgeois room is accompanied not by a dream of visibility in the sense of showing an attention to class status, but to a radicalized flavor of the invisibility that would be inherent in the move to hide the television. If family life were to be hidden
away, the television would no longer need to be hidden from outsiders. A family room which is distinct from the living room dispenses with references to romantic aesthetic protocols of the age before and includes a great deal of technology that is hidden in cabinets around a large flat panel television that is mounted as a centerpiece of a room. Safety in this design comes from the romantic meta-talk. This design has been approved for use.

This move to enhance the separation of the public and the private reveals that the romantic ideology of the late network era could include television viewership as a part of family life, but as apart that one would manage through co-viewing or by placing the sign of media consumption under the sign of family. Blueprint 2000 could just as easily be Blueprint 1900.

The anxiety over television watching is palpable. In a February 2000 feature article on hiding televisions, “If you’re a closet TV watcher, what better place to store the TV than…in the closet.” In this feature piece, several strategies are discussed to create complicated obstructions to hide the television. The ultimate goal for the home viewer in this article is to “hang the TV on the wall” which at that time would cost $15,000. The repeated use of the five figure price for a flat screen television is in itself telling as it establishes that the television is too expensive for the middle class reader, and that the expensive object might be something to be sought after. Quotidian life is figured as a place that is already content and stable, the question is how one might manage the intrusion of the public other through the television screen into their space. The anxiety over television ownership is present, yet is suppressed through a fiction of authenticity and stability. By advising the public about the normal strategies for concealing television
use, *Better Homes and Gardens* provides its readers with reassurance that they can pass
as non-television watchers.92

As a caption in the April 2000 issue reads, “Americans have a yo-yo relationship
with their television sets. They can’t live with them or without them. Perhaps the best
thing to do is to decorate them.”93 Unlike the design of the house of the new millennium,
the house of the present has many bulky cathode ray based televisions, which are difficult
to deal with. Where clothes and other items would be relocated to is not discussed. The
move to put the television in an out of the way location would mark it as secondary to the
purpose of the space.

If we were to name this way of thinking about decorating, a May 2000 article on
“Carefree Decorating” would be appropriate.94 To be a successful decorator, your home
must be carefully arranged, yet not appear to have been worked on heavily. This
simultaneously begins to break the relationship to a particular aesthetic, it must look like
few aesthetic codes are in play, and yet is still riddled with contemporary anxieties about
presenting the decorated home. The light touch of sentimentalism becomes pedagogical,
and the romantic impulse of personality decorating returns once again.

In a October 2000 feature on home offices, a potential design features a television
placed at a acute angle to all possible seating areas, in a built in, behind the figure who
would be seated at a desk.95 The next month, in a section on kitchen design, a blue print
on calls for the installation of an off-center fireplace with an adjacent built in television.
In an article on family room design, we can find children struggling over a remote where
a television would clearly be directly in front of them. This centered television is
spatially bracketed by the caption: this space is a “basement family room,” or “den.”96
Off center, out of eye line, and built-in hide-able televisions reign with little disruption. In a February 2001 advertisement Broyhill articulated the same designs for furniture that might hide the television with “the style of 18th century France.”

**Toward a Democratic Design: 2001-2002**

In our visit to a very modern Georgia couple, readers learned that a collector might appreciate pure form and news consumption. What is retained in this approach to modern living is the emphasis on collecting, to building an allegory of the evolution of the late twentieth century. After an introductory piece on the nation coming together after September 11, the major aesthetic claim for the January 2002 issue was, “I lavish on white.” In the first feature article of the February issue, this new aesthetic is named by Catherine Kramer and Sarah Egge, “Undecorating.”

The heart of undecorating is the removal of visual noise as to rinse the home of concern and anxiety. This incites the use of digital technology and empty space to create a new way of thinking about the home environment, a way of thinking that returns the home to the position of “sanctuary.” The design concept here is that decreasing visual noise would allow the decorator to make the home more comforting and functional. An entire bookcase full of old west liquor bottles would only be a hassle in this way of thinking about the home space. In an image that resembles a 1950s advertisement for televisions, the home office is re-imagined from being a place for one person with a seating area, to being a his/her office with two computers set at a forty-five degree angle in front of a large television that both could see. One homeowner shows how they have concealed a large television “so Mike can watch the news.” In what is an act of supreme foreshadowing, the origin of this way of thinking about design is found in...
Scandinavia. If space is opened and the real use of technologies is honestly embraced, then the physical and psychic space could both be uncluttered.

Throughout the February 2002 issue, televisions move from being behind and off center to being in front of and at angles that would be necessary for the real activity of television watching. By March, we can find an example of remodeling where a television is added in a centrally visible location, so that the whole “family could keep an eye on it.” While high-minded editorial content still appears that advises us on how we might moderate children’s television viewing, the idea of family co-viewing has become acceptable. Televisions appear more frequently, and a remodeling of a classical living room even includes adding a screen. In 2002 multiple articles appear that are concerned with the storage of paratextuals, “Maximizing Media Walls” shows us how to manage pesky tapes and wires, and proposes designing the lighting concepts in a room to maximize viewability.

The 2002 holiday season saw the editorial strategy shift from limiting television consumption, to advising exercise between television viewing sessions. In a June 2003 feature story on remodeling, a homeowner remarked, “Kids today have more gear than the 1950s—TVs, computers, video games, and all. Everything we did to the house was to bring it up to the level of today’s activities and incorporate modern details.” The remodeled home in 2003 becomes modern when it includes the capacity for technology to be used, the distant past, where a lesser home might suffice, is no longer present. The children of the new millennium have further needs for media access. An advertisement for the film *Barbie Swan Lake* advocates that girls should hold premier parties, where they might do Barbie themed activities while co-viewing the new film. A well-placed
ad in the December issue suggests buying your female child a pink television. Over the coming months televisions would only become more common, and the advertisements for romantically styled television cabinets would continue.

The Emotional Public Sphere: 2003-2005

While the transition from 1998-2003 marks the increasing visibility of the television in the domestic space, 2004 and after marks a high degree of continuity, as the television display ideology of the past stays consistent. Screens are out of the way, of odd sizes, and often seem often unwatchable. In one advertisement a television is behind a bed, in a living room that features eighteenth century furniture the television is for all intents and purposes in another room.

Halloween 2004 saw advertisements for media itself as a gift, with Dora the Explorer and Sponge Bob Square Pants leading the way. December saw the introduction of such luminaries as Hannah Montana and the Power Rangers. This season also saw the introduction of other technologies, with photo-printer advertisements from both Kodak and Hewlett Packard. Kodak’s advertisement was particularly well conceived as it proposed the photo-printer as a family memory technology, with pictures of parties and children to boot. Advertisements for Best Buy show a man surfing on a wave of screens, while 1950s retro poster art sells classic films on DVD to older readers. Handheld learning systems began to appear in the magazine as proposed gifts, and advertisements for flat screen televisions begin. What all of these ways of introducing new technology have in common is their displacement from the romantic home. The word learning device is intended for a child to use on the go, the printer is in some other space away from the party and the family, and the first flat screen television
ad is a picture of the box against a pure red background. In January 2005, Symantec strategically deployed this discourse of the family and the image to sell software. Their campaign featured a woman taking a picture of a grandmother and child near a laptop computer. “A virus could turn your digital photos into instant memories,” read the text. In the domestic context of photo storage a computer virus has taken the place of the television as a source of pollution.¹¹²

In March 2005, Stephen C. George wrote an issue closing column called Then and Now that compared an issue of Better Homes and Gardens from 1955 with the present moment in 2005.¹¹³ George rewrites the history of television adoption to suppose that television was always a legitimate part of the home, that children have always watched television after doing their homework, and that the technology is both ubiquitous and normal. For George, television has occasionally received some criticism for promoting a sedentary lifestyle and being a bit too intense. The position cited by Spigel that television was as devastating as the atom bomb is completely liquidated from the historical record. His conclusion takes the classic bourgeois position on a recreational drug -- television should be used in moderation.

The benefit of television being that it might be the feedstock of the public sphere, that it might start discussion, create common experiences, and help children become more attentive to others. In this sense, George proposes that some users of television might not be able to handle their programs, and that a middle class person would be ready to consult online forums and to think through their viewing decisions as a textual poacher. The idea of the television as a technology for producing good citizens has been widely discussed.¹¹⁴ The idea is both that the television might serve as a contact point and
microcosms of the emotional public sphere, while it promotes values that are consistent with governmentality.\textsuperscript{115} Although this may be a position that has currency in some sectors of the media studies field, the trajectory proposed in this chapter would question the uniqueness of this citizen making process. Further, George’s idea that the public culture forming benefits of television could be balanced with personal needs destabilizes the Foucaultian narrative.\textsuperscript{116}

Television went from bad, to acceptable, to good if taken in moderation. It would seem that viewing quality television would be much akin to drinking red wine. Parents of lower socio-economic standing would need to be told to avoid television; the middle class audience of \textit{Better Homes and Gardens} would surely be able to handle their sitcoms.

\textbf{Fat-Screen: 2005-2008}\textsuperscript{117}

Jeanie Moos wrote a guest column in the Then And Now section in June 2005 entitled, “My Television Is So Fat.”\textsuperscript{118} “When company comes, I’m embarrassed that my TVs reveal me for the low-tech wreck that I am.”\textsuperscript{119} For Moos, cultural currency comes from owning a thin television. She equates a thin television with a thin body, or as she puts it, “I mean, do I really want to stuff my face with chips and ice cream while watching a television that is skinner than I am? You bet I do.”\textsuperscript{120} The glorious body and the glorious television meet not in the overt promise that the purchase of one would be tied to the other, but in the popular formulation of irony. Moos pre-deactivates the claim that the thin television is tied to the thin body, instead the object can stand in for the thin body that is desired. Moos touches on a potentially painful point, while keeping the subject distant enough that they might protect themselves.
Deflection through irony would mark that the position of the television has entered into another phase. Initially, the television was to be shunned as a lower-class diversion. Later the television was a necessary evil for the viewing of news, and even later for the production of a nearly Habermasian public sphere via an effective public culture. In the turn to irony, the older pretensions that the television might have a utility as a democratic form is displaced by the logic of status incumbent in the appearance of the thin body. Anxiety about the use of the television in the home was never about other people, it was about the decorator. The rapid acceleration of this textual logic would only make sense with the fear inherent in the bourgeois life, being an early adopter would evacuate the essentially conservative position that they are the tastemakers of the status quo. If they were already on board with this perspective, and had venerated as a part of their aesthetic ideal, then their relative slow speed of adoption would make sense. Thinning out would allow them to save face.

The anti-televisual rhetoric of older issues melted away. Aside from one nostalgic appeal for parents to leave video games out of their car-trip planning, which the author already concedes is not normal or even likely optimal as technology is now a car trip staple, the television becomes perfectly acceptable.

**BHG Best Tip – Get a TV: 2008-2011**

Featured designer Stephen Saint-Orange regularly addresses advice about where televisions might be ideally positioned in the home. Saint-Onge put it best in a discussion functional design for living rooms, “You have to be honest with what you want for a room.” The context for the quote was in a piece by Judy Garlock, which diagnosed the failure of a late 1990s family room design that was not honest about the functional
use of the space. In the featured design “a family hub” prominently features a flat screen. A quote from Donna Smallin, the owner of said family room explained the impact of the change, “You know you’ve got it right when you walk in and you feel the stress of the day melt away.”

Chairs are arranged to optimize sightlines. On several occasions advise about optimal eye level is provided, and a badge is even stamped on a page for a BHG best tip for instructing readers to place a large television in the center of the room.

In a January 2008 piece on living room design, the tone was triumphant when a flat screen television was moved from an awkward interior wall into the center of the main wall, as to be in full view of the seating. The caption describing this move, “Media Magic.” In this same issue, a caption describes how outdated armoires used to conceal the television could be reworked into functional pieces of furniture, in a section called “Hidden Potential.”

The cabinet that just thirty-six months before a must have, is now obsolete. Lucky for Hearst, readers have a short memory for expensive advice. Television is no longer a virus but a helpful phage. It infects the infection that is technology, it can be managed, and it can overcome the apparently anti-family impulse cultivated by modernity itself.

Once the television could be watched without shame, the function of bulky concealment strategies was nil. Living rooms can now actively feature televisions, with no pretense of hiding the machine. In an April 2009 interview with designer Donna Talley, the normality of the placement of the television had been inverted. Talley remarked, “I’m not a tv-in-the-living-room type of gal,” which did not mean that the television was relegated to an unimportant space in her design, but placed in a multiple use office/study/library where she would spend a great deal of time. The room in the
accompanying picture is scarcely a home office. In a caption describing her set-up for this room the key piece of furniture is a steamer trunk, “…for optimum tv viewing…” If we defined the living room as the place where you spent the majority of your time, this office would surely be a living room.

The strategy for developing credibility for Better Homes and Gardens operationalizes the anxieties already existing in its audience. The screens were simply too expensive for the middle class readers of Better Homes and Gardens at their inception, yet their inclusion in the dreamscape of Blueprint 2000 would confirm that the idea of the flat screen television would have cultural currency. Better Homes and Gardens could not be publically concerned that the aesthetic strategy they advocated through the late 1990s was cluttered, anxious, and quite possibly ugly. The move to undecorate as a response to anxiety gave the magazine cover to have a substantial change in perspective.

Important demographic changes had also been afoot for some time with the idea of women working outside the home becoming completely normal by turn of the twenty-first century. It was now possible to directly integrate it into the space of the room, and once the idea of trauma and anxiety could be discussed in open terms, an anti-anxiety aesthetic project could take hold. Mitigating anxiety required that consumers designing their homes would need to have an honest conversation about function and everyday life, much like at the turn of the twentieth century where designers affirmed their personalities. This is important because it shows how the aesthetics of everyday life are political. This project may have gained currency in the United States just a decade ago, but the style had surfaced before, in Europe in the mid twentieth century. It would only
make sense that the end of advertisements for romantically styled television cabinets is parallel with the rise of advertisements for IKEA.

This functionalism had strong resonance with the vision of Le Corbusier, who argued for an idea of design as being derived from function rather than from form. The urbanism and design of Le Corbusier offered to unite the technological possibilities of post-Fordism with the lived experience of everyday life.\textsuperscript{127} Doing design would be fundamentally democratic, in that it could provide a better, more aesthetically pleasing way of life for the urban masses. The turn in aesthetics takes us toward a different source for aesthetic knowledge, one that does not depend on the work of experts to produce interior spaces that would be desirable or that would require full time labor to live well in that space. At the nexus of democratic design and undecorating an important new source for design information has colonized the American design imaginary -- IKEA.\textsuperscript{128}

\textbf{“The IKEA Nesting Instinct”}\textsuperscript{129}

If you were to look at a recent issue of \textit{Better Homes and Gardens}, you would find full-page IKEA advertisements where Sauder television hutch advertisements had once been. The aesthetic crafted by IKEA features democratic design, emphasizing that it is possible for everyone to have a good, sleek, function driven life, while appearing to be a socially responsible corporation.\textsuperscript{130} IKEA has become a tastemaker in American life. In a showroom flyer on aesthetics IKEA frames the importance of their project this way: “Enjoying a beautiful life at home without giving up the rest of what makes life worth living. IKEA believes everyone of us deserves that.”\textsuperscript{131} Quotidian life can only be worth living if it is democratically designed, and this can only be effectively lived through low price functionalism.
Consider the treks made to experience the IKEA stores in the United States. The store is a narrative experience, where the shopper encounters a series of model rooms with distinct color schemes and uses, with an underlying aesthetic proclivity that could best be called the Bauhaus of the twenty-first century. As the shopper moves through the experience, posters describe the design concepts in the rooms they have already viewed, telling them about the design they are looking at, functioning as meta-communication. The IKEA building from the moment of encounter tells you how to experience what you are looking at -- as democratic design art. The show room is a form of democratic education center. It helps you develop the preferences that would make the market work.132

As of November 2009, the IKEA experience at the Mall of America was focused on the way that flat screen televisions should be presented in the home. Starting from the arrival on the third floor southeast corner of the showroom, each room set-up included a flat screen television. The first flat screen television caught my eye; it was displaying an IKEA commercial and had a curious glow behind it. I was at first ecstatic, as I thought that I had finally found an Ambilight television in the United States.

Upon closer examination, I found that the display had a Philips LCD television, but that the unit had strips of LEDs glued onto the back. Creating the appearance that it was an Ambilight, while not being an Ambilight. Each way that IKEA had to display a flat screen television was either designed to facilitate an Ambilight or to accommodate lighting technologies that would create an ambient glow from around the television set. Each room accepted the television both as a focal point for the space and as a source of light. Only in one display in the store was an attempt made to conceal a television. This
television storage solution used semitransparent mirrors to cover the television that could slide out of the way to cover the area around the television. If anything, this would conceal the television when not in use, and create a mantle around the television, like a perfect moving picture frame.

In the displays there were two different models of televisions in use; those that had Ambilight and those that didn’t. Again dividing these televisions, those with Ambilight were turned off; those with it were running constant stream of IKEA commercials. The televisions with Ambilight bore a sticker that noted “For Display Only,” while the non-Ambilight units did not. In short, the IKEA store had a large number of televisions that are not available in the United States, and featured televisions that are available with technology that is designed to simulate the Philips units that were already plentiful in the showroom. It wasn’t enough to simply provide the displays throughout the main hall; IKEA provided texts throughout the store to explain the purpose of the furniture. To explain the use of these glue on lamps, a flyer headlined “Lamps around the TV,” was prominently displayed. The flyer had two paragraphs, one that described the purpose of the lamps and a second that discussed the possible types of lamps. The first sentence made the necessity of the lamps clear, “Make sure your eyes stay focused until the end of the movie!” The reason why someone would want additional light to be produced by the television wouldn’t be because it produced a more powerful affective experience, but because it is simply easier on your eyes. The subjective experience of the film is secondary, the function of your eyes is primary -- biopolitical self-regulation at its best.
IKEA also offers consulting services in the store where a co-worker can work through your design to help functionalize the living space. The IKEA approach to installing flat screen televisions is twofold – they offer furniture that can fit around a wall mounting bracket and credenzas. In a poetic caption on a flyer next to a television display, a bold headline read “From chaos to control,” with a paragraph of text that made two moves, one to say that the television display solutions proposed in the show room were functional, and a second move to show how the furniture could be had in many different styles and materials. In another flyer titled “Tradition meets technology!” the argument is framed in-terms of functionalism which can transcend particular aesthetic choices: “You can decorate country style throughout your kitchen, living room and home office – without compromising your family’s new traditions.” This is only possible because: “...[it] may look antique but it has plenty of room for the wonders of technology.” Redesigning the home space toward techno-functionalism can universalize the democratic design in a way that can accommodate the entire home space with ambient technology.

IKEA provides aesthetic knowledge to the consumer, and hails the television installer to build his or her own ambient television experience, one that is distinct from that of the Ambilight itself, one that is textually stable. The Ambilight technology adds to the text as it operates, it supplements the visual experience of the television by projecting light out into the space, producing a larger affective experience. Here the hinge point of the IKEA television project is apparent, the way that television is operationalized in the IKEA room settings is as ambient television, not as an evental television. The television modification kits that one might purchase from IKEA are
designed to create a stable look for the room, not to expand the text on the screen so that the viewer might be fully engulfed in the experience.

In this way, IKEA’s democratic design can “allow you to live the beautiful life” without giving up the smooth surfaces and clean lines of technological, functional design. The IKEA solution for the placement of the flat screen television is not a transcendental work of genius, but the logical end point of a process where the television technology has become ambient. IKEA’s technology lends itself to the argument in this paper – a television that is always lit is always marked. By marking out the television even when it is off the lights sustain the idea that the television is supposed to be on, the television is supposed to be ambient.

**Digital Ubiquity**

The aesthetic circulation model I have presented in the first part of this paper argues that the placement of a television in the home is a nodal point where discourse and built environment converge. Bourgeois homes are carefully designed. Receiving quality information from competent sources is critical to effectively designing a stylish, functional home. The design paradigms in play should not be taken as expressions of the position of a single device, even on our most anti-humanistic day it would be in error to say that the television placed itself in the living room, but that discourses that inform the production of a way of life which comes with certain aesthetics. The way of life is in itself political, as it characterizes the ontological position of the public. Covering the aesthetic dimension of decorating under function is an important feature of American culture in the late twentieth century, and a feature of what some scholars refer to as neo-liberalism. Discrete modern subjects are presupposed to be choosers, rational or
otherwise. To concede that one is not really a chooser would be akin to retaining a Victorian living room after the rise of personality decorating. Or worse, that one went to Burger King, and didn’t have it their way.\textsuperscript{140} Being a follower is obsolete, even though aesthetic success depends on following trends and propagating established discourses, as we might call it, the living room dialectic. The anxiety that permeates bourgeois culture, that the Other might be enjoying more fully that I am, can only be satisfied by following recommendations so that one might be like the Other, while claiming to have originated those ideas.\textsuperscript{141} Counterfeiting is bourgeois creativity. Critiques of neo-liberalism miss the mark. What we identify as a neoliberal political formation is really the lingering impact of romanticism.

Where anxieties over the collapse of the public and the private via the screen were before dealt with through visual references to tradition, the move to undecorate by contrast eschews traditions in favor of functions. The reference to the past is still present, but has shifted to a new aesthetic ideal. To be clear about the standing of the collapse of the public and the private a return to the transition from the parlor to the living room would be in order. The rise of the living room was seen as an affront to the idea of the public-private barrier, the technology of the gaslight broke down the same barriers that are now broken with televisions and computers. It would not be risky to venture that the same debate will take place with the rise of neural interfacing, as stereo-optical technology has made the hologram a reality.\textsuperscript{142}

A particularly vexing feature of the discourse of the flat screen television has been the lack of a discourse of the digital. Where in the context of other kinds of technology, or even other audiences as seen in Boddy’s work, the marker of the digital is used to
describe the new technology, the audience of decorating publications seems to gain little from this term. The technology is digital, make no mistake of this fact, the devices that individuals are putting in their homes utilize quantization processing to create hyper-accurate renderings of content. Digital and gas seem to evoke a similar response from middle class decorators, they represent change.

This historical point has been made before, and Lynn Spigel chooses not to read this as the repetition of history but the endurance of common communicative forms. Moving the response to the terrain of pragmatic decision-making is convenient, in that political change might come from changing the surface level of the recommendations. In the context of the discursive Nietzsche of eternal return, the circulation of those communicative forms would be the ongoing function of dominant conceptions of morality, a reading that would be in great sympathy with that provided in this reading of the present. The response mechanism, not the irritant is the key to this analysis.

The fears of the 1950s have been entirely realized in the aesthetics that would make the living room looks like a bank lobby. And the fears of the 1890s were entirely realized in the living room of the 1950s. Aesthetics of pure function destabilize the distinctions between places, making spatial arbitrage and thus a post-Fordist conception of labor possible. Participation in the aesthetics of functionalism both materially makes the home a site for immaterial labor, through the connection of high-speed Internet connections, and figuratively as it opens up useable space. In a similar move de Certeau invokes Kafka’s “Penal Colony,” where the production meaning has been replaced by “a galloping technocratiation,” while the dialectical relation of romanticism and decisionism
might be relatively unchanged, the changing economic and technological capacity require examination in their own right.\textsuperscript{144} A task that will be undertaken in following chapters.

Lefebvre would be exceedingly skeptical of a form of democratic life that left the libidinal economy of the present intact. For instance, in the conclusion to \textit{Everyday Life in the Modern World}, Lefebvre argues against a reading of Marx where material equality would be seen as liberatory, the heart of the capitalist enterprise is the production of a form of life, not just forms for life.\textsuperscript{145} In Andrejevic’s parlance, democratic design invites participation in a regime of capital that colonizes time; it invites the public to install the devices that re-feudalize the lifeworld.\textsuperscript{146} Consider the insistence that the learning center and the home office be on opposite sides of the house – the dream of collapsing labor and leisure contains the ruin of constant labor from the outset, and no matter how much one might try, the learning center educates the children as to how their parents participate in twenty-first century time thrift. It isn’t just for family.

Perhaps most viscerally is the way that IKEA markets the fill light technology, and how Saint-Onge prescribes the placement of television for Americans as a biological technology that would make the interior space more comfortable, the new televisions would use less space and would show class status. Combining the approaches of the surrealists as inherited from Benjamin, consists of searching for the point where desire in everyday life is articulated to circulating aesthetic discourses. The affective residual from this circulation is read here as a desire for function, that the good and beautiful life can be accessed through aesthetics that open space. Functionality becomes a term that covers the operation of the older aesthetic ideas in new formulations. A romantically inspired television cabinet would surely have been understood to be high-class, just as the sleek
faux-teak and glass cabinet of IKEA is high class now. The romantic conception of home life can be seen as relatively stable between periods. The reference has changed, not the underlying conceptual structure. In antiquity, learning to read came through a mother whispering into the ear of a child. Now, learning to read the Internet happens in a living room where the mother and child hold the mouse. The axial positions within design have not changed. The veneer may no longer be wood paneling, but the structural elements are still distinctly particleboard. We live in an ongoing aesthetic revolution. Here is the site where the dialectical character of digitality is revealed, it operates both through the continuation of cultural forms and through their disjuncture. When read through another dialectical force, post-modern capitalism, this relationship takes on a decidedly political edge – what is at stake in the position of the digital in the home is the role of the police, the authorization of the proper use of time. This act of covering can function as long as it can be deployed in the service of bourgeois cultural norms, which currently depend on the ubiquitization of technology. In short, function has not transcended form because function is a form in itself.
Notes

1 Agent 006 is the protagonist of Wong Kar Wai’s There’s Only One Sun.

2 Suzanne Katrina, Better Homes and Gardens, (September 2010), 92; in Berit Thorkelson “30 ideas for a livable living room,” Better Homes and Gardens, (September 2010), 92.

3 There’s only one sun, as a moderately famous reviewer said of Leighton Pierce’s work, “its totally erogenous, and thus monstrous, and I love it.”

4 This is a Platonic aside, the key here is that there is nothing beyond the room in this paper, and surely not for Wong Kar Wai.


6 Jacques Derrida, The Gift of Death, (Chicago: University of Chicago Press, 1995), 84-86. The orgiastic is managed to the point where even originary biblical sacrifices would be treated as medical or criminal. This is similar to a Foucaultian reading where the use of categories deactivates political possibilities. I also take this as place to point out that the pre-symbolic Real, if we are to take a Lacanian view, is expressed in many symbolic practices, of which the orgiastic would be a fine representative.

7 Aurea failed in the United States. It is difficult to find anything aside from message board posts in German about the technology. There was a rumor that some ambilight televisions were sold in a single Sam’s Club as late as 2007.


9 This is a distinction about warranting pattern. The sections work both by classification and enumeration depending on if I am establishing the idea of a trend in the magazine or exploring a category.

10 This piece adds to an established corpus of work in Television Studies, that charts the integration of television technologies into everyday life. Specifically, this paper is situated between the work of Lynn Spigel, Barbara Klinger, Julie D’Acci, and Anna McCarthy.10 What Spigel made famous in her first work, the politics of the television in the home-fragment. Just as this work is situated with in an established television studies vernacular it also stands apart, as it is an essay on a medium in transition. I take this to refer to a strong conception of relational cultural studies that takes the connections between audiences, industries and texts seriously. D’Acci is particularly on point in her discussion of the importance of circulation models in television studies. Barbara Klinger, Beyond the Multiplex (Berkley: University of California Press). Spigel, Make Room for TV, and TV By Design. Anna McCarthy, “Ambient Televison,” in Television After TV: Essays on a Medium in Transition, ed. Lynn Spigel, Jan Olson, John Caldwell, and Charlotte Brundson. (Durham: Duke University Press, 2004). Julie


12 The list of various dream locations in convolute k is expansive.

13 This was the result of a Google nGram analysis. nGram allows you to search the collected written works in the English language that Google has scanned for trends in use. Google nGram results are promising for digital methods, but are problematic in that the database is expanding. With the current volume of work done at University of Michigan library, I would venture that results about trends from nGram would be relatively stable. More on this tool and digital methods from the University of Amsterdam will be discussed in chapter 4.

14 This is a key stone citation for this chapter as Haltunnen provides the only history of the transition from the parlor to the living room that has strong primary citations in magazine archive research. Karen Haltunnen, *From Parlor to Living Room*, in *Consuming Visions: Accumulation and Display of goods In America 1880-1920*, ed. Bronner, (New York: WW Norton, 1990), 171.

15 There are some sources that contend that the reason for the transition from the parlor to living room can be found in the over-use of the parlor during the pandemic flu of 1918, which fail to deal with the historical trajectory of the change from parlor to living room. The citation for the death theory comes from Miss Manors, who also would likely accept the decline of the Victorian ur-aesthetic, although she might judge it more harshly. If the Bok theory is to be believed, the transition clearly would be clearly set in the late 1800s. As Bok was editor of Ladies Home Journal, and was a muckraker and modernist, he could easily taken the position against the parlor. This would also be opposed to the Miss Manors theory of the living room ending as a result of the Spanish flu. Edward Bok, *The Americanization of Edward Bok*, (New York: Cosmo Classics, 2005). Judith Martin, *Star-Spangled Manors*, (New York: WW Norton, 2003), 264.

16 Haltunnen, *From Parlor to Living Room*, 173

17 Ibid 174

18 Edith Wharton and Ogden Codman, *The Decoration of Houses*, (New York: Charles Scribner’s Sons, 1897), 198.

19 Ibid 178

20 Ibid 182

21 Ibid 180

22 Ibid 188
23 Ibid 189

24 Wharton and Codman, Decoration, 198.

25 Martha Woodmansee, The Author, Art, and The Market: Reading The History of Aesthetics, (New York: Columbia University Press, 1994). The genius author is the key figure for both common law and moral rights frameworks for intellectual property, the common law framework relies less on the idea of the genius, but in its contemporary circulation in the United States the figure switches between the genius and a labor view of production. In either case, the idea of the author engaging in natality is critical to establish why a work is worthy of protection.


27 Black, Ibid


29 This is a commentary on the death of the author and the survivability of the genius author even in the face of the death of that author, the creativity debate is misplaced in that it deals with the sources of inspiration rather than the sublime mode of mixing individual labor with natural materials. Marking something as being personal and creative is the real horizon of intellectual property studies, not the policy prescription itself. This would suggest that whatever good McLeod and others might do on this front, they will always be behind the power of the radically personal figure.


31 The periodicity is played out both by Buck-Morss and by biographers like David Ferris. The Cambridge Introduction to Walter Benjamin, (New York: Cambridge University Press, 2008).

32 Buck-Morss, 218.

33 Buck-Morss, 55.

34 This is a key idea in Agamben and others who take the angel as a breaking point in the stream of speech acts that constitutes modern living. The idea of the law as speech act comes across in the section on Kafka. Consider the ending of the book, the truth of the law is human invention, the romantic position on law for Agamben is that which is outside the coproducive relationship between human creativity and the physical world. Giorgio Agamben, The State of Exception, (Palo Alto: Stanford University Press, 2005).

35 Consult Convoulte F.
36 Ibid, 170.


38 Benjamin, Arcades Project, 216

39 Spigel, Make Room for TV, 48.

40 Ibid, 41.

41 Edkins discussion of the proliferation of trauma narratives coincides with the view of trauma presented in this piece, as an ongoing process of failure and recouperation. I elected to steer away from theorizing through trauma as a primary optic. This is not to say that fads aren’t necessarily productive, but that a reading of trauma alone would over simplify the archive, and would take this work in the direction of theorizing based on the lack which has already been established to lend itself toward reactionary ends. The chapter would also encounter a face validity problem as the practices involved in decorating would not look at all traumatic. An early version of this chapter used some quotations from two articles from the first half of the decade to tell the story of undecorating as being tied to 9/11. This felt, and was hackneyed. Jenny Edkins, Trauma and the Memory of Politics, (New York: Cambridge University Press, 2003), 18-19.

42 Jürgen Habermas, Legitimation Crisis, (1973).

43 Spigel, Make Room for TV, 27. Spigel’s reading of Hoover is not so much the tragic Hoover that one would find at his Presidential museum, but the Hoover of the promise of technical life. Of any President, Hoover espouses the decisionist ideal.

44 Spigel, Make Room for TV, 69

45 Ibid, 67

46 Ibid, 69

47 Ibid, 98

48 Ibid, 67

49 Fowler and Minnow have been quoted extensively, the quotations and analysis can be found in -- Carter, Baron T., Mark A. Franklin, and Jay B. Wright. The First Amendment and the Fifth Estate. (Minneapolis: Foundation Press, 1994).

50 Spigel, TV By Design, 7

51 These could be any 1960s television shows.


53 Ibid, 7.
54 Ibid, 8.
60 Ibid, 94
61 Klinger, *Beyond the Multiplex*, 244


71 This is quite similar to the Burkeian function of rhetorical consubstantiation. Kenneth Burke, The Rhetoric of Motives, (New York: George Brazziler, 1955).

72 The discussion of speech act theory is in the introduction, while the discussion of credibility is later in the work.

73 De Certeau could be seen as an anti-Michael Warner. This asks the question of if there could be a priestly counter public, or if poaching without redeploying is meaningful political activity.

74 Ibid, 148.

75 The theory of television as constituting a public sphere has become somewhat passé. Early contributors to television studies like Bruce Gronbeck were far more interested in the use of public reasons than television studies scholars are currently. There is a more substantial discussion of this in chapter 1.


77 This article is in debt to Buck-Morss and tends to agree with the position taken on cultural studies in this chapter. Angel McRobbie, “The Place of Walter Benjamin in Cultural Studies,” in The Cultural Studies Reader, ed During, (New York: Routledge, 1993).


79 This is a note that David Depew has argued this in seminars and makes a fine point. Graduate students are all too quick to use French theoretical sources without getting at the context in which those sources wrote.


81 The advertisement can be found in the February 1998 issue of Better Homes and Gardens.

82 Sauder advertisements can be found in most issues during this time period. Sauder continues to manufacture furniture, but does not advertise in Better Homes and Gardens.

84 Ibid. This article is particularly over the top.


88 Ibid, 216.

89 The idea of the romantic literacy project comes from Kittler in Discourse Networks. What is at stake here is a revision of the role of psychoanalysis and Foucaultian critique. Chapter one is a reading of the role of mother as the generative source both of reading and affective energy.


91 Ibid.

92 Passing is meant to describe the ways in which individuals would attempt to mask their identity for the purposes of social advancement or to avoid shame. The passing described here could also be understood as covering, which is distinct in that it would not be actionable yet would be problematic for civil rights. Kenji Yoshino, Covering: The Hidden Assault on Our Civil Rights, (New York: Random House, 2007).

93 “Living with your Television,” 58.


100 Ibid.
107 Ibid.
111 Steven C. George and Myatt Murphy, “What’s in Santa’s Sack?” *Better Homes and Gardens*, December 2004, 123.
112 This note is intended to trouble the idea of abjection in rhetorical studies. As Faltesek and Carlson claimed in a 2005 conference paper, downward transcendence and identification with the abject are similar if not the same rhetorical strategy. Abjection is often appearing now as a potentially liberating subject position, what is dangerous about abjection is that it enacts the Nietzscherian transvaluation of values. The break between identification as the abject and contemporary forms of moralism is unclear at best. This is especially troubling as it would break off the possibility of judgment of populism. In the context of a politically active form of upward transcendence, downward transcendence can be empowering. Invoking abjection outside of that context legitimates it as a starting point for rhetorical action, which it is not.
114 The idea of television as a citizen producing technology is distinct from the rhetorical view of television as a possible element of public culture or the public sphere. The good citizen view tends to be inflected by the work of Foucault, which as discussed in chapter one can all too often turn toward a strong view of power where agency is overwhelmed and history becomes too concrete. This critique of the governmentality
view of Foucaultian studies is intended to show how this chapter, and good scholarship
could avoid making power too strong. An example of a work that uses the
governmentality view would be: Toby Miller, *Cultural Citizenship: Cosmopolitanism,
Consumerism, and Television in a Neoliberal Age*, (Philadelphia: Temple University
Press, 2006). An example of the rhetorical view would be: Leah Vande Berg, Lawerence
Werner, and Bruce E. Gronbeck, *Critical Approaches to Television*, (New York: Allyn &
Bacon, 1998).

115 Peter Lundt and Paul Stenner, The Jerry Springer Show as an Emotional

116 A previous version of this chapter as designed long ago would have delved
into a discussion of Copjec at this point. For the sanity of the reader, this additional
theory adventure has been excluded.

117 There is an important historical note here, in 2006 Nickell is replaced as editor
by Gayle Butler. The change was abrupt, with a man from the business side managing a
few issues between the style change. The Butler years dramatically reduce the parenting
advice that Nickell had popularized and substantially increased the emphasis on
gardening and design, which she had been a special consultant regarding for several
years. Butler also increased the integration of BHG to television and web properties.
Nickell is now affiliated with Reader’s Digest. The heart of this section takes place after
she leaves.

118 The “Then and Now” section appears during the hayday of the Karol DeWulf
Nickell editorship of BHG. Her style was characterized by nostalgia and parenting
advice. Then and Now used a writing device where a contemporary issue would be
juxtaposed with one from the 1950s.

119 Jeanie Moos, “My Television Is Too Fat,” *Better Homes and Gardens*, June
2005, 295.

120 Ibid, 295


122 Ibid, 51.

January, 54-62.

124 Ibid, 56.

125 Lauren Payne and Laura Moss, “Master Class,” *Better Homes and Gardens*,
September 2008, 54.

126 Ibid.

127 William Ramroth, *Pragmatism and Modern Architecture*, (Jefferson:
MacFarland, 2006), 151.
128 I use the capitalized IKEA as is an acronym for the founder.
130 The hagiography of IKEA has become increasingly unclear.
132 This is a reference to a long since forgotten Krugman article about Spegetti.
133 *Lamps around the TV*, Unpublished Flyer, Photographed, November 29, 2009.
134 The IKEA term for employee is co-worker.
137 Ibid.
138 The earlier footnotes on Agamben’s reading of Aristotle provide the page numbers to support this claim. I want to draw particular attention to the idea that ways of life can be used as common places.
139 Neo-liberalism is a slippery concept. I use it here because it refers to the discrete subject position. The problems with the critique of neo-liberalism will become more apparent in the following chapters.
142 Spigel and Boddy both conclude with notes relevant to the inclusion of holograms in the living room.
143 Spigel, *Make Room for TV*, 182.
FILM, VIDEO, METADATA: TIME-AXIS MANIPULATION AFTER THE LINEAR MEDIUM

Steve Jobs and his team have been and will be as important to the story of cinema as Fellini or Spielberg or Disney.

--Anthony Minghella, in the forward to *Behind the Scene*

Critics, transformed into “curators,” heedlessly take the place of artists in order to simulate the work of creation that the latter have abandoned, while artisans, who have become inoperative, dedicate themselves with great zeal to a work of redemption in which there is no longer any work to save. In both cases creation and salvation no longer scratch onto one another the signature of their tenacious, amorous conflict.

--Giorgio Agamben, *Nudities*

During the shooting of the surrealist film i.will.know.you in August 2010 the art director made an error, a spelling error. The producer, cinematographer, director, actors, grips and passers by failed to notice that the word hemisphere, appeared as hemispere on a sign. As surrealist film, it could surely survive this kind of error. The misspelling could easily be taken as an intentional move. Instead of accepting that there was nothing that could be done the cinematographer endeavored to correct the error a full seven months after principle photography ended. He used a program included in the Adobe Creative Suite called Mocha, to isolate the depth plane where the problematic writing was, and to edit that writing. Planar locking was relatively quick. The writing and color was sampled, layered over the offending text and recomposed. The correct spelling was now on the sign. No one was the wiser. The process took the first part of an afternoon.

The image of the actor running in front of a wooden sign on a nineteenth century bridge is entirely real. There was a sign, and there is a bridge. At the same time the image
is profoundly fake. A computer vision program selected elements of the scene that were animated by a robot. None of the frame-by-frame care of animation was required.

Up until the last decade, the idea of interactively editing a media piece seemed ridiculous. If a show was being produced on traditional film stock, the cost for making a print both in terms of time and the capital expense were prohibitive. In the case of video editing, the resolution of video (525i) was so low, and the colors possible with NTSC monitors, so lackluster that the majority of editing suggestions that could be given would address macro flaws with the piece, rather than minute changes. For television sitcoms production values were disregarded even more radically through high-key lighting and multiple camera production. Details would not even be captured because of the high light level, and the use of multiple video cameras would allow the editor to choose between many shots of the same take.

The task for a film editor is to take what has been shot, and to cut and tape it into a meaningful narrative. Ideally a narrative that cascades along with L-shaped cuts articulating one shot to the next. The video editor is in a similarly precarious position, although the editor is not cutting and taping a strip of film together, they are expected to rapidly construct media packages from multiple tapes. This technique of tape-to-tape editing allows a skilled worker to assemble serviceable news packages, music videos, or recordings of weddings. In both of these scenarios the strip determines the situation. Both film and video editing rely on the construction of a time code from established parts, which are connected into a meaningful order. The way that time flows can be manipulated, but is essentially bound to a particular place: the editing room. In order to facilitate the manipulation of time, one needed to fix space. The locus for decision-
making is centered on one person -- the editor. The edifice of editing, which had been so carefully positioned as a specialized art form was rapidly transformed over the period of just a few years. It is entirely likely that this account of editing will already seem antiquated to some readers, soon enough it will seem antiquated to any reader who is familiar with media production technology. What could force a rethinking so fundamental that the basic concepts of editing could completely change so quickly? At a more basic level, what does it look like to edit today?

This chapter will have a few sections. First, I will review the conditions for storing transmissions, and thus editing them, before the rise of the linear and non-linear technology. Second, the histories of many major digital non-linear editors will be explored in detail. Third, I will present several case studies of the manifestation of changes in the production of media texts resulting from the introduction of non-linear editing software. These changes will be described both in terms of the features of the software, as well as through examples in production. Finally, the chapter will draw implications from the digital transition in editing software.

The Early History of Editing

Early television programs were often performed and broadcast live, with little effort made to record the program. The first videotape systems would not be introduced until the mid-1950s, and thus recording a live television program on anything except film was impossible. Early efforts at recording television for later playback featured a device called a kinescope that would record the live feed of the television program on film by pointing a camera at a television screen.3 One of the most important programs from this
distant past era for viewers today is *I Love Lucy*, which has a curious place in the American imaginary of the televisual past.\(^4\)

The American cultural memory of the television of the 1950s is in many ways a history of economic and technological practices, more than a history of taste. Without videotape technology, a program would either need to go out over the air or be produced on film and played like a movie. Technologies other than simply filming the program were unreliable at best. The kinescope was essentially a movie camera pointed at a television, with very low resolution, and the hot-kinescope (a combination movie/TV camera) relied on precarious technology.\(^5\) *I Love Lucy* was a popular program when it ran, but was not the only program of note with, *Texaco Star Theatre, Gunsmoke* and others populating the rating sheets of the late 1950s. The local, live programming that was the stuff of community viewing would never appear in the annals of the Nielsen ratings.

We remember *I Love Lucy* because it is available to us; because Ball and Ricardo took substantial steps to ensure that the program was entirely captured on film, rather than simply broadcast for future extra-terrestrial viewing, as the waves would emanate into space.\(^6\) The film prints of the program allowed it to be transmitted again, at a later time. Storage on a film allowed the program to have a life after death, much as the phonograph allowed sounds that were at one time dead in the air to live for future playback.\(^7\) A performance that was once vivacious and live is fixed on a medium that allows it to transcend death, the original fate of all media products. It is no accident that I chose the term fixed as it carries with it a particular meaning in American law. When a work is fixed to a medium for more than a transitory period of time it becomes subject to
copyright law. The fixity that allows a work to live for more than an instant is also the factor that places it in the limbo where it might live forever but might never reproduce. A sacred relation if ever there was one.

The move to use copyright law to protect a work in this context is out of economic necessity: the strips of films of the past are the central asset of media production companies, they are the only enduring thing that the company has beyond a bit of real estate and always already depreciating technology. The archival filmstrip would point toward reproduction as the original source of value in the media industries, both because it creates the possibility of storing value, becoming collateral, and because it is the technological innovation that makes editing possible. The central concern of this chapter is not the development of film capital, but the advent of editing systems.

Benjamin’s work on the aura proposes a theory of editing that contributes to this work by coming directly from his reading of the craft of producing the filmstrip, the shooting ratio. Since Charlie Chaplin had an utterly unwieldy shooting ratio of nearly 42:1, the film could be edited, and thus “improved” to use Benjamin’s terms. To put this in some context, this means that for every one minute you might see in a Chaplin film, there were forty one minutes of material that were not used. Decades after Benjamin, Alfred Hitchcock tried to keep his shooting ratio as low as possible. A low ratio made a film both cost effective and prevented studios from making editorial changes to the movie. For Hitchcock, keeping the shooting ratio under control reduced the influence of outsiders.

In this elementary form, Benjamin’s theory of editing posits that an external observer might be able to effectively produce a collage from a bin of clips that would be
greater than the sum of its parts. The strip appears nowhere else in Benjamin’s essay, as the political implications of the aestheticization of politics takes priority over the ways in which the technical details of the medium produce the message. This possible perfectibility of text is at the heart of the Benjamin’s political argument. If we are no longer wedded to the performance as such, with all the flaws inherent in it, perfected texts will be the fantasy objects that Benjamin rightly fears.

Editing allows the production and reproduction of a form of theatrical time. Consider Benjamin’s reflections on Russian cinema in the early 1930s. The most popular programs of that day in Soviet Russia were films of peasants, whose daily activities would be filmed, only after the actors were told that the cameras had been turned off. As a form of proto-reality television these films were positioned in such a way as to be a synecdoche for the real lives of Russian peasants. From the beginning of production, the axis of time has been heavily manipulated. By telling the peasants that the camera was off the producers of the show produced a certain kind of everyday time, something that felt real. The relative position of different kinds of time is a central political concern for Benjamin, and is the figural basis for the state of exception as theorized by Giorgio Agamben.

Walter Benjamin’s most famous work is on the tension between the productive possibilities of a democratized version of artistic reproduction, and the propensity for those modes of reproduction to abet an aestheticization of politics that would surely lead to the worst possible political formulations. The relative weakness of Benjamin’s account is that his reading of the movement of texts is inflected by the Marxist politics of Adorno and Horkheimer, while retaining a hope that access to the means of production
might produce meaningful political action. At the conclusion of section eight of the essay on the work of art, Benjamin lays out the case for the democratization of cinematic production technology: since the film industry is at the heart of a new regime of publicity which will surely operate in the hands of the established bourgeoisie minority, the workers would need to gain control of film production resources. The ownership of film technology would be important for Benjamin as it tells us about an entire regime of property relations. The importance of studying the diffusion of editing platforms would come both from the need to study the ownership of the means of cinematic production and from the power of those technologies to change the ontological status of media with regards to death.

A great number of important works in communication and culture have relied on transmission metaphysics. James Carey, following Harold Innis, theorized the relationships between spatial centers and peripheries in the development of telegraph systems. Later, transmission allowed large audiences to receive a single message, amplifying the power of a single voice to reach a large number of people. In traditional thinking about broadcasting, transmission is bound in time, it happens at an instant. Early telegraph operators had a momentary leg-up on the information cycle, allowing them to make quick decisions that could be profitable. Transmission was so risky in fact that stock exchanges were quick to outlaw the use of telephones on the trading floor, as to keep information in one single place where it might have power, or at least be controlled. In this sense, transmission is both profoundly powerful and extremely limited. While reaching millions of audience members simultaneously might hail a public with political possibilities, it is also bound to the moment. To be truly effective a
communication would need to take on a form that could be transmitted repeatedly, so that it could live again. The implications of the digital transition in the transmission of television content will be taken up in greater detail in chapter four.

While Benjamin provides a framework for a figural rhetoric that can address historical forces outside the context of a reductionist frame of material relations, his way of reading leaves something to be desired when it comes to the everyday operation of technologies. To develop the theory of editing and the implications of the manipulation of the strip through digital technology, I turn to the greatest philosopher of storage, transmission, and editing technology today: Friedrich Kittler.

Kittler’s turn toward storage offers a chance to see transmission through time. The stories of how media are inscribed for Kittler often are involved in a story of military necessity and accidental triumph. His history is not one of class conflict, or the gradual evolution of technological forms by fan communities, but of the purposeful production of technology to resolve the fundamental Hegelian dialectic: who lives and who dies. For example, the rise of the tape recorder in the United States can be attributed to Allied plundering after the war.²² Bing Crosby may be given a great deal of credit for popularizing this technology in the United States, yet the story has a militaristic side that we would be at fault to ignore.²³ The great weakness of Kittler’s theory of media technology is his willingness to attribute the driving force of history to a particular thing. Where some are technological or financial determinists: he is a military determinist. The strength of Kittler’s approach is that he offers a way to theorize aesthetics in the context of the technology that produces those images, and as his theory relies on conflict as the engine of history rather than human genius. Kittler avoids romanticism. Kittler offers a
powerful supplemental approach for this chapter because his vision is framed around his desire to re-imagine history as powered by a force – his image of history is at once devoid of human subjects and yet alive with the human will to power.\textsuperscript{24} In this sense, Kittler is the anti-Habermas, in that his theory gives preference to non-human things, especially the system over the lifeworld.\textsuperscript{25} Assembling the story of editing from this perspective would focus on the technology itself and the changes that system would produce, rather than focusing on the human actors who might share films. While studies of film festival programming are interesting, we lose an important vantage point on the human condition if we allow the human actor to eclipse their world. Agamben’s recent critiques of inoperativity, of the over-assertion of agency – establish that we get a far richer view of the human world when we stop forcing humans to center stage.\textsuperscript{26}

Kittler offers a challenge to media theories that focus on transmission, notably arguing that storage rather than transmission should define our understanding of how media work. Starting with written inscription systems, Kittler argues that media store meaning that can be accessed in the future, and that storage is the horizon for human communication activity.\textsuperscript{27} A gramophone allows the storage of the voice so that the real uncanny qualities of life might be captured on a disk or on a tape. Yet, simply having the ability to store human sounds is not enough. The record has a trace of the Real and can call forth the imaginary and the symbolic.\textsuperscript{28} Even as these recordings might contain some quality that is difficult to describe, they are ultimately tied to the imaginary and describable through the symbolic. A Kittlerian reading of production technologies has little room for an indescribable, visual sublime. This way of reading the history of media production technologies offers an important break from trends in visual rhetoric that
privilege the apparently extra-linguistic capacity of the visual, or the turn in fan studies to abandon the legitimacy of judgment.²⁹ Lacanian vocabulary gives Kittler a way of talking about the ontological features of the text without drifting into mysticism or description for its own sake.³⁰

Kittler’s concept of time-axis manipulation offers a way to theorize the media performances that have become the most meaningful for American audiences. We can add effects to films through the use of optical printers which duplicate time, we can cut time on editing tables to articulate different moments together, and we can synthesize time all together. In all of our cases with film or video, the manipulation of time is carried out in discrete blocks. We move around hundreds of frames. We copy twenty seconds of voice over onto a tape. The time-axis that has already been given is simply being manipulated. Even into the 1990s, this was the dominant way of thinking about the production of film and videotexts, as the connection of a series of discrete linear things. Strips of audiotape allowed sound to be manipulated in the same way that images could on strips of film. A strip of magnetic tape could be strung through multiple recorders to create loops of time, to record their own echo, and since the magnetic encoding is instant, repayable, and scrubable, the time line is extremely durable. Time was finally well enough stored so that it could be manipulated.

The following histories and technical analyses suppose that the strategic reading of the digital transition in video production can be read as the outcome of a change in editing technology. The details and effects of these technologies can be read as expressions of the primacy of time-axis manipulation, which in the context of this chapter is taken as the figural basis of a contemporary digital rhetoric.³¹
The Microcomputer Revolution: A Short History of Non-Linear Editors

According to some corporate documents, non-linear editing was invented in Massachusetts in 1987. Others credit George Lucas for tasking his organization with building a non-linear editor shortly after *Return of the Jedi*. A particularly well written account of the rise of digital non-linear editing attempts to demonstrate that while the technologies may have been available for decades, the paradigm shift should be attributed to a single genius film maker in 2003. The least exciting trade and engineering journals date the first non-linear editor to 1970.

Building an archive that describes the field of innovation in the non-linear editor market in the 1980s faces difficulties in that many of the companies involved are long bankrupt, and the trade journals that covered the industry ended publication twenty years ago.32 The difficulty in theorizing the non-linear editor based on articles in trade journals is that the articles tend not to engage with the broader issue of what the software means for the production of media. These newsletter articles tell us important things about features and workflows, but very little about aesthetics or rhetoric. Instead the issues as a whole present an image of what the industry might look like, a dream image where awards are celebrated, and plentiful success stories fill the pages. An issue of *Optical Information Systems* from 1987 has an image of the future that includes: vacuum-sealed CD presses the size of a car that obviate the need for a clean room, pages teeming with innovative project announcements and requests for proposals, interspersed with academic articles on developing technology.33 A certain sense of heady innocence pervades the editorial decisions that come from a mixed board of academics and trades-people. Just as the vision has a utopian flavor that would gesture toward an ideal image of the future
where open dialog and development would characterize video production, this is not even
an agonistic vision of the industry, it is cooperative.\textsuperscript{34} The dream for the future of the
industry would seem to be of an effective community bringing innovative solutions to
medicine, education, and society writ large.

Unfortunately for theories of optical systems, the technology that would have
made this industry possible was already obsolete.\textsuperscript{35} Since the rise and fall of platter size
optical drive technology was swift. Laserdiscs offered an increase in image quality over
tape, but lacked the random access of disk-based systems. The paradigm shift during at
this time can be seen in the editorial decisions of \textit{American Cinemediator}.\textsuperscript{36} Before 1986,
the publication was black and white, featuring ads for the Moviola editor and rapid daily
printing. In 1986 the publication switched to color printing, the advertisements that
featured the decades of history of the Moviola were long gone. Ads for multi-million
dollar disk based editing systems had replaced those of the relatively inexpensive film
editors. In 1990, a Congressional report concluded that the development of non-linear
editing would revolutionize communication business and art.\textsuperscript{37} Congress was on point in
their recognition that the technology of the future was not the optical disc, but the random
access of a hard-drive.

The first disk based system arrived in the early 1970s with CBS’ technology the
CMX 600, which while being the first non-tape based editor, was still analog.\textsuperscript{38} Only six
were sold.\textsuperscript{39} In the early 1980s, the CMX 6000 became a popular editing system. In the
practitioner interview that introduced non-linear editing in \textit{American Cinemediator} the
interviewee was careful to indicate that he had been a professional editor for fifty-three
years, and that CMX Corporation had hired psychologists to ensure that the interface was non-threatening.\textsuperscript{40}

According to several histories the first major computer based editing system to gain traction was developed by Lucasfilm in the early 1980s called the EditDroid.\textsuperscript{41} Debuting in 1984, the EditDroid was first used to successfully edit a Hollywood feature film in 1986, \textit{The Patriot}.\textsuperscript{42} The underlying technology of the EditDroid was a system of laser disks, which could map the underlying structure of a film onto a timeline, and that could stock a clip bin. Laserdisc technology allowed the EditDroid to traffic in file formats with much higher resolution than those using videotape alone. The drawback of a Laserdisc driven system would come in the expense of operating the press machines. Editing would require transferring all footage to Laserdiscs and then moving on to the editing phase. The EditDroid would maintain the role of the strip and the time code, rather than displacing it into the computer itself. While the discs had a higher quality than tape, they were still essentially similar to tapes. EditDroid saw the collection of a great many resources that would also be instrumental in the development of Pixar.\textsuperscript{43} For all the capital that was involved in building the EditDroid – the scores of engineers, the millions of dollars, and the support of a visionary director, there were only a dozen EditDroids made, and Lucas himself never edited a feature film on the system.\textsuperscript{44}

What both of these early systems have in common is their essential propensity to be seen as metadata management systems. The EditDroid would functionally serve as a storehouse for in and out points on video clips sourced from the Laserdisc array. It is particularly perplexing that in a technical sense the CMX 600 was more sophisticated than the EditDroid in that it was a truly offline editor. The CMX 600 was in no way
dependent on a linear medium, while the EditDroid was dependent on a linear medium that was independently formatted for use in the system. These early systems are referenced as prior art in the patents of future video system developers.45

The fully offline system would not reappear until a far later time in the development of non-linear editors, with the consumer entry point Amiga and the much more professionally oriented Avid system. A second difference between these early systems was that while the CMX made the transition to using hard drives to store media, the files that were recorded on the drives were still analog. At the same time, the EditDroid offered digital audio but not fully digital video since it still used the NTSC codec. In this sense, there is a lag between adopting digital technologies. If we take a strict view of becoming fully digital, a system that was digital throughout the production process may not appear until the 2000s. In his early 1990s textbook on using non-linear editing systems, Thomas Ohanian provides a three phase development history for non-linear editors with the first phase being all pre-laserdisc systems, the second being the laserdisc driven editing system, and the third being the fully digital editing system.46 This typology is attempting to cover both substantial periods of time and technological development. His model intentionally excludes videotape editors and other systems that are not random access, as those systems may be non-linear, but lack the ability to manipulate and manage media through a collage like interface.

Early technologies allowed users to move blocks of footage around with far greater ease than linear physical editing. For example, early Macintosh based editing software, such as Big Time TV allowed users to connect their equipment into a relative inexpensive editing suite.47 The drawback of this desktop system was quality – the
system worked with composite video connectors on standard consumer videotape. The total resolution on one of these systems was negligible. The first widely available non-linear editors for industry side work came out in the late 1980s and early 1990s, notably the Avid Media Composer and Adobe Premier. Although the surviving platforms, Avid, Premier, and Final Cut Pro are widely written about, there were a host of start-up companies in the late 1980s that aggressively worked to cultivate the market.

A particularly rich source of information about this early phase of the non-linear editing industry can be found in an episode of Bay Area Public Television’s *The Computer Chronicles*, from March 15, 1990. Beside the incredible archival use of old episodes of *The Computer Chronicles*, the episode from March 15 features interviews with key players from each of the systems that are still at the heart of modern production: Avid, Macromedia (Final Cut Pro), the Commodore Amiga (defunct), and Videologic (DVA and DAB). Stewart Chifet and Jan Lewis are particularly adroit hosts for the program, asking incisive questions of the corporate representatives. First, I will turn to the companies with products that did not survive until the current era.

Commodore did not survive beyond the early 1990s, with firms attempting to obtain the full functionality of the Amiga editor into the mid 1990s. The Amiga as shown in the episode is simply beyond the other systems demonstrated. With full timeline editing, animation, and fully internal processing, the functionality of the Amiga was the leader. Kirk Curtis, the President of Videologics appeared with Kevin Robinson from Byte magazine. When asked by Jan Lewis about the future of the market Robinson rightly predicted that the early lead for the Amiga would evaporate. His rationale was simple, the IBM/Microsoft compatible world would offer technology at a low enough
cost, and further that the Amiga had begun to lag behind technologically as well. His second place: Mac. Videologics did not fare well in its own right: within a few years it went public and was acquired by a British firm. They are now known for their work in audio processing technology. The demonstration by the Videologics representative foreshadowed the fate of the company: their main feature was that their adaptor relieved pressure on the CPU of the host computer, meaning that their DNLE product was hardware based. Diagnosing the weakness in the Commodore was like the pot calling the kettle black. Apropos that a company that features hardware would end up in the hardware game. With these two players out of the way, Avid, Apple, and Adobe would be free to compete for the non-linear editor market. This is not to say that there were not, and have not been open source approaches to non-linear editing. Unfortunately, the majority of open source non-linear editors have come relatively late in the game. The potential profits that would come form developing the killer app for video editing are far too enticing to go undeveloped.

Avid appeared on the non-linear editing scene just two years before their appearance on the Computer Chronicles. According to Avid’s corporate history, their founder both built a workable editing system and made the “pioneering discovery” of non-linear editing. Avid was an aggressive, well-capitalized player, acquiring EditDroid from Lucasfilm in 1993. In this time period the biggest drawback to the Avid was fragility, the high capacity 600-megabyte hard disks could only be shipped once without breaking. Combined with the five-figure price tag for the editor, the Avid was a powerful technology with a very high price tag. Even with these drawbacks, the Avid became a dominant force in the production of feature films by the late 1990s.
James Cameron was able to use Avid to successfully manage the millions of feet of material collected for *Titanic*.\textsuperscript{52} Many of the innovations that were available for the Avid were common among non-linear editors, and even present in the mid-1980s on equipment made by Commodore. Avid’s technologies had substantial drawbacks, notably that they regularly crashed. According to the industry lore, or at least the Final Cut lore, the software providers (Avid in particular) didn’t really care about technological failures or support.\textsuperscript{53} Dealing with crashes was the price to play in the new era of editing.

Even with the inclusion of multiple technologies, Avid is a closed system. What is loaded into the system can’t be moved into other developers systems. To this day, Avid based systems require the purchase of expensive “keys” that allow the import of assets from other companies software.\textsuperscript{54} The economic reasons for this would be clear from Avid’s perspective. Since Avid regularly acquires companies that make complimentary technology that could be integrated into their platform they could induce companies to buy a full suite of solutions for their enterprise. This strategy can be seen in concrete terms in their financial statements: the revenue streams that support Avid come from any number of subsidiary technologies to the central non-linear editor, and further the company has been losing money for the past several years due to their purchases of other firms.\textsuperscript{55} The general strategy would be for Avid to purchase the firms that it normally would contract with to preclude those firms from stealing their intellectual property and trade secrets. By integrating business functions Avid would gain additional strength by minimizing transaction costs and by offering integrated product platforms that might address multiple customer needs.
On a fundamental level this is an enterprise level strategy. Although Avid is pivoting toward the non-professional and software only markets, their company still derives a quarter of their revenue professional editors and service contracts. The turn toward the software only implementation of Avid is an important step, as it would point toward a model where users would use Avid on standard hardware, rather than through the use of adaptors that might be attached to their systems. Avid concedes in its regulatory filings that it may not regain profitability. If Avid were to fail in integrating the business units it has purchased it could represent a sea change in how non-linear editing technologies are produced. Avid’s strategy to this point has been one of horizontal integration. The limits of horizontal integration are clear, if the market price level for the product has dropped, then taking on debt to finance adding features to maintain that price level would be a risky business.

Yet, as I will develop in the second half of this chapter, the non-linear editor is really just meta-data processing system. A software side implementation of Avid begs the question of the non-linear editor purchase in the first place. Why would an enterprise version of Avid that costs tens of thousands of dollars be superior to a retail implementation of Final Cut pro that would be one thousand dollars? It seems clear in the regulatory filings that Avid is depending on larger customers such as television newsrooms and cinematic production to sustain their business model. This would seem to be the key reason why Avid would need to claim to be the professional’s choice since the bulk of the retail of the market would seem to be filled in by Final Cut Pro. The idea of the dedicated board or adapter would finally be over. Digital microcomputers would eliminate the need for hardware to be fixed in the first instance.
In May 2011, Adobe announced that it would break with its normal release schedule and issue Creative Suite 5.5 in the Summer, rather than waiting until late 2012 to release Creative Suite 6. Adobe software has produced popular products for video editing, post-production, word processing, and web development (flash) since the late 1980s. The core video-editing product has remained relatively stable for more than twenty years, Adobe Premier. Premier and now Premier Pro offer DNLE functionality in addition to their ability to integrate into the wider Adobe platform of products. A file that one would use for editing in Premier can be opened in Photoshop and modified with still editing tools. This cross application flexibility is a key part of the Adobe appeal as it provides a complete production environment and familiarity with other software packages that users already enjoy. Adobe also leverages the fact that it is one of the only cross platform non-linear editors. Users could go back and forth between Mac and Windows platforms in a way that they cannot with other editing software.

The drawback to the Adobe system that has impeded adoption is the relative instability of the system. Complains about Avid not responding to user needs are also true of Adobe. Further, Adobe has faced increasing difficulties in product stability, forcing them to release version 5.5 of the creative suite to fix problems rather than to add new features. Financially, Adobe Premier pro is not a central part of the companies overall strategy. Adobe’s file format .PDF, font tools, and Photoshop have long been the heart of the company’s strategy. Video editing is secondary to the rest of the production platform. Much like Avid, Adobe has been aggressive in purchasing other firms. One of Adobe’s most well known products, Flash, was developed by Macromedia and was purchased along with that firm in 2005.
While Adobe is an interesting company, the lack of market share and corporate focus on alternative markets make this software package interesting, but distinct from the struggles in the current DNLE market.

In 1998 Apple Corporation introduced its editor based on the Macromedia technology from *The Computer Chronicles*, Final Cut Pro. The release was of little note to anyone except the most involved techies. One of the only magazine articles to remark on the release offered a critical insight about the underlying technology of Final Cut Pro, that it features: “an aggressive open-source strategy for making its technology pervasive.”

Final Cut was fascinating because it was predicated on an open file format. No special key would be required to move between programs, the technology for transforming and processing data be out there for anyone who wanted to edit. I should be clear about the implications of this move. The importance of Final Cut is not so much that it was first, as it was a late entrant or even that it had great capability, but that it could play well with others. This allowed it to become a critical non-linear editor with a majority of editors using the system. The turning point for both non-linear editing and Final Cut Pro came shortly after its introduction, with the successful editing of a feature film, *Rules of Attraction*.

*Rules* was based on a Brett Easton Ellis novel of the same name, with his regular stable of late 1980s nihilists and hedonists living out their college years. The film starred James Van Der Beek. The film was apropos; like much of Easton Ellis writing the film was non-linear. One scene didn’t necessarily lead to the next and the image would start running backwards. *Rules of Attraction* is a film about time-axis manipulation. Roger Avery proved with the film that Final Cut Pro could accomplish a
particular kind of frame substitution that would allow for a video system to be used in place of a film system. Underlying this innovation is the possibility that the system could not just capture existing data, but it could synthesize new data, new time streams that could be collected and used in the production of a movie. This is known as 3:2 pull-down. The problem with uploading or digitizing film into video is that it requires adding an additional frame of information, as a video camera captures data faster than a film camera. A video system runs at 29.97 frames per second, while a film system ideally runs at 24 frames per second. Leaping forward onto a non-linear editor was only really possible once a system for processing was perfected. Final Cut Pro could alter the formerly stable syntax of time. While the film was a critical and commercial middling, the technological evidence was now in place for a change that would be truly dramatic.

Walter Murch took this as evidence that Final Cut Pro was ready for theatrical editing and received an Oscar a year later for editing Cold Mountain, with Final Cut Pro. The truly remarkable thing about Cold Mountain is that it was edited on consumer level equipment. Murch used over the counter Macintosh computers. With Final Cut selling for $995 and a viable computer for processing being only a few thousand dollars more, powerful cinematic computing could be had anywhere. Even more interesting is that this was not the first time that Murch had become a key early adopter of a technology. Thirty years before, Murch was the first editor on a major motion picture to use the KEM flatbed editing system. Murch debuted this machine in his work on The Conversation. Charles Koppelman notes that the KEM changed the physical work-space for the film maker, as the KEM flatbed editor changes the position of the editor from standing with a Moviola, to sitting down in front of the desk like KEM. Those inclined to sit rather
than to stand would seem to think this is an improvement in working conditions, since it would take the standing work position of the carpenter and transform it into sitting position of the clerical worker. Any blue-collar identity remaining for the film worker could be transmuted into that of the white-collar producer/editor. On the other hand, Leighton Pierce has argued that editing should be done standing up, if only for the health of your back. Murch is a key figure, with the ethos of an elite filmmaker and the enthusiasm of an early adopter. Much like adopting the KEM, Murch’s adoption of Final Cut Pro was an instance of early adoption, not first adoption. This is not meant as a quip about Murch, his work is superb. The key is the way that we tell stories about technological advancement in production work.

It is easier to tell the story of the non-linear editor as being about a single genius innovator, rather than the structuring power of a technology. I endeavor to re-tell the story of non-linear editing from the perspective of Microcomputers, which had already been commonplace for decades. Developing fixed capital for editing was a thing of the past. Personal computers with IBM, Motorola, or other chipsets were developing with incredible speed. Film and video editing did not push the computer revolution forward; rather they were pushed by it. As Vincent Mosco argues in his reading of the digital sublime –technology can only be revolutionary after has become ubiquitous. Aside from the quality of the footage shot, any high school student could now have an Oscar quality-editing rig. This paper was chapter on one.

**The Digital Intermediary and the Archive**

Although *Cold Mountain* is an important point for editing, *O Brother Where Art Thou* presents an important challenge for how we think about storing and reproducing
film. The incredible power of the non-linear editor for changing the nature of work in the production industries comes from the capacity of the system to either reproduce an image on traditional film stock or to produce a meaningful collection of meta-data where film might be conformed to match a digital timeline. A second feature of computer-based systems is their capacity to transform the data, rather than to simply transport it. In *O Brother Where Art Thou*, the Cohen brothers used the capacity for digital color correction to produce a digital intermediary. A digital intermediary is a print on film stock that has been produced after editing on a DNLE system. The original camera negative is retained, yet the digital copy is more important than the shooting original as the film process moves forward. In order to produce the unique light and color effects that one would notice in *O Brother*, the Cohen’s took several weeks extensively color correcting with a computer. After the film was completed, they contended that the digital intermediary was in fact the real archival item, and that the original camera negative was now rubbish. This would be quite disconcerting for a major motion picture company. At the heart of a media production firm there are really very few assets, and since those negatives are the collateral that allow the studio to exist in the first place, they are highly valued. The original camera negative would be an asset that could be utilized for the production of future products, such as re-mastering for a future new medium. If the digital intermediary were the asset that had substantial value due to digital manipulation, the entire structure of the business would be at risk.

The question of the integrity of the strip is far less important for television, since the medium has rarely had the same technological capacity as 35mm film. For the vast majority of its life, television has been a low-resolution form that rarely even transmitted
a full image. The NTSC system only transmitted one-half of a single image in any given field, the fields alternate at the speed of the alternating current of the power grid, with the brain integrating the rapidly alternating fields into a single image. Combine this lack of data with the instability of the transmission and the television program would not be nearly as sacrosanct as the feature film. This is also the case in how we think about distribution. The brief history of tape suggests that the television program has always had a precarious position. Network television that one sees in prime time is often routed live through a satellite dish, while the reruns and local commercials could be playing off Beta or three-quarter inch tapes.

Unlike how the digital could destabilize the archive of a Hollywood studio, production through a digital medium could retain the vast seas of data produced by multicameras television production to facilitate a host new features and programs. Consider the data management challenge that the program *Big Brother* presents: huge amounts of footage, limited production time, and the need to film continuously as to capture the exploits of the characters. Sports and reality television producers have used digital technology to become such effective archivists that their aid has been sought by the military to improve data management for the Gorgon stare weapons program. The *Real World* has never been more real world.

The practical power of the digital for managing data cuts across the idea of the authentic original time coded strip of film. The aura of the work of art, which is ultimately all a firm really has to sell, is dissipated by the digital just as the digital might allow the production of new artistic products. By displacing the authority of the original versus the copy the digital troubles the speech act of the promise. One can no longer say
with complete force that the variant of an image that they are selling is in fact the original. Aura was always an intersubjective product up for sale. This explains the troubled history of the histories of digital non-linear editors: every system must always be first, it must always be represented by the best auteur, and it must be the system chosen by professionals. The story has the same structure of any in the media industries where a host of fundamentally similar products vie for supremacy based on secondary criterion, which always remain secondary. It doesn’t matter if the editor was first on the market, or last on the market, it matters if edits.

Reading Final Cut Pro

In the next sections, I will turn my attention to the particular features of the Final Cut Pro technology. What focusing on Final Cut gets this chapter is a way of dealing with the proletarian mode of editing. Even if we take Avid at their word that they are the center of the editing universe, they are still behind Final Cut with the public writ large. In a second sense, the margins and modes of production in the television industry are moving away from the accumulation of capital for expensive, proprietary systems like Avid. If the financial analysis holds, Avid is attempting to become more Final Cut-like anyway, and in this sense we can take the phenomenological import of the Final Cut interface as a leading indicator of where DNLE is going.

In the story of the transition from flatbed editing to non-linear editing there are several competing factors, notably: the speed and availability of microcomputers, the development of an information processing system for converting media types, and the political economy of labor saving technologies. For James Beniger these demands would be a feedback loop: the technologies that would allow non-linear editing would feed the
production of excess transmission capacity and visa-versa. What is notable about this control revolution is the speed by which it has progressed. The feedback loops are numerous and accelerating. DNLE would seem to be at the heart of the explosion of YouTube, which is disciplined through copyright complaints and harvested for profitable content by corporate trawlers as market research and sketch comedy for Tosh.0. Mark Andrejevic argued a similar point with regards to reality television: there are corporations on your message boards, looking at your production of content as an active audience. Cultural studies have been monetized. The eagle has landed. Going forward the question is not how cultural industries will cope with the changes wrought by DNLE, but what these new media technologies say about our situation.

Friedrich Kittler offers insight into storage versus transmission, yet is inadequate for a world with fully operational, consumer accessible DNLE. Final Cut Pro is processing, transmitting, and transcoding. Perhaps the weakest place in Kittler’s theory is the relationship between how media transition from storage to transmission. Harmut Winkler contends that the central point for analyzing a media technology comes at the point where storage and transmission meet. Where Kittler theorizes storage and transmission as being discrete, Winkler includes a place for the work of processing technologies. Processing steps into the relationship between the transmission and storage, offering an alternative to that reductive view. Moreover, Winkler’s view complicates the notion of time-axis manipulation with his point that the heart of manipulation is reversibility. It isn’t enough to move around parts of a text, this could be done with tape and a scissors. The ultimate process one can do to a time code is to flip it. This can be one easily with a non-linear editor.
The relationship between storage and transmission isn’t linear, but is circular to the point of being cybernetic. In this sense, technology is very much a creature of the culture that produced it. The preferences and tolerances of the audience produce the next generation of feedback mechanisms. The level of control offered by Final Cut Pro is unparalleled. This is where Final Cut Pro becomes really interesting, since the notion of the time code itself has already come into play, the question becomes if there is any linear process left in the production of the text at all. Here I want to consider several features of the Final Cut Pro system, and similar systems, in isolation.

The Server Bin

One of the first major features to notice with any non-linear editing system is the use of a bin where clips might be loaded, arraigned, transformed, and organized. This bin comes directly from the older system editing practices; in those days a bin was a canvas box for clips. Once attached to a computer network the power of the bin increases. Many people can add many clips at any time; multiple editing systems can be running. A multiplicity handling editing tasks can get a much greater volume of work done than an individual. The bin works through a graphical interface in Final Cut Pro allowing a user to see a series of clips with critical information, with the option of dragging them onto a timeline. Unlike a film bin, the online bin can produce a nearly infinite number of copies of the clip. Once in the time line it is possible to manage any variety of special effects and basic editing maneuvers. Fades, L-cuts, chroma keying, and any host of procedures that would at one time require optical printing, sending film away, or a special machine are accomplishable through the use of the processor alone.
The bin is a creature both of the physical world and the rendering of the computer operating system. This graphical user interface also carries with it a particular sensibility about computationalism. David Golumbia has termed this “the cultural logic of computation.” Computationalism has changed the character of the decisionism that had defined previous eras. No longer is the question about finding a sovereign to just make the choices for us, a computer does a far better job of accepting displaced political responsibility than a person. A particularly telling scene comes from *The Simpsons*, where Homer purchases a personal computer. While driving home from the store, the car hits a pothole causing him to bump his head. Homer remarks, “Don’t worry about that head, the computer will do our thinking now.” Unfortunately, George H.W. Bush was right, all too many Americans are like Homer Simpson. The political effect of computationalism is to make it appear as if technical mastery of the computer could stand in for technological mastery of the social. Computationalism becomes a reactionary social resource, which Golumbia turns to as a critique of apparently unstructured social technologies, like Wikipedia or Google. By framing the interface as a natural part of the editing process, political choices, such as who gets paid what to work when, receive perfect cover for a conventional capitalist politics of accumulation. Golumbia’s critique ends in a far less optimistic place than those forwarded by audience oriented cultural studies. Since the forms of participation that take place through these interfaces are governed by computationalism, they are questionable as liberatory systems from the start. Different kinds of graphical user interfaces are assemblages of technologies. Any variety of mathematical transformations are in play at any given time with Final Cut pro, which are largely concealed by the graphical presentation of the system. Complex
mathematical constructions are presented as simple blocks of color. The interface is so simple anyone can use it.

Simplification of the interface is also an important form of deskilling. John Caldwell noted in his ethnographic work on reality television that the rise of a new class of production assistant labor under the title of the “logger.” A logger watches piles of reality television content, organizing it into the bin for an editor/producer. Caldwell argues that the tools of production are important nodal points for imagined communities of production workers. By deskilling editing and clerical functions Final Cut can essentially change the cost structure for a production, a logger is just above a minimum wage job. The bin changes the physical properties both for understanding time as a fungible block and for understanding labor as essentially interchangeable. Non-linear editing does more than put clips into the bin -- it renders post-houses, workers, and industry communities, as items in a bin. The cultural logic of computation has come home to roost. The production community has been remade, in the image of their tool.

Consider this in the context of Kittler’s reflections on the typewriter. Where film editing would apparently convey a spirit (read: handwriting), editing with Final Cut is like editing with a typewriter. This is the truth of HD reproduction – the non-linear editor shifts meaning into a stable structure of signification. There is only an attempt to render a particular through the vocabulary of a now technological universal. Consider the recent trend of abusing digital lens flare. Now that Final Cut and other editors can produce authentic looking lens flare effects with a post-production filter, they are now almost required to appear regularly in movies and music videos, even when they don’t make any artistic or scientific sense. What was once the marker of care and cash is now
automated. Instead of showing an evolved production aesthetic, lens flare is has become droll.

Online Resource Sharing

During the installation process for Final Cut Pro, the user is asked if they want their computer to join the online network of Final Cut editing suites. At first this might seem innocuous, or even potentially utopian since we all could share computer resources. On a second inspection this arraignment mirrors one that is in fact despised – the criminal botnet. By linking the processing capacity of many computers into a single locus for rendering, Final Cut makes every processor in the network a part of a cybernetic whole. Tasks that could take hours or days would be reduced to minutes. Botnets are an inherently risky configuration offering the possibility of collective effort and the risk of exploitation. Botnets have been responsible for DDoS attacks against major banks, as well as spamming online polls with throngs of votes for Ron Paul. It would seem that Steven Spielberg could easily use your processor for editing, with only the hope of the reverse.

The construction of this network challenges the macro political economy of production. The producers of the hit ABC television show Lost have remarked that the network has been pushing to lower production costs. In a particularly interesting exchange the producers told the story of a meeting where network executives showed a short film produced by a single editor in Brazil for one thousand dollars. The video was fantastic. Once the production community is like a bin, importing one more asset is just a click away. Instead of downplaying the power of the margins to create content, a creatively oriented producer noted that the costs of production really hit home when
footage is sent to the “render farm.” In his narrative, the Brazilian editor would ask for the same astronomical prices as the render farm once he got a “taste” of the cash flowing through the industry. This is eerily similar to my analysis of the bin as a social technology. The Brazilian editor by using non-linear editing technology and an online video sharing system had become standing reserve for ABC executives. While the recourse of the established players is that integration into the social structure would change the compensation preferences of the outsiders. This assumes that the structure would remain intact long enough to integrate these new players and not that the integration would dissolve the structure itself.

Consider even a very affordable render farm: Rebus Farm in Denmark, charges three hundred and seventy dollars an hour for rendering. When I conducted price checks on render farms that work on Hollywood films, the prices were at least four times higher. Final Cut Pro would drain demand for these services as the network could accomplish the rendering. This speaks to a fundamental technological challenge not addressed by Kittler – heat dissipation. By moving to a network without a physical center, heat can be more effectively released from the chips involved. This might not seem revolutionary at first, but heat dissipation is the real key to the operation of a rendering network, clock time is secondary at best. Heat damages systems, fouls drives, and reduces efficiency by increasing the resistance of electrical paths. Final Cut thus breaks the narrative chain of acceleration by rewriting the story to be one about control over the network rather than speed. Heat is a waste product. Once the entire user base is the farm, we won’t need a lagoon.
Integration with parallel technologies

One of the longest standing markers of film production has been the image of the slate being clapped. Slating allowed the synchronization of audio and video tracks. The synch provided by these technologies is rough but more than adequate. Human ears and human judgment make this technology work after the fact. New versions of DNLE software allow the editing program to interact with specialized slates, cameras, and audio recorders, which can import time code relative to the universe of the project. DNLE resolves the problem of synchronizing clocks and film by linking all production technologies through the single locus of the graphical user interface. This is a remarkable moment, as this technology both plasticizes the subjective experience of the camera, as it universalizes time. By stabilizing and destabilizing time in the same gesture the field and the studio become a site of distributed processing.

Much like how the development of the distributed processing network challenged the idea of a discrete processor, interactive/integrated technologies make the vision of a clear distinction between the editor and the director more difficult. The time code is produced, notes and other logging information can move instantaneously from site to site. Metaphors for artisanal production of cinema only serve to distract from the bulk of business and content models, particularly in the case of reality television. Technologies like P2 cards, integrated slates, 702 Sound Devices, and other digital production tools process continuously and break the possibility of a spatial fix on particular production possibilities in particular spaces. Shakespeare was right in the case of non-linear editing, “all the world’s a stage.”87
The story of changing spatial relationships in the sections on the server bin and online resource sharing was about the relative decline of necessary fixed capital at a spatial center. This is what David Harvey meant by the spatial fix. For critical geography the spatial fix offers a vocabulary to describe the processes by which we understand both how particular business processes are tied to a location, and how capital accumulation processes produce a particular kind of spatial knowledge that optimizes the operation of capital at that site. Harvey provides a fine example of the first instance of the spatial fix in his reading of the international wine industry. A key part of buying and selling wine is fixing a proper price for the product, if an expert evaluator is not involved in pricing, the name may have a great deal of control over the final sale price. Some particular brand names in this industry are really the names of places, and have received protection under trade law. Thus, if Idaho received protection for the quality of their low-moisture potatoes, they would be able to use legal mechanisms to protect the use of that name in trade.

The second variant of the spatial fix comes in the production of a place where an enterprise might operate with fewer costs. IKEA for example outsources production from European Union countries to the United States. An American worker is a bargain compared to their well-compensated German counterpart. The example of the Lost producers being pushed by the Brazilian exterior is a particularly pressing example of the use of the spatial fix being deployed to effect change in physical rather than financial center. There are clearly two distinct spatial centers in this argument: the center of production and the center of finance. Financial interests controlling production will
remain with big banks, studios, distributors, and several Middle Eastern countries that are
heavily involved in international co-production.92

What is particularly important about the development of tools that link the
graphical, computational world of the editor and the scene being filmed is that they
abandon the spatial fix in the first instance. In the regular post-Fordist critique, work is
taken from the center and distributed to the margins where the protection of workers is
substantially deceased. This strategy was dependent on moving between rival spaces.
Sierra Tinic has a fantastic example of this in her work on Canadian production.93 The
government has created a “grid” around Vancouver where production is subsidized.94
Although this is supposed to lead to substantial economic gains for the subsidizing party
this is often not the case. Toby Miller has noted that New Zealand lost over two hundred
million American dollars on the production of the Lord of the Rings Trilogy.95 Since the
narrative of economic gain is quite strong, a producer then can choose between different
discrete spatial locations, such as Vancouver, Los Angeles, or any number of desperate
mid-western states or countries that would be willing to pay a production. In North
Carolina for instance the government will go further, and help filmmakers secure the
assent of locals. A business model that is far sweeter than mere arbitrage.

There is a particularly interesting sub-dynamic in this out-sourcing relationship
with regards to class politics: the means of production on the margins are often owned by
the workers. We can take the transition in the production of professional wrestling
programming as an example. World Wrestling Entertainment has been moving and will
soon end their direct involvement in the production both of television and stage
performances.96 Instead firms like NES Supershooters will take over all production tasks
related to professional wrestling programming. This offers WWE substantial advantages in that they would not need to employ workers to accomplish these tasks, and further that the would not need to own depreciable assets for production. Combine this with the independent contractor status of wrestler performers and the company has very few employees and just a couple of buildings.

The traditional Marxist line would suggest that the ownership of the capital for production by small houses like NEP Supershooters, or even more radical diffusions like free-lance video editing would be liberating for the worker. They would have ownership. What has happened instead is that the lack of the spatial fix combined with the diffusion of the possibility of ownership of digital media production technology has only further extended the reach of the risk society into the everyday life of media producers? Since there is no center point, there is no place for the virtuoso of Italian autonomous Marxism to organize a labor revolt. The multitude that has been offered as the remedy for all too many instances of inequality has no effect since it can never form. The Marxist conception of ownership is insufficient ground for the political after digital technology breaks the spatial fix.

The Arrival of HD processing

Microphones are important, but the sine qua non of television for the 21st century public is the HD image. The image of a high definition flat screen television has already been the hinge of fundamental change in how the American public decorates the living room, as discussed in chapter two. High definition is not just a display codec -- it is ontological. Programs of the past could be produced on flimsy sets, with overblown lighting. The camera used to make anything look authentic, now it makes everything
look cheap. Much like Nietzsche’s perspective on Wagner, HD content is ugly and too
detailed, and yet we can’t imagine watching anything that is not HD.\textsuperscript{102} Nietzsche put it
this way:

\begin{quote}
I understand perfectly when a musician says today: “I hate
Wagner, but I can no longer endure any other music.” But I’d also
understand a philosopher who would declare: “Wagner sums up
modernity. There is no way out, one must first become a
Wagnerian.”\textsuperscript{103}
\end{quote}

It is this split that defines our televisual economy.\textsuperscript{104} We, the viewing public,
have upgraded our display devices to the point that much of our content appears ugly, yet
it is this content that provides the long-tail of media revenue that keeps television
going.\textsuperscript{105} The post-network era depends on the production of a great volume of
programming that is high definition, and this programming must be produced quickly.\textsuperscript{106}

HD cameras are increasingly available to the general public for a reasonable
price. For example, the Flip HD is now under two hundred dollars, and the faux 35mm
Cannon 7d is only fifteen hundred.\textsuperscript{107} Once a home movie can be made in 720p with a
hard drive, filmic feedstock becomes cumbersome. Digital production offers the film
maker unprecedented control of the image, mobility, and ease of transfer into the editing
medium.

HD production is not simply different in how it can be transmitted, but in how it
is manipulated. Friedrich Kittler concludes his section on the typewriter with the claim
that an automated discourse analysis has taken hold.\textsuperscript{108} This is nowhere more truly
perceived than with the HD image. Instead of simply having an image that is deployed in
sequence, an HD frame is a file that can carry a great deal of data with it. This additional
material is called metadata. Unlike an individual frame of film, it is never on its way to
the dead letter office. This is also true of the way that the image is produced. There is nothing natural or inevitable about how an HD image appears. Consider a state of the art reality television camera such as the Panasonic HPX-300. The camera can change how the recording media, the chip, encodes data. The gamma setting can be adjusted so that the HD recording appears to be film-like. In addition to this, these high-end HD cameras also produce a reliable date and time stamp that can be used in depositions. To paraphrase Kittler, film is like a bee; HD is like a cruise missile.

Rapid production requires an alternative to a Fordist conception of shift labor. HD editing facilitated by Final Cut Pro is the perfect platform for binge labor. John Caldwell describes these phenomena in his ethnographic fieldwork at production houses. When the work is present, it needs to be accomplished by an army of human editors, at super human speeds. Public presentations of this capacity are often framed in hyper-masculine terms. Editors who can work for days at a time are venerated. The bodies of production employees are presented as a replacement feedstock for film.

When Murch started editing on the KEM flatbed, and later Final Cut pro, the idea was that these technologies could open up media production. The technologies are instead an ergonomic nightmare, transforming editing from lively process into one done by weary workers hunched over computers. In a world with digital production technologies, bodies are cheaper than celluloid.

The Genie is Out of the Bottle – De-Democratizing the Non-Linear

The response of the more traditional segment of the film production industry has been to attempt to de-democratize the spread of technology through artificial aesthetic
distinctions. Systems like Sony’s CineForm 65 would come with such high price tags and proprietary workflows that they would be reserved for those who might truly be perceived to be artisans. The problem with this de-democratization strategy is that it cannot hold up against Moore’s law: if 4k production values were already coming with technology at a fraction of the cost, the potential advantage of a new expensive camera would be null. Putting the genie back into the technical bottle would not be possible, as the technology for producing similar products has already proliferated. At the end of the day all footage entering non-linear editing systems is essentially translated into metadata, as long as the input device is adequate, the downstream technologies are commensurable. Metadata generated by Final Cut is the same as metadata generated by Avid. The only distinction between different kinds of footage to be edited comes in the form of what is called a codec.

Codecs are relatively straightforward; they are codes that make sense of the electrical impulses recorded by the sensor. The codec is an important site for understanding the politics of media production because it offers an important place for media businesses to extract rents from media producers. A critical case study is the development of the H.264 codec, produced by the MPEG LA working group, a collection of copyright holders that includes Sony, Apple, and Microsoft, owns H.264. Footage from many modern cameras that are designed to supplant film production, such as the Cannon 7d, output natively in the H.264 codec, and YouTube, iTunes and many other platforms use H.264 to manage file sizes for content distribution. Small production companies are rightly concerned that the H.264 codec would destroy their business model if the cameras that export in H.264 were only licensed for non-commercial output. The
development of this strategy for extracting value from independent producers is a way of establishing a spatial fix around the figural position of Los Angeles, without possessing fixed capital there. MPEG LA was not involved in the production of the codec. What this group does is facilitate patent pools where actors that would normally be antagonistic engage in facilitated transactions to reduce costs. This would seemingly allow firms with a legacy of patent ownership to cheaply extract value from the production process, regardless of where it might take place. MPEG LA pools go beyond just the H.264 codec, with additional assets under management including many popular codecs and connection standards, including Firewire.

At first this collection of companies and patents might appear to be threatening creativity. Conspiracy theories about the H.264 patent pool go as far as to allege that the codec is the leverage point for Steve Jobs to have a personal right to censor all video content on the Internet. What these scenarios fail to take into account is that plasticity of DNLE systems, through transcoding footage editors have the ability to directly circumvent any attempt to extract value from small firms, the products they sell could just as easily be in an NTSC format. Pooling rights for a codec is a double edged sword for companies, while it allows them to avoid litigation costs that might come protracted battles about which patents take priority, it precludes any individual firm from attempting to use a litigation strategy outside the structure of the pool. No one can sue. Editability overcomes the potential juridical strategies to control the formulation of time code in the twenty-first century. The failure of move to de-democratize technology can be attributed to non-linear editing. These politics are the same as those of the server bin itself. Interchangeable parts have overcome the artistic claim to control of the workflow.
Figurally the attempt to connect production value and the technological value of media production is a failing proposition. Audiences’ willingness to make important decisions on the basis of the technology of production quality is overstated. Consider the rise and fall of stereo-optical films. The extreme profits that accompanied *Avatar*, were taken as a sign that the audience would select three-dimensional offerings over their two dimensional counter parts. In a matter of months, ticket sales between traditional and stereo-optical films turned in favor of the former, audiences became quickly tired of what they perceived to be subpar effects.\(^{122}\) What enabled the flush of these pictures was non-linear editing. With some modes of stereo-optical production two cameras are held in perfect alignment to provide the illusion of depth, in many cheaper and faster modes of production, a non-linear filtering technique is employed to produce the same effect.\(^ {123}\) The image is replicated and each is slightly off-center, planar locking is used to identify which fields of are in front of others. The frontal fields would be enlarged to provide a first level, non-stereo depth cue. Depending on the output medium, the image would either be color corrected and composited for anaglyph, or exported separately and synched on two filtered projectors for polarizing (clear) 3d.

Good narratives with solid advertising campaigns seem far more likely to be a hit with the public than films pitched on their technology alone. Only in the final anti-humanist calculus would film capture technology finally override the human story processor. The analysis of the capacity of non-linear editing technology in this chapter has demonstrated that the continued progress in micro-computer development combined with the rise of new distribution channels have been instrumental in the rise of the dream typewriter.
Editability has fundamentally changed the status of the image as a form of evidence. Where the camera once provided evidence that was more credible than that of the human eyewitness, the prospect of editing reinserts the human editor in such a way that the human actor once again inexorably taints the image. What this means for rhetoric, is that the media environment can be understood as a site where aesthetic images with no determinate end freely circulate. Non-linear editing allows the easy fragmentation and reproduction of a text. The magic of the editor is the ability to guide the audience in the translation of the imaginary to the symbolic and the autotelic production of the imaginary. An editor goes a step further than any typewriter ever could, it can generate content without a human tickling the keys.

**X Doth Protest Too Much**

In the weeks after this chapter was completed Apple computer released a new version of Final Cut pro, version 10, also known, as X. Criticism of the new software was quick to flow. Some features had been removed and some workflows changed. Just as things may have gotten worse, render times improved. Improved rendering speeds remove one of the most expensive and time consuming elements from the production process as was discussed in the rendering section of the chapter. Many of the criticisms of Final Cut X come as ergonomic concerns, much like those that the veteran editor discussed in the context of the EditDroid in the 1980s. If the new control layouts really save keystrokes, mouse-moves, and configurations, the market could look very much like what it does now. Adrian Covert writing for Gizmodo Australia may have formulated the position of pro-editors best – they object to Final Cut Pro X looking like iMovie because it jeopardizes their ego integrity.
If anything the reaction to Final Cut Pro X confirms the thesis of this chapter. Editing professionals are in a tenuous labor position as they are interchangeable parts. In an attempt to gain market share rival firms have slashed prices. While this may lead to purchases in the short term, this move will destroy any remaining profit margin in the industry. Final Cut Pro X is likely what a three hundred dollar editor can ever be. Even with these dramatic price reductions the Adobe product is still much more expensive, and becoming an Adobe user would commit production professionals to purchase expensive software on a regular schedule. Attempts to take advantage of user spite about Final Cut Pro X could just as easily confirm the price level in the market, stabilizing Apple’s position as the cheap, effective system.

Beyond the politics of pro-sumers resistance, the apparent ease with which these users could switch systems speaks to the power of the editor to determine their situation. Even if Apple’s offering falls out of favor, the implications of the non-linear editing system for digital culture remain. And since systems would adapt to become more like the Final Cut system described in this chapter, the implications only become more likely.

Digital Reproduction Killed the Film School Star

It would be conventional to privilege Cold Mountain as the starting point for non-linear technology, and the 2005 thriller Syriana as the ending point for the flat bed editor. It would also be conventional to tell the story of digital media as being the product of a few genius authors, the same characters that copyright seemingly protects. John Caldwell has argued quite persuasively that the stories that are told about the adoption of technology hinge on individual heroes who make bold decisions in the face
of great adversity. For Caldwell, it is this mode of story telling that makes industry life bearable. The epidictic flare of the stories gives their subjects a taste of immortality. Origin stories are a source of cultural capital for production workers. Even if the pay is low, the work unstable, and the quality of life poor, they can at least say that they have produced a technological work of art.

In this technical review, I have argued that the properties of the editing system itself offer a compelling way of theorizing the structure of cinematic and televisual production. Through an analysis of use cases for the particular features of a dominant non-linear editing suite, I have tried to tell the story of the digital transition in media production as a political story. To answer my initial question – how did this paradigm shift happen so quickly and quietly – the answer is that the ways in which the editing technology determine our situation were forgotten in the name of familiar stories about Hollywood and visionary directors. Non-linear editing slowly diffused over four decades; in the 1990s raw computing power pushed the paradigm shift over the edge.

The politics of the non-linear editing system are unfortunately reactionary. Although the means of production might now be increasingly in the hands of the public writ large, the dream models for the production are still fully capitalist. This is perhaps the most dissatisfying part of calls to close the digital divide – once inner city youth can be fully engaged in post-production work, then democratic possibilities would have arrived, even as their inclusion in the first place is an indication that the cost structure of the industry has fundamentally changed. On the other hand, this is an essential step in producing the conditions whereby they could work in the production industry. A digital workshop employee with the practical wisdom to know the difference between good and
bad work is educated, in the first instance this requires that they be fully versed in the image vernaculars required of them. Caldwell concludes his chapter on editing tools with a discussion of the imagery of self-mutilation in trade publications, especially the image of the self-mutilating editor.\textsuperscript{131} It isn’t enough for a post-house to advertise that they do good work, they must profess to the patron that they are willing to disfigure their bodies in the name of creativity. Two particularly powerful images offer graphical proof of disfigurement. In one example, the ideal worker of a post-production house is presented as a hooded leather slave, bound with digital cables.\textsuperscript{132} In another, the ideal worker, named Jimmy, has the face of a young man with masses of distended skin as proof of his ability to binge.\textsuperscript{133} Jimmy binges on food, and work. Aside from the retroactive insertion of Walter Murch into the story of non-linear editing, the bodies that carried out the works of the transition are a part of that nameless mass we call the industry: a constantly changing increasingly undifferentiated workforce of 250,000 in Los Angeles alone. Digital Non-Linear Editing is compelling because there is no hero. The technology slowly spread over the course of decades. No paradigm shift, no story.

DNLE is important because it interferes in the apparently stable relationship between conceptions of transmission and storage. The bin allows labor practices to change dramatically, online transmission of content destabilizes the spatial fix requiring large computers, peripherals allow the cultural logic of computation to change the physical performance of film making, and high definition processing allows the production of images and sounds that only exist in the world of the video with untold speed and ease. The key is the microcomputer revolution. Once we had the computing power, we could proliferate technologies that would use random access to facilitate the
transmission and storage of a thing at the same time. In the late 1980s a non-linear editing suite was thousands of dollars a day to rent – a decade later it was a thousand dollars to purchase. The declining values of out-dated assets in a paradigm shift make a popped real estate bubble look stable.

The future question is about if we can start to think of production in truly plastic terms rather than using the stable discourse of capital to continue to define who has access to production decision making. The properties of the interface figure the conditions of the possible. In media production, we hold onto the idea of a flat earth, even after a moon shot. Southern California is the Promised Land, even though it is a barren place with toxic air. This is the dialectical image at work, in one sense non-linear editing offers the chance that we might rethink creativity, just as it reinforces the politics that came before. The dream was that everyone could be a creator working on their own without the drawbacks of a large stable business enterprise. Creative destruction is an oxymoron; while new structures may be created the pain of losing the destroyed is all too often underestimated. From the beginning this is a story about destruction.

What makes this reading vulnerable is its reliance on reading the physical traces of the technology. Digital non-linear editing technologies, and the mass adoption of their peculiar ontology by the public, establishes a value for everything that could be arrested and parceled. Everything is potentially a meme. Every video clip a demo reel. The politics of everyday life in this world look suspiciously like a war of all against all. Agamben was right, the Hobbesian state of nature was never a real thing, it was just a story used to frighten small children. Walter Benjamin’s conclusion of the work of art
in the age of mechanical reproduction arrives at a similar point – aesthetic politics end in war.\textsuperscript{136}

In practical terms, plasticity will squeeze the margins for below the line workers and owners of fixed capital. Owning a render farm is a risky business when an online volunteer cybernetic network could destroy demand for your services. The business of video production has been fortunate to utilize Fordist spatial modes to make it worthwhile to use editors in Los Angeles and to secure film permits.\textsuperscript{137} At the same time Final Cut Pro offers the democratizing possibility that high quality production might take place in alternative spatial centers. The technology is simply too powerful, and the sure variety of possible sources of latent demand for cultural products too diffuse to allow a single actor or even set of actors to fully monopolize the social imaginary. In 2010, there were 734 feature films made in the United States, the traditional major players in the film industry produced 126.\textsuperscript{138} It seems increasingly likely that the islands of stability in the industry might be an ethereal lag in the allocation of market resources. In time it is all too likely that the bourgeois value of prudence will win out over all others and Final Cut pro will redefine the landscape that produced it.\textsuperscript{139}

There seems to be a resonance between the collapse of stability, acceleration, and the rise of a stable point in the network architecture. In the era of non-linear editing, job stability comes from reputation, aspiration, and the fantasy of visibility: not from some fantastical transcendental notion of art.\textsuperscript{140} It is unfortunate that this seems to have been the model before non-linear editing as well. In this sense, the production of feature motion pictures has always been an industrial process. Any materialist analysis could easily find that the reason for the production of symbols is the monetization of meaning.
The impulse to blend labor with the reservoir of publically available meanings (read: rhetoric) is not a new thing, but the technologies to produce it so quickly and plastically are.

The blessing and the curse of non-linear editing is that the imaginary center of the culture industry has been displaced through a new symbolic technology. Modern production companies have survived by assuming a plasticity of identity and time while relying on the artifacts of a bygone era to develop the cultural and reflexive capital to operate like a holding company. In other words, the big players hold onto intellectual property and enough capital to utilize the editors on the margins. The editors on the margins remake how they work so that they might be utilized. Underlying this business model is the creeping sense that there is nothing but the void, at any moment the model could break down, if only because of the technological condition that made it possible. The irony is that the computational logic of the graphical user interface is like a holding company for parcels of data that are always already transforming. As the business model spreads, imaginary stability could easily give way to the Real power of the symbolic technology. The material reality of the dispersion of work to the margins could easily give way to an alternative way of media production. As Benjamin put it: “In the age of assembled artwork, the decline of sculpture is inevitable.” The decline of fixed capital is a result of the non-linear production of art.

To put this conclusion in the Benjaminian vocabulary, the digital in the context of editing has taken on two distinction positions. On one hand it is the expression of a kind of technology that is complimentary with the conception of the digital reduced to signal processing. On the other, the digital appears as a synonym for the ownership of the
means of the production and self-directed labor. In this chapter the technology is
historicized from the current political categories – deskilling, post-Fordism, and
intellectual property. Digital culture suspends the full impact of the critique in the hope
that access might lead to a revolution in production. Unfortunately, the inertia of fixed
capital overcomes the possibility for change through the distributed public.

High-definition processing killed the film school star, and non-linear editing is
killing the Hollywood giant. Unfortunately, the Hollywood giant is all too happy without
her body.
Notes


2 This note comes from the introduction section to the book. The idea of the inoperativity of the artist is an important development in the figural economy of the state of exception in that it shows the difficulty in reconciling the debate over the rhetorical situation. In this sense, there is no way for an artist to create a truly rhetorical situation from the subjectivist position, and the objective position would be quite bleak in this account. As an epigraph, it is meant to show the curious position of the artist in relation to technological change, as the move to retain film, as the source of creativity would only really make sense as a work of redemption, and not creation. Giorgio Agamben, Nudities, trans. Kishik and Pedatella, (Stanford: Stanford University Press, 2011).


4 Here I am referring to the presence of television styles. I use Caldwell’s term because he intentionally provokes discussion of the technologies of television production. In other instances in the paper I am using televisuality to refer to the excessive style that now characterizes television. I tend to take this as my agenda-setting book and concept for television studies. John Caldwell, Televisuality, (Piscataway, NJ: Rutgers University Press, 1995).

5 Butler, Ibid, 218.

6 Ibid.


9 In this way the move to fix something to media is the condition of possibility for immortality, and yet cuts off the possibility of natality from the media object, in the Arendtian sense. In one sense this is liberating for the human subject, as our perspective would be that which could find the production of action, and yet is disabling, as it makes history all too human. Hannah Arendt, The Human Condition, (Chicago: University of Chicago Press, 1998).


12 TM Ramachandran, Film World 9, (1973), 65.

14 The term aestheticization holds special significance as it is a fundamentally Benjaminian term.


18 Ibid 34.

19 Ibid.

20 This is a canonical text in media studies. The combination of political economy and cultural studies done in this work is fantastic. James Carey, *Communication as Culture*, (New York: Routledge, 1992), 201-229.

21 Ibid 57.


24 This traces through other sources from the initial Hegelian dialectic of master and slave as understood by Agamben. The figural struggle between the party that is willing to sacrifice their life for power is instructive for this way of viewing the history of media. The party that is unwilling to sacrifice their life becomes the governed. In this sense, the party that produces inscriptions is that which might transcend death. Fredrich Nietzsche, “Beyond Good and Evil,” in *Basic Writings of Nietzsche*, trans. Walter Kaufmann, (New York: Random House, 2000). Agamben, Giorgio. *Homo Sacer*. Trans. Daniel Heller-Roazen. (Stanford: Stanford University Press, 1998.) Kittler, Friedrich. *Optical Media*, (Stanford, CA: Stanford University Press, 2010.)

25 The idea of Kittler as the anti-Habermas is my own, but has been confirmed by his student John Durham Peters. Jürgen Habermas, *The Structural Transformation of the Public Sphere*, trans. McCarthy, (Chicago: University of Chicago Press, 1989).

26 Agamben, *Nudities*, 43-45. This section offers a fantastic response to cultural studies and the curatorial mode in general. Real human agency for Agamben requires negotiating the human and the figural. The super-human politics of agency that have become the sine qua non of neo-liberal discourse are anti-imaginative since the imaginary is entirely bounded in the work of everyday life. In this Arendtian sense, natality, and
thus the possibility of real political activity is not only bracketed because it is only retroactively available, but because it can not be produced through fiat.


28 Ibid.

29 This footnote provides context for both quips made in this sentence. There is a good deal of complexity in the analysis of the visual and robust debates about the possibility of the direct interpretation of the visual. Martin Jay has detailed how the visual is denigrated and yet centered in western society. Suzie Linfield has responded to the anti-visual critique of Susan Sontag by asserting the power of the image to produce affective resonances that she believes are more profound than those created by text alone. This debate is interesting, but effectively bracketed by Bruce Gronbeck’s argument that while rhetorical studies may stumble in dealing with the visual, particularly given the history of skepticisim in the classical rhetorical cannon, but ultimately can address the visual through a rhetorical vocabulary. On the fan and cultural studies side, Henry Jenkins is unfairly saddled with the hardcore anti-theory, anti-judgment perspective. Albrecht is an advocate for the idea that scholars should not attempt to resolve issues relating to the quality of artistic creations. This critique of cultural studies echoes Terry Eagleton’s *After Theory*, which I contend offers a way of thinking about the necessity of political judgment and theoretical complexity. Both the move to renounce judgment and theory are ways of truly rendering the artist inoperative, which is the general purpose of the epigraph of this chapter. Michael Mario Albrecht, “Acting Naturally Unnaturally: The Performative Nature of Authenticity in Contemporary Popular Music” *Text and Performance Quarterly* 28:4, (2008) 379-395 Terry Eagleton, *After Theory*, (New York: Basic Books, 2003). Bruce Gronbech, “Visual Rhetorical Studies: Traces Through Time and Space,” in *Visual Rhetoric*, edited by Olson, Finnegan, and Hope, (Los Angles: Sage, 2008). Martin Jay, *Downcast Eyes*, (Berkley: University of Califonria Press, 1994). Suzie Linfield, *The Cruel Radiance*, (Chicago: University of Chicago Press, 2010). Susan Sontag, *Regarding the Pain of Others*, (New York: Picador, 2004).

30 Lacanian theory is useful for Kittler as it offers him a way to theorize human communication that can be outside of established histories.

31 This is a nod to the idea that we have entered into a second modern period.

32 The journal that regularly covered this market that is hardest to find is BM/E, which stood for Broadcast Management and Engineering. This title ended in 1991.

33 There is a certain something about this issue that is really remarkable

34 There is a distinct impression that the parties in this industry are not interested in destroying each other. This might come from the academic elements of the journal. Mouffe provides a fine primer on the distinction between agonism and antagonism in her work on radical democracy. Chantal Mouffe, *The Democratic Paradox*, (New York: Routledge, 2000).

35 The Laserdisc had serious problems, most importantly they could not record content. Combined with the high cost and technical weaknesses of Laserdisc systems

36 This is the publication of record for the professional society of American Cinema Editors, which is indicated by the A.C.E. credential.


42 *Optical Information Systems*.


44 Scott Kirsner, “Inventing the Movies: Hollywood’s Epic Battle Between Innovation and the Status Quo from Thomas Edison to Steve Jobs,” (Seattle: CreateSpace, 2008), 82. Be aware that CreateSpace is a vanity press, the information from this source can be verified by other means. What this source does well is to show the dynamics of industry lore.


46 The history provided by Ohanian confirmed much of what I had already learned through archival research. Thomas Ohanian, *Digital Nonlinear Editing*, (Boston: Focal Press, 1993).


48 Ibid, 47. There were also systems available for Comodore systems, yet I tend to avoid the Amiga in this chapter since the competition between Comodore and the rest of the personal computer world is beyond the scope of this work.
Computer chronicles


Kirsner, Inventing, 83.

Ibid

Ibid, 50.

This is a major issue with several software suites, and is Digidesign’s key problem; it costs an extra $500 to use all the features of your software. Thanks Avid.


Ibid, 3-4.


The raw number that is key here is the total number of FCP licenses. There are lots of fan debates about which is more important, but there are huge numbers of Final Cut stations out there. Oliver Peters, “Avid vs FCP – Market Dominance?” (August 16, 2008), http://digitalfilms.wordpress.com/2008/08/16/avid-vs-fcp-%E2%80%93-market-dominance/ (Accessed October 27, 2011)

Rules of Attraction, based on the book by Bret Easton Ellis, directed by Roger Avery.

Koppelman, Behind the Seen, 51

Ibid, 52.

Pierce prefers a standing configuration for computer based editing, both because it is better for the editors back and because moving while editing is a way of expanding the editors’ body map. In this way, production work is performance work.


Rick Utley, presentation on panel “The Ultimate Backup: Keeping Media Alive,” at South By Southwest (March, 2011).

The film was not thrown away.


71 Ibid.


74 The controversy was quite similar to Quayle’s attack on Murphy Brown. See: http://www.funtrivia.com/askft/Question31256.html

75 Golumba, 206

76 Ibid, 209.

77 Ibid 218.


79 Ibid, 165.

80 Ibid, 150.

81 Yes, this is a deeply Heidiggerian note.


84 Denise Mann and Henry Jenkins, panel organizers of transmedia workshop at the Society for Cinema and Media Studies Conference, March 2010.

85 As per a quote I generated on their website in March 2010.
Quotes generated in 2010.

87 William Shakespeare, *As You Like It*, Act 2, scene 7, 139–143

88 David Harvey’s experimental geography offers a great deal for media studies scholars. I am citing this particular work by Harvey, as he clarifies the definition of the spatial fix in this article. David Harvey, “Globalization and the “Spatial Fix,”” Geographishe Revue, February, 2001.


92 Marc Graser, “In the News,” *Variety* (July 11, 2010) lexis


94 Ibid, xiii.

95 The page number will be in a future version of this work. Toby Miller, et. al. *Global Hollywood No. 2*, (New York: British Film Institute, 2008). In a more recent example, New Zealand gave *Avatar* $45 million. http://www.stuff.co.nz/entertainment/film/3326306/The-high-price-of-subsidies There is a fairly well developed literature about the subsidies given to Lord of the Rings.


Ibid, 612.

John Caldwell, *Televisuality*, 342. This would be the example of the excessive style that Caldwell critiques so elegantly. Caldwell’s critique is also a good way of dealing with the screen studies oriented work that would dismiss this paper.


Unfortunately, Cisco has discontinued sales of the flip camera so that they might focus on their core business. I content that the reason why the business unit was closed rather than solid deals with issues of cash handling. Companies will too much cash on the books are potential victims of a leveraged buyout. As for the sale of sophisticated Cannon cameras, these are now available at Wal-mart and Target locations nation wide. For the Cisco situation: Floyd Strimerling, “Defending Cisco,” *Technorati*, (May 16, 2011), http://technorati.com/technology/it/article/defending-cisco-a-turn-around-for/ (Accessed October 27, 2011) As for the issue of cash flow, see: Olubunmi Faleye, “Cash and Corporate Control,” *The Journal of Finance* 59:5 (October, 2004), p. 2041-2060.


Kittler, *Gramophone*, 263


This is a core theme of Caldwell’s *Production Culture*.

A practice called “crunch time” characterizes this kind of work condition, where the necessity to binge transcends the normal work structure. This model both burns out workers and the businesses themselves, since it destroys the goodwill that the company holds with the workers. From what I have learned from talking to people working in the field, the pattern for a production house seems to follow a trajectory of ever increasing crunch time, and then sudden shut down with the completion of the product. Emily Chung, “Dream jobs in hell,” *The Toronto Star*, (August 15, 2005), http://nlgames.com/content/Buzz/1130548795_News.pdf (Accessed October 27, 2011)


The CineForm 65 debuted at the National Association of Broadcasters meeting in the Spring of 2011. Sony effectively communicated that the camera was out of


117 MPEG LA is a patent pool organization that was designed to review nearly one thousand patents that were relevant to the development of the MPEG standard. What is particularly important to understand about the MPEG pool is that it survived anti-trust scrutiny. According to the Clarkson and DeKorte, this pool is the “gold standard” for how patent thickets are supposed to operate. The MPEG LA pool is charged with resolving patent thickets where parties become counter productively litigious, the pricing of fax machines is a particularly nice example, where twenty percent of the cost to the end user went to clearing the thicket. The anti-trust issue also would likely blunt the chance of misbehavior by the MPEG group since the leverage that they would attempt to use to misbehave would clearly show that they were developing a restraint on interstate commerce by restricting the use of the codec. It would likely be a clear violation of anti-trust. Gavin Clarkson and David DeKorte “The Problem of Patent Thickets in Convergent Technologies,” Annals of the New York Academy of Sciences 1093 (2006), 180-200. As for fax machine patent fights: Olga Karif, “Smartphones are the latest patent battleground,” Business Week (May 17, 2010), http://www.telecomseurope.net/content/smartphones-are-latest-patent-battleground?page=0%2C1  (Accessed October 27, 2011)


121 MPEG LA says they won’t attempt to sue camera users. Nilay Patel, “Know your rights, H.264 patent licensing and you,” Engadget (May 4, 2010),
(Accessed October 27, 2011)

122 Daniel Enberger, “Is 3D Dead In the Water?” Slate (August 24, 2010), http://www.slate.com/id/2264927/pagenum/all/#p2


128 This would be an especially seductive way to write the history, as it would allow our continued hagiography about the vaunted USC film school classes of 1970s to continue. Murch, Spielberg, and George Lucas could be responsible for everything – the hundreds of thousands of wage laborers who make film go, and the technology that makes this relationship possible could be sublimated. Syriana was an important late KEM flatbed film.

129 Caldwell, Production Culture, 189.

130 Jenkins does some interesting work in this paper, but is far too willing to accede to the expansion of technology as a panacea. Henry Jenkins, Confronting the Challenges of Participatory Culture, (2006), digitallearning.macfound.org

131 Caldwell, Production Culture, 189-192.

132 Ibid, 189.

133 Ibid, 192.

134 Ohanian, Digital Nonlinear Editing, 44.

135 In the section on the “Ban and the Wolf,” Agamben frames the state of nature from Hobbes as a provocative image that could give rise to the biopolitical. The idea of the outside threat of a Brazilian editor would be enough to get Hollywood editors to
engage in self-mutilating practices. Instead of a media production state of nature though, we have a media production biopolitical state. The large companies can hire editors, there is no way that the Brazilian editor from the *Lost* example could ever really enter into the market. The editors are made to fight in the name of the image of an outsider. Giorgio Agamben, *Homo Sacer*, (Stanford: Stanford University Press, 1998), 160.


137 The main argument in Miller et al is that the media industries in traditional spatial centers exploit below the line labor, and do this through specific juridical protocols, like tax incentives. Miller, Toby et. al. *Global Hollywood No. 2*, London: British Film Institute, 2005.

138 Milt Shefter, presentation on panel “The Ultimate Backup: Keeping Media Alive,” at *South By Southwest* (March, 2011).


140 If this was ever the case, it was in a short period in the 1970s for the big twelve at the USC film school. There was a gap where these young folks were able to get access to fixed capital to do art stuff much more easily than they ever could now. There is some industry lore about this and the production of *The Conversation*.


142 I mean this in the full Lacanian sense. There has been an undercurrent/gesture toward the psychoanalysis in Kittler, but not an overt discussion of it.

ENGINEERING, FINANCE, AND THE LAW: DIALECTICAL IMAGINARIES AND THE ECONOMICS OF THE DIGITAL TRANSITION

We are ushering in the end of analog broadcasting and the beginning of the digital age. Things went about as smoothly as we could have hoped. It’s looking more like Y2K than the Bay of Pigs.

--Jonathan Adelstein, FCC Commissioner’s Statement On June 13, 2009

At one level it is to resurrect a precedent, to cite to a text, to a record, to a memory, but, as all lawyers know, it is also an interlinear and supra-textual moment of invention, an entry into practice, and a poetic moment of creation of judgment. There is no law here, only image, and the work of legal invention that takes place outside of law. The unwritten law, the empty tomb, is witness to a plethora of critical possibilities. It is here that the force of law encounters the contours of affect, here that the text becomes an image, the letter a figure, the body an enigma, and poetry law.

--Peter Goodrich, *The Empty Tomb: Post-Critical Legal Hermeneutics*

In September 2008, Wilmington North Carolina was the on the cutting-edge of history. In response to concerns from consumer groups, the Federal Communications Commission undertook a real world test, ending the broadcast of analog over-the-air television several months early, so that problems on the national level could be diagnosed. On the first day of the test, nearly eight hundred citizens of Wilmington called a special FCC telephone line for help due to a loss of television programming. The two-week total for calls to the line was twenty-two hundred seventy two. While the total number of calls decreased each day, an intractable problem became apparent, noted in FCC call center documents as “channel 6/44 reception issues.” Unfortunately for WECT, channel 6 in the Wilmington market, their choice of transmitter site and
frequency spread left substantial parts of their previous viewing area uncovered. Decades of service ended by a transmitter location decision. While the residents of Wilmington were able to find alternative NBC coverage from a newly built, Raycom owned NBC affiliate, many people living in rural areas would not find alternative service. As a response to the public safety risks inherent in losing television, December saw the Congressional creation of the nightlight provision that would allow the continued broadcast of emergency information for a few months on analog channels before the end of all over-the-air television, and the delay of the full transition until June.

Acting FCC Chairman Michael Copps offered an important insight into the problems with the transition in Wilmington – the issue was not awareness, as consumers knew the change was coming, but implementation, either by the consumers or by the stations poor decision-making. The transition on the national level has been regarded as a success. The spectrum once occupied by broadcasters has been freed up, additional free-over-the-air television signals are plentiful on digital sub-channels, and those that lost service were not loud enough to be of national concern. Technologies that might have mitigated potential problems with reception in urban areas have been approved, but were never actively perused.

With the risk inherent in changing transmission designs, there must be a compelling reason for change. The purpose of the transition was two fold, to increase the amount of available spectrum for mobile telephony, and to increase the quality and quantity of television reaching the public. While increasing the beauty in the lives of television consumers would surely be an important regulatory goal, the increased capacity for interactive communications was critically important to the deployment of the
system. To put it more bluntly, the transition was about cell phones and wireless Internet, not art. Over the two decades of planning involved in the transition, the economic landscape changed dramatically. When the original notice and comment periods for advanced television systems were issued in the late 1980s, cable penetration was relatively low, and the use of home satellite dishes was limited to those with an inclination for construction, and large unsightly equipment.\textsuperscript{11} By 2011, pay television penetration had reached ninety-one percent, and television scholarship plumbed the depths of the difference between cable and satellite consumption.\textsuperscript{12}

In turning to the story of distribution we get to the far side of the digital transition, non-linear editors and flat panel televisions are relatively cheap. Broadcast and cable infrastructures are wildly expensive.\textsuperscript{13} In analyzing the digital transition in distribution it is important to note that this is not merely a discussion of the digital transmission of broadcast television content, but of a range of distribution systems including satellites, cable systems, and the Internet or IP centric content delivery. The once stable and reliable vision of a broadcaster amassing fixed capital and viewers purchasing receivers is no longer stable. Where there were once smooth, relatively low cost transactions between content providers and the audience, there are now any variety of market arrangements between viewers and content providers. The original legal vision of government intervention into the media industries for the purpose of eliminating destructive interference has been entirely realized.

In this chapter the aesthetics of distribution regimes for television in the United States are considered as both a trailing indicator and a condition of possibility for the production of digital culture. Like the theory of ubiquity and innovation in chapters two
and three, this chapter retains but qualifies the important of technology and the lifeworld, focusing on the ways in which technologies are figured and how those ideas inscribed both on those technologies and in the law. The regimes of inscription seem to shift between over-the-air and over-the-cable broadcasting from a regime that organizes a grid aesthetic for the purposes of managing interference, to a regime that manages an energy aesthetic by balancing the interests of different copyright holders. The ways in which different aspects from either aesthetic are held over to manage contemporary problems offers a way to theorize the emergence of disruptive innovations through a reading of the aesthetics of important developments in media law. I want to be clear from the outset, this way of reading the law does not follow the case method, or attempt to historicize individual Justice’s jurisprudence. The purpose of this mode of reading is that we might get a critical vantage on how bourgeois decision makers imagine what the world looks like – the normative implementation of the dialectical image.

Legal Surrealism

Much of this dissertation has been a work showing the ways in which aesthetics produce decisions about the purchase of goods, the production of assent for labor practices, and the creation of art objects. What is one of the weakest aspects of the theoretical work of Benjamin and his inheritors is their reading of the rhetorical field of the law of the public sphere. This is not to say that these approaches were not political, they surely discuss the normative and cast judgment. What these positions lack is a vocabulary for a discussion of regulatory politics.

The strength of Pierre Schlag’s position is that he offers a way of reading the aesthetic positions offered in regulatory and judicial discourse that is in accord with the
position taken in this dissertation. Further, Schlag takes a clearly critical position. He is willing to judge what are better and worse forms of law, he is able to establish enough reflexive distance to recognize that force of law does not come from the law itself. Because of his distance, Schlag can be effectively used to punctuate other reading strategies, which will become clear in the following section.

This is not to say that there have not been moves to read the aesthetics of the law, what is unfortunate is that the aesthetic is often subordinated, and the aesthetic becomes a romantic attempt to recover what was once beautiful or good about the law. While the beautiful, and even the good tend to be overlooked in the every day analysis of the prudence of a particular law, the power of the rhetorical framing of perceptions of the law remains paramount. As Schlag puts it, “Legal aesthetics come to organize social life in part through the ways in which laws apprehend facts and thus form the “fact-fields” in which the aesthetics operate.” Aesthetics are a condition by which cases are made intelligible. Schlag outlines four aesthetics in contemporary American law: grid, energy, perspective, and dissociation.

The grid is at first appearance clear, lending both to its ease and the rhetorical force of claims coming through that aesthetic. The law has rules and distinctions that flow from the text, which allow a legal thinker to search for concrete sources of authority to test the legitimacy of a law. By breaking the law down into discrete areas, this aesthetic allows the policing of barriers and the production of fields of expertise. Above all, this aesthetic implies a cartographic imaginary where the territory fits the map of what the law might be. Instead of changing to fit a context, or flowing with the energy of the time, the grid aesthetic is at its strongest when it appears to be unchanging. Schlag
describes this as the grid thinker’s effort to build a monument of law, through the production of a clear object they might endure.\textsuperscript{18} This is the aesthetic invoked in the worst decisions in copyright law, where complex standards and balancing tests might be applied; stale historical tests are implemented instead. The fair use standard would be terminally vague, and the moral clarity of the Ten Commandments would be all too appealing.\textsuperscript{19} Schlag is on point when he quips, “washed in cynical acid, law’s empire is society’s mess.”\textsuperscript{20} Within the grid, cleanliness really is next to godliness.

Aside from evacuating human society of dynamism, the grid aesthetic suffers from other maladies. Grid aesthetics incorporate change least effectively, by adding new categories.\textsuperscript{21} A grid thinker must either decide to integrate new facts or concepts that fail to adhere to their framework within existing categories weakening those categories, or to create ever more categories, until the very idea of categorization itself becomes incoherent.\textsuperscript{22} If the grid remains unchanged it begins to lose authority as it loses touch with legal reality, in this sense, the grid is weak in that it is too stable. Since the grid is so slow moving, pioneering judges might work around it by failing to connect their decisions to the aesthetic in the first place. For Schlag, this is the optic by which complaints of insufficient legal restraint can be understood.\textsuperscript{23} The concern for a grid thinker would be that too many judges could be building their own monuments unto the law, and that confusion might produce doubt in the audience.

An alternative to the grid aesthetic would come in the energy aesthetic, where the law is taken as a changing force proceeding along a vector.\textsuperscript{24} The optic for understanding the law here is not the creation of clear lines about where the law is or has been, but where the law is going and what the law will be doing. In the future tense the energy
aesthetic subverts the grid in that things are not ever truly in a category, they could just as easily be changing categories, or even be modified by the very act of observation. A juridical Heisenberg effect as it were. Or to put this in rhetorical terms, the energy aesthetic attempts to smuggle the deliberative into the forensic.

To emphasize this point Schlag takes the better part of a page listing movement metaphors in the energy aesthetic. Energy aesthetics attempt to quantify and commensurate leading to a host of balancing metaphors (which are actually quite rare in Constitutional law) appearing to be common. The energy aesthetic offers a way to theorize legal change and to resolve what would be messy exclusions and rigidities in the grid. In this sense, the energy aesthetic runs the risk of appearing insufficiently normative. Balancing would offer a conclusion for a two-pronged grid; it would not provide the prongs to be balanced. This failure of normative production is one of the most common responses to work in Critical Legal Studies in that the chance that normative law might produce social change is taken as a reason why critique is a failure. The hope that the legal system might break from reifying class, race, or gender animus is enough to say – this time will be different. Simply adding architecture is an easy enough solution to this problem, with one particularly important example being Posner’s work in Law and Economics.

As the energy aesthetic is often dependent on some external source of structure, such as the reliance on the work of the grid aesthetic, the energy aesthetic becomes a general legal remodeling contractor. In a particularly important attempt to mediate the relationship between energy and grid, H.L.A. Hart imagined the relationship of grid like law and energy like implementation through a core-periphery model. Legal thinking has a
grid aesthetic at its core, and radiating out from that, structures that operate according to the logic of the energy aesthetic.\textsuperscript{32} Classification and naming would be a matter of placing a dispute, either near the core, or out on the margins; with different conceptions of authority in either space. Schlag takes this as an unsatisfactory solution to the problem of legal aesthetics as it retains the grid as the center. Energy has become too safe, without danger, possibility is absent.\textsuperscript{33}

Schlag traces his third aesthetic to Felix Cohen, who identified both the grid and energy, and subsumed them both to the relative position of the observer.\textsuperscript{34} The moderating relationship of perspective allows the legal thinker to make distinctions based on text and context or decision and ground that would allow the grid to be shifted as to facilitate change.\textsuperscript{35} Legal thinking becomes a struggle over meaning where subjects might construct the law for each other. The relative authority of this aesthetic sensibility is a familiar one, the Sovereign subject; replete with power is a deeply romantic concept. This opens the door for the inclusion of alternative perspectives, both that have been historically privileged and those that have been marginal, offering entry for Critical Race Theory and other positions. Unfortunately, perspectivism is infinitely regressive, since there is no grand narrative to stitch the perspectives together, one must be added retroactively to make judgment possible. Such connecting reagents carry trade names like: law and economics, practical wisdom, tradition, or originalism. Worse still, some call for the selection of an idealized fictional perspective to resolve the debate. Once a mythical hero is called in, gritty existential struggle is much less compelling.

The final aesthetic alternative comes in dissociation, where the fluidic reality of legal practice becomes a phenomenological access point. This slowly slides into a form
of legal realism that has little utility for rhetorical critique, much less a historically
grounded concept judicial legitimacy. As a form of anti-grid, the dissociative aesthetic
takes itself as thrown into a world that is already formed. By turning to the world as
already formed the dissociative position loses track of the reason why it existed just as it
adopts the perfect alibi. Gary Minda makes an analogy between this position and the
jurisprudence of Judge Judy, stylized to common folks' perfection, as an aesthetic legal
figure without any legitimacy for larger legal principals. Judge Judy could never set a
precedent, not even for Judge Joe Brown. By bracketing the law from the decision, the
question of what are rightly legal aesthetics can be rightly differentiated from those of
labor aesthetics that happen to regard the work activity of lawyers as their primary
ground. In short, using the everyday lives of lawyers as the basis for legal and rhetorical
theory is circular at best.

This study takes Schlag’s aesthetics as a reading strategy for the ways in which
legal authority is constituted. Some of the decisions important in understanding the
transition are clearly framed around the production of a grid, while others attempt to
create zones of energy and levels of good, and others rely on the legal solvent of
economic theory to cut through the metaphysical difficulties that would constrain legal
behavior. At stake are any number of decisions and laws, from the expansive grid
aesthetic of the Communication Act of 1934 to the energy in the 1998 FCC ruling that
allowed the creation of the Fox empire in the United States, economic imaginaries and
their aesthetic potentials have shaped the law in the United States. Economic imaginaries
are the door to the “zone of twilight” produced through attempts to resolve the grid
through energy, or the diversity of perspectives through intellectual arbitrage.
aesthetics may be ephemeral, they have durability as Schlag writes, “One cannot change a form of thought, experience, or sensibility in the way that one can switch breakfast cereals or legal theories.”

The Material Politics of the Twilight Zone

As much as the defenders of quantitative financial methods would like to believe that economic metrics accurately describe the world, the things that we understand to be the subjects of economic theory are linguistic creations. Consider the ABA guide for the practical lawyer on financial statements -- the most common ways that financial fraud occurs do not involve complex formulas or a long line of shell companies holding the bag, but the speech act of naming. What would be irregular is named regular, future debts or credits are enacted upon the books in the here and now. A good example comes in the reading of the Jiffy Lube fraud of the late 1980s. Jiffy Lube experienced explosive revenue growth in 1987. The stock market took notice, rewarding the operators of the firm with handsome prices for stock. In order to make the company appear more profitable than it actually was, the managers accounted for new franchise fees as if they were regular revenue at corporate stores, making oil changes appear to be worth hundreds of dollars. The rapid expansion of the chain acted as a feedback loop – the fraud made the chain appear wildly profitable, fueling expansion, which then was counted as regular business, rather than as one-time revenue. This worked quite effectively until the maximum number of Jiffy Lube locations had been reached, then rather than padding the books with current irregular revenue, the real revenue from oil changes became all too real for the market. The stock collapsed and law enforcement became involved.

Practices of naming may be one way in which economic systems operate, but they are
surely not exhaustive. There are several options for reading the economic frame of reference that often serves to establish the heart of the legal grid for communication law. In this section, I review the use of the core-periphery relationship as an element of economic criticism and what other approaches to the analysis of economic figures provide for analysis. The next section will focus on a particularly important break between Pigouvian and Coaseian economics, which can offer a way of understanding the nexus between aesthetics, rhetoric, economics, and the law.

A key term for understanding the relationship between discursive renderings of institutions and the physical world in media and production studies is what David Harvey has termed the spatial fix. The term spatial fix can refer to several contradictory processes and formations within late capitalism; including the production of center points within networks, as well as the ways in which spatial metaphors can be deployed to solve problems. Harvey generally refers to the production of center points and expropriation of the margins in his use of the term. The core-periphery relationship is an important concept in studies of globalization and media imperialism, which refers to the production of spatial centers that would dominate smaller marginal markets. Core-periphery is a particularly strong term, since it implies a power relationship that is clearly often to the detriment of the weaker power. The particular dynamics of these relationships have been a topic of conversation, with some research suggesting that the directionality and strength of the relationships in the model are more fungible than once thought.

Streeter uses the center-periphery model in his work on broadcasting to describe the relationship between television networks and their affiliates. Affiliates are dependent on networks, although some autonomy exists in that they can change network
affiliation, the vast majority of broadcast institutions are subordinate to their network. This relationship is quite similar to the one between the users of media and content distribution companies, which will only become more important as post-Fordist fragmentation continues. Following Streeter’s move to use the core-periphery model to describe the relations between media companies within the United States, this article pushes the model further to describe the relationships between individual users and media companies.  

Coombe’s argument focuses on the ways in which the deployment of legal instruments like copyright, constrain the everyday possibilities of cultural life. Essential for this argument is the relationship between the mass media and the lifeworld. The cultural forms that come from the mass media are important, serving as a feedstock for the production of a multiplicity of meanings. This is the tension inherent in Raymond Williams’ idea of mobile privatization. Mobile privatization was a contradictory process because it both provided for a better quality of life for urban workers, while requiring them to have fewer connections to their home life. Through mobile privatization the number of sources for cultural information increases, as do the number of places where cultural literacy would be important for individuals. The system and the lifeworld depend on each other. Media companies and regulatory bodies contribute to the lifeworld of everyday media use, just as those bodies are produced by the efficacy of their discourse in the lifeworld to operate in the first place. The implication of this relationship between discourse and institutions has been taken up by several scholars, and offers important insights for the study of communication and culture. The law rather than
contributing exclusively to the public sphere is just as much a part of public culture, 
where aesthetic arguments are far more likely to be rehearsed.

Although I have discussed the spatial fix at length in chapter 3, this paragraph 
runs the argument with metaphors that are more appropriate for this chapter. I use spatial 
fix to refer to two distinct phases within media business models, the first where 
regulatory, technological, and economic necessity prompt the accumulation of fixed 
capital at central sites, like sound stages and transmitters. The centers in media systems 
are extremely difficult to develop and are often capital intensive. In the later phase of the 
spatial fix, media companies shed their depreciating fixed capital in favor of a new spatial 
arrangement where finance and control are centered in once place, while the means of 
production and fixed assets are dispersed to other actors.\textsuperscript{55} The spatial fix in the second 
phase refers to the specific conditions created by a quasi-monopoly to extract value from 
cultural texts rather than accruing value from the distribution of those texts.\textsuperscript{56} In the 
second phase, it would appear desirable for a media company to treat the communication 
infrastructure as a given, focusing instead on deploying juridical monopoly controls like 
copyrights or patents to protect their interests in an established cache of content.\textsuperscript{57} 

Although Harvey may emphasize the role spatial fix as a way of theorizing 
material relations, the operation of the spatial fix in discourse is important to understand 
how institutions render spatial questions. Here I turn to James Carey who offered a 
compelling reading of spatial stories about communication in his work on cultural 
studies.\textsuperscript{58} Carey describes these relationships as mapping strategies, which reveal the 
power differentials between the interior and exterior places in a network. What is most 
striking about Carey’s account is its emphasis on the map, and its power to produce
reality. Since communication systems are always in a state of decay and renewal, the way that maps are deployed through stories produces the regulatory and economic conditions that structure communication networks.

This conversation regarding the effects of media centers is also apparent in the discussion of media consolidation. Several important works have argued that consolidation risks the homogenization of media content, and worse amplifying the spectacle of twenty-four hour news. While studies of journalism are important, they assume that all ownership of fixed capital is roughly equivalent between company and media type. This article argues that there are both differences in how the spatial fix operates over time and between different media industries. Coming from a more international perspective, Arsenault and Castells provide important details about the structure of global media business networks in the early twenty-first century, however at no point in their analysis does a large American cable company enter into the media economy. By focusing on the relationships between a few global players, we lose sight of the everyday structure of the media industries as produced by content distribution systems, which are also the largest media companies in the first place. These authors have a distinct Marxist edge with an emphasis on materialism.

Convergence arguments about post-network television provide the counter point to the critique of centralization. Amanda Lotz reads industry behavior as essentially reactive to audience fragmentation. Derek Kompare addresses television from the side of the audience, reading the possible modes of content use by individual web users, and the multiple platforms they might use to access that content, without theorizing content is delivered to those devices. Alissa Peren’s vision of online distribution is quite similar
to established projects, showing how multiple platform distribution is an effort to counter declining viewership, however the choice of platforms focuses the analysis on the audience, rather than the business model.\textsuperscript{64} Integral to these accounts is Henry Jenkins’ theory of convergence culture, which argues that multiple platforms for content distribution are coming together into a single delivery medium.\textsuperscript{65} The development of the HDBaseT cable standard, where Ethernet cables are replacing specialized video cables, is a fine example of convergence on the consumer end, but the political economy that has made the adoption of this system possible is absent from this kind of work.\textsuperscript{66} What is missing from both the critique of consolidation and convergence culture theory is the role of the distributor. It is striking that many of the prominent authors in production studies do not seek to engage in discussions of what an economy might be, or how discussions of that value could be understood in traditional economic terms. If anything, these authors engage in a form of immanent economic critique where the contradictions of Hollywood economics and their hard gathered evidence would offer a corrective to an established industry. As John Caldwell has noted, dominant forces in the production industry are quite resistant to challenge from the outside, and often work to delegitimize scholarly challenges to their authority.\textsuperscript{67} This is discussed in greater length in chapter three. It bears repeating as some of the most influential figures in this field, Michael Curtin for instance, do incorporate theories like David Harvey’s spatial fix, and a Marxist edge can be detected in John Caldwell.\textsuperscript{68}

A materialist conception of rhetoric does similar work, but instead of relying on a spatial imaginary as a reading strategy for understanding the deployment of power, scholars like Ron Greene use materiality to displace the literary logic of representation
for logic of articulation that would read how ideas are connected together for the purposes of producing power. While not taking the position of media determinism as radically as that seen in the work of Freidrich Kittler in chapter three, Greene’s work takes post-structuralism not as a rare bird to be described at length, but a fact of academic inquiry. Dana Cloud’s response to Greene takes the classic form of the revolutionary response against reformism, which while satisfying underplays the attention to materialism in Greene’s account, and tends to overplay the distribution of material as the horizon of struggle. In this sense, the apparently pure Marxist position would become circular.

Rhetorical readings of economics, rather than materialism, have attended to the role of persuasion within the economics discipline and to the question of materiality in rhetoric. Deidre McCloskey’s groundbreaking book *The Rhetoric of Economics* engages the question of the rhetoricity of the discipline itself. McCloskey effectively shows the ways in which economic authority comes not from a physical reality, but through language. As a lament the work is quite effective, the empirical works of the economics of the past are juxtaposed to the theoretical works of the present. Concrete dissertations displaced by mathematical mechanisms in search of an application. An important accusation for McCloskey is the displacement of empirical significance, that a result could have a tangible impact, with statistical significance, that a result would be meaningful even if the effect could not be seen in the real frame of reference. McCloskey’s more recent works seek to recover the ethical heart of the capitalist enterprise by showing how the values for the bourgeois in the 1700s were not limited to prudence. Real bourgeois life would entail an appreciation of justice, love,
benevolence, and temperance in addition to an interest in prudence. By asserting the values of canonical texts against contemporary American public culture, McCloskey is opening the space to have a debate over ethical positions within capitalism that could enrich arguers who all too often might remain in separate camps. This common place can constitute the basis of economic criticism.  

Goodnight and Green undertake McCloskey’s economic criticism in understanding the dot-com bubble and the mounting housing-bubble. For Goodnight and Green, bubbles are a rhetorical malady. The figure of the information superhighway could hail investors to join in an apparently new economy, broken free of the old economy by name alone. The accelerating rate of bubble inflation and collapse can be attributed to the pace of communication innovation and state intervention. State intervention should not be taken as a monolith, the ways in which states intervene and the particular discourses of their interventions inflect what the reactions might look like. An intervention to manage a patent dispute in the fax machine market might be entirely distinct from one that would declare open season on the work of a long dead author, or that would assign ownership over the method for identifying a sequence of DNA. This complex relationship between the figure of a market and a regulatory paradigm can be found in the discussion of intellectual property law.

**Fixation, Medium, Space**

While the regulatory paradigm of center and margins is particularly appropriate for the collection of fixed capital for industrial operations, the content that is delivered via those systems operates by a similar, yet a distinctly different logic. In their original formulation, intellectual property laws, copyright in particular were designed to create an
asymmetric diffusion of innovation that might allow for profit taking by individual inventors and authors.\textsuperscript{78} The core of the legal regime for copyright is that an author would have the right to bring an action against one who has distributed an identical or derivative work, that this work be fixed to a medium, and that this fixation must be for more than a transitory period of time.\textsuperscript{79} The ever-increasing duration and scope of copyright poses substantial issues for studies of public culture. Material that was once understood to be a part of the cultural reservoir is increasingly taken as private property, much akin to the enclosure movement in England, which was a key harbinger of glided ages, past and present.\textsuperscript{80} Patent law has retained a temporal limit, with a patent being a fourteen-year license to sue those who would infringe those rights.

Within communication law, intellectual property law is a fascinating site for analysis due to the plain evidence of indeterminacy, or at least incoherence. Judges are often non-experts, ruling in contradictory ways, and in some particularly egregious cases, without any basis in legal texts.\textsuperscript{81} Many of these cases are repeated in volumes on intellectual property law, not for their novelty, but for the lack of other meaningful examples. Cases against individual downloader’s of music are not particularly useful as they are often settled out of court, and fail to engage the question of fair use. Cases that could be of use would be those where a figure has engaged in some creative use of information technology, and has had the capital behind them to fight against the powers that attempt to restrain them. Other examples might be those of corporations locked in battle over patents or mergers and acquisitions, which could take many more years to resolve than one might have to write a book. In the end, intellectual property scholarship that uses legal decisions for a primary archive covers the same material repeatedly. As a
contribution to this literature base, this chapter will turn to vistas for intellectual property
law and economic theory that have been left relatively undisturbed.

The economic models proposed by theorists of intellectual property are often
predicated on the Nobel Prize winning work of Ronald Coase, and what has become
widely known as the Coase theorem. The Coase theorem provides that in an ideal
frame of reference, where there are no transaction costs, that bargaining would be the
most effective way to manage tradable externalities. This was intended as a response to
Pigou, who argued that the internalization of externalities to their producer would be
most efficient. Pierre Schlag takes up the Coase-Pigou engagement in his discussion of
law and economics. Schlag contends that the uptake of Coase has lost one of the
fundamental insights of the response to Pigou that the ideal frame of reference is in itself
impossible. The free market uptake of the theorem all too often uses the implication of
the ideal frame of reference to avoid substantial problems with the theory, such as that
initial allocations of property rights often can distort the outcomes of negotiations or that
there are substantial costs inherent in communication.

For Law and Economics scholars, the idea that the Coase theorem contends that
the best regulatory structure could be divorced from the initial allocation of property is
quite seductive. Schlag identifies the key to this beauty in the example of the railroad
externality, where the creation of a regime to force a railroad to internalize the cost of
fires created by their trains would not necessarily lead to the best outcome, as it might
encourage farmers to cause fires. The railway thought experiment is taken as a way of
seeing most situations where a tradable externality exists. If the existing property rights
can be abstracted away from the optimal result the free market for bargaining could be
the creation of a less aristocratic, more egalitarian society. Further, this perspective is attractive because it retains the legal aesthetics of the perspective position. Each individual's understanding of their material conditions and legal positioning can be privileged, much akin to the rise of personality decorating, or the individual owner of editing capital. Agency is seductive; structure is ugly.

Kembrew McLeod and Peter DiCola take up this argument in their book *Creative License*, where the Coase theory is applied to the less than ideal frame of the music industry.\(^8^6\) While a market might be able to efficiently convey licenses for songs for sampling or other purposes, the structure of the licensing mechanism allows parties with strong initial property positions to make exorbitant demands. Paul McCartney for example requires that all property rights for songs created with samples from his catalog be assigned to him, a 100% royalty.\(^8^7\) Further, the licensing regime allows the copyright owner to deny permission to use the sample in the first place, which would expose the potential user to litigation, or in the case of registered material, statutory damages. The denial of permission creates an externality that by definition cannot be traded, and further due to the nature of the property rights serves to create structures to maximize the transaction costs extracted by parties that are property rich. McLeod and DiCola pose the rightly Coasian solution to the problem of music licensing – create an institution to minimize transaction costs, and to implement a tax on those refusing to license, as they, not the sampler is creating the negative externality.

In the teachers guide for *Creative License*, several games meant to teach the Coase theorem are included for the benefit of high school students.\(^8^8\) The instructions for the negotiation games focus on exposing the problems of a structure-less bargaining
situation. For example, a game is designed to create spatial price differences and asymmetric transaction costs that might reveal that no market is an ideal frame of reference, students in different parts of the classroom would receive different prices for their goods. Aesthetically, Creative License and associated works rely on the energy aesthetic where the law produces structures for conversation and balancing interests.

By arguing from within Law and Economics disputes regarding the Coase theorem, DiCola and McLeod are able to engage one of the more persuasive tropes in contemporary Conservative thought from the inside. Unfortunately, if the idea of the idealized frame of reference is taken as a metaphysical assumption for the empirical world, rather than as a thought experiment, then their work will be shrugged off. What would be particularly striking about the reception of the work is that Coase himself authored an amicus curie brief against the creation of an unlimited term for copyright, arguing that unlimited copyright would distort property rights in a dangerous way.89

Even if Creative License, is metaphysically bracketed from reception, it does call to the fore the central premise of this theory section, that a figuration of the market is critical to legal judgments in communication law. If there was no figuration of the market, then the aesthetic logic of judgment would be incoherent, a rare dissociative bird. Here we turn from the theoretical discussion of legal aesthetics to the history of analog television in the United States.

The Spatial Fix in Twentieth Century Television

The story of American broadcasting starts with radio, which paved the way for television. In the early days of television, producing a program for later play was far more difficult than broadcasting a new program live. Without videotape technology, a
program would either need to go out over the air, or be produced on film and played like a movie. The kinescope was essentially a movie camera pointed at a television, meaning very low resolution, and the hot-kinescope (a combination movie/TV camera) was unreliable at best.\textsuperscript{90} Liveness was not merely convenient, but affective. Live programming carried an added cultural value that recorded programming would not, which continues to have currency today.\textsuperscript{91} Effective distribution of television programming on a nationwide basis came later, with the development of videotape and satellite technology. Broadcast programming was distributed via radio waves, with information about viewership returning through audience research.\textsuperscript{92} In broadcasting, there is no direct linkage between the transmitter and the home, and funding for program production comes exclusively through advertising. The spatial fix in broadcasting comes almost exclusively through controlling fixed capital at the transmitter, if the audience watches the business would flourish. Access to programming cost only what a television set and electricity would.

The structure of early television depended on the Communications Act of 1934, which was a consolidation of several distinct legal structures. The heart of the Communications Act is the Radio Act of 1927, which was called for by the industry due to the preponderance of radio interference caused by the lack of a meaningful regime for managing bandwidth.\textsuperscript{93} The text of the act is relatively straight forward, with title three going as far as to define different zones for regulation. Although the act may contain straight forward provisions for managing issues of radio interference, it also repeatedly bears one of the key phrases for the establishment of the energy aesthetic in communication law, that the Commission should exercise control of the airwaves in a
way that would be future proof, to maintain the “public interest, convenience and necessity.” In this construction, Congress gave the FCC an escape hatch from night school lawyering. This phrase creates a strong possibility to engage in balancing tests and studies of public good that would not ordinarily be seen in Federal legislation. This clause has also been understood as an important feature of American administrative delegation. Laws do not implement themselves, and bills rarely contain enough detail to deal with the reality of governance. To accomplish the actual work, executive agencies are required to write administrative rules that would accomplish the intent of what Congress had delegated them to do. By placing judgment in the hands of the FCC, the Supreme Court would be placed in a position where the grid aesthetic would require that they protect the judgments of the FCC, which are often fully charged. The meaning of administrative delegation, rather than communication technology itself becomes the key. This difference can be seen in the Courts decisions in Sanders and NBC.

FCC v. Sander Brothers and NBC v. United States

In the 1939 case of FCC v. Sander Brothers Radio Station, a divided Supreme Court created a distinction between the provision of a broadcast license and the conduct of broadcast business operations, essentially restricting the FCC to operate as per the grant of license refusal provided in the Communications Act. The key portions of Justice Roberts’s majority opinion:

It may have a vital and important bearing upon the ability of the applicant adequately to serve his public; it may indicate that both stations -- the existing and the proposed -- will go under, with the result that a portion of the listening public will be left without adequate service; it may indicate that, by a division of the field, both stations will be compelled to render inadequate service. These matters, however, are distinct from the consideration that, if a license were granted, competition between the licensee and any
other existing station may cause economic loss to the latter. If such economic loss were a valid reason for refusing a license, this would mean that the Commission's function is to grant a monopoly in the field of broadcasting, a result which the Act itself expressly negates, which Congress would not have contemplated without granting the Commission powers of control over the rates, programs, and other activities of the business of broadcasting.

The opinion continues:

Congress had some purpose in enacting § 402(b)(2). It may have been of opinion that one likely to be financially injured by the issue of a license would be the only person having a sufficient interest to bring to the attention of the appellate court errors of law in the action of the Commission in granting the license. It is within the power of Congress to confer such standing to prosecute an appeal.96

It is telling that the first sentence of this passage goes as far as to say that zero service to an effected population would be an acceptable outcome for license distribution. The logic of the Court was that the FCC should theoretically grant all licenses that would not create interference, and then as a result of harm withdraw broadcast licenses from those who might be nefarious. This is not to say that the majority did not have a valid point in their claim that the authority of the FCC to create monopolies for the sake of economic strength could be problematic; what is lost here is that the market at the moment of the suit the market was at a low point, if the station had engaged the process during a boom the story could have easily have been different. The expressed rationale for curtailing the power of the FCC to use its own judgment was that Congress did not make the warrant for FCC judgment clear in section 402, which would be taken as an aspect of negative space. If Sander had been the controlling case law, any sense of regulating the distribution of licenses would have been impossible. The Sander opinion did not stand for long, as just two years later, the Court reversed their position on delegation in National Broadcasting Company v. United States.
In NBC, Justice Frankfurter used the rationale of the FCC report on chain broadcasting to find that the Commission would have expansive powers to deal with forms of commerce that when taken individually would not seem to warrant regulation, but that when taken together from an important pattern.97

But the various practices we have considered do not operate in isolation; they form a compact bundle or pattern, and the effect of their joint impact upon licensees necessitates the regulations even more urgently than the effect of each taken singly.98

From this point, the opinion engaged each of eight different arguments provided by the commission as to why the behaviors of conglomerated broadcasters were bad for the public. Frankfurter finds activities to be in proximity to the act, and thus is within the purview of the FCC to regulate. Things are in the area, bundled, or patterned. Where the compact verb “to be” functioned in the Sander decision, the verbs in NBC are less definitive and more open to polysemy. Instead of seeing a clear set of broken jurisdictional lines, we see the development of areas and patterns, ambiguity and the passage of time.

Justice Murphy’s dissent in the case works by reducing the rationale of the majority to be an attempt to enforce anti-trust laws.99 Once renamed as an attempt at anti-trust enforcement Murphy could show that the grid did not offer any support to the Commission. What is particularly striking about Murphy’s argument is his attempt to imagine radio as a tool of oppression.100 Murphy’s dissent positions radio as a possible tool of oppression that would need to be regulated through the direct action of Congress, as if the action of the FCC would be more open to demagoguery than that of the Senate. The energy of radio is taken to be dangerous in this account, and instead of seeing the
interest of the government being in the diversification of ownership, the idea of regulation is sublimated with tyranny, the pattern of inference relies on the aesthetic of the grid. The issue would not be that regulation would increase the chances of tyranny, but that the grid is taken as being the only thing that is holding back the flow of chaos that the radio might produce in the hands of a Fascist. The result of the case was that NBC was forced to divest a network, the blue network, which would become ABC.\textsuperscript{101}

\textit{Red Lion}

The authority of the FCC to provide for the public interest was a factor in the development of the fairness doctrine in the late 1940s. The theory of the fairness doctrine is much like those justifying the creation of radio regulation in 1927. Since there is scarcity of opinion due to the nature of the medium, then it is in the public interest to promote fair public debate. In the most rudimentary formulation, the fairness doctrine provided a right of response for persons, small groups, or political parties who were attacked on the public airwaves.\textsuperscript{102} The key decision in this area is \textit{Red Lion v. FCC}. The most important feature of Red Lion is not that it confirmed the legitimacy of administrative delegation, but that it created a \textit{reciprocal} right to listen as an element of the right to free speech.\textsuperscript{103} The key section of the opinion is between pages 386-390, where there are a few essential moves to shift the perspective. First, the opinion builds the metaphor between radio transmission and the reality of speech and listening:

\begin{quote}
When two people converse face to face, both should not speak at once if either is to be clearly understood. But the range of the human voice is so limited that there could be meaningful communications if half the people in the United States were talking and the other half listening. Just as clearly, half the people might publish and the other half read.\textsuperscript{104}
\end{quote}
In the preceding paragraph, the opinion started with the idea of a sound truck that might drown out all conversation, which is clearly regulated, then moves to the voice, and eventually to extend the idea to an apparently non-rivalrous good, the book. Figurally, this allows the Court to build the idea of the listener into the broadcast relationship. The details of the scene of communication are far more compelling than the relatively abstract vision of the station as collective editor being curtailed. Further, the idea of turn taking stands in strict opposition to the monolog imagined by the broadcasters. To accept the First Amendment claim that a broadcaster lost a chance to speak due to the fairness doctrine one must imagine a continuous filibuster. The right to listen appears in very concrete form a few paragraphs later:

But the people as a whole retain their interest in free speech by radio and their collective right to have the medium function consistently with the ends and purposes of the First Amendment. It is the right of the viewers and listeners, not the right of the broadcasters, which is paramount...It is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market, whether it be by the Government itself or a private licensee...It is the right of the public to receive suitable access to social, political, aesthetic, moral, and other ideas and experiences which is crucial here. That right may not constitutionally be abridged either by Congress or by the FCC.105

The creation of the right to listen is critical to understanding the path of decisions going forward as it is entirely created through the imaginary that extends beyond a grid like system. The way that the decision works is through a perspective aesthetic, where the important element of the case is shifted from the right of an editor to get the most possible speech onto their carrier wave, and toward the perspective of the listening public. Once the argument had been accepted that the listening public would be at the heart of the discussion. The shift of perspective makes the balancing test possible as it
introduces a competing player into the analysis who would not appear to be there before. The public functions as a more dignified stand-in for the people, who’s interest, and need for quality media would seemingly be far greater than a few owners.

The second important feature of this paragraph is that the Court presents an image of the marketplace of ideas, which faces threats both from the action of the government, and through the actions of private entities that in any event only exist because of the action of the government.106 The Court invokes the necessity of regulation to preclude interference on both sides of this paragraph because it reveals the historically tenuous structure of modern broadcasting; it is not a natural development of the marketplace of ideas, but a creation of government action. The marketplace of ideas exists because of a market failure. What is striking is that the marketplace as a liminal space is placed at risk by the market imaginary itself.

A key feature of Red Lion, and the following decisions in Tornillo and League of Women Voters, is that the Court refers to the vision of economic scarcity in previous decisions, and then brackets that position.107 Footnote 28 of Red Lion is the first place where the Court recognizes that technological scarcity might be in decline as an economic factor leading to particular regulations, but holds open the idea that economic scarcity could be a rationale for regulation.108 For example, it might be possible for a firm to accumulate enough fixed capital to rebuild Hollywood like facilities in North Dakota, but it would not be likely. To paraphrase David Harvey, how many Disney Worlds do we need?109 The reticence of the Court to evacuate the image of scarcity is telling as the frame of forced choices provided legitimacy for difficult decisions that might not be pleasing for all those involved. In League of Women Voters, the Court
recognized the importance of technological innovation in that many more choices were now available for viewers, but were unwilling to set aside the core logic of the grid, as it would lead to a null conclusion.\textsuperscript{110}

1970s Program Access Rules

The end of fin-syn rules presents a less compelling regulatory picture. Fin-syn rules originated in the 1970s as a way to break the hold of vertically integrated media companies, much like the Paramount decree did for films. Fin-syn and the Prime Time Access Rule lead to a surge in the production of independent content, including such programs as \textit{Star Trek: The Next Generation}.\textsuperscript{111} The end of fin-syn includes what is perhaps one of the most bizarre statements in regulation, that the rules should be removed because of a trend in government working that way.\textsuperscript{112} If there has ever been an instance of the dissociative aesthetic in law it is the end of the fin-syn rules. Ending fin-syn did not increase program production or variety, instead it lead to a destructive wave of vertical integration and the collapse of first run syndication market. If we consider Lotz research as a variant of prospect theory, the path of decisions leading to reality television become quite clear. Integration looked appealing because of the chance of winning in the production market. After integration, the reality of the losses incurred by failed productions offset and overtook the pleasure, becoming a painful experience in and of itself. Reality television poses the optimal programming choice, with small losses and large potential gains.

Every other legacy media form where content might be delivered has blown through the limits of capacity to the point where much bandwidth is modulated without so much as a program to run. Thus notice the rise of the knife channels, where an
infomercial repeats continuously to fill the time. The last horizon of the technological scarcity argument was the development of digital over-the-air television, which will be taken up later in this chapter.

**Digital Documents**

While the language of the court decisions that shaped the development of contemporary media technology dealt with flux between grid, energy, and perspective, the language of the agency level documents related to the transition has a style that is most closely connected to the energy aesthetic, retaining an important distinction as a species of discourse. Legal discourses are often forensic; an Aristotelian view of discourses would suggest that the forensic is related to accusation and defense, the epidictic for speeches of praise and blame. The deliberative capacity and future orientation of the FCC rule making negotiations is quite clear, and administrative delegation may offer a more robust potential democratic venue than Congressional or Judicial action. The deliberation that the FCC undertook was intended to facilitate the implementation of the spectrum reallocation, or in a more generous light, to provide better television to the American public. Much to the delight of media scholars, the FCC maintains a website with an archive of official regulatory material, starting with the 1995 call for comments for the en banc hearing where visions for digital television would be heard, through the final report from the stations two weeks after the June transition. As an archive it offers a chance to see the agreement regarding ends that characterized the transition.

The deliberative stance allows the FCC to move between aesthetic sensibilities as it sees fit, with a dynamism that comes from the prospect of future adaptation. The
Wilmington case was not on the agenda for a number of years. The Wilmington test was a response to public discourse, a success for the public sphere. Consider the Third Report and Order from 2007 where the FCC finalized the rules by which stations would operate after the transition. The Report and Order allowed cable operators to elect to both fulfill their must-carry requirements through pure digital transmissions, and further to restrict the total amount that a station might be required to carry so as to avoid duplication of channels and the exhaustion of bandwidth. The goal of this action was to balance the interests of the broadcasters and cable operators, which is accomplished by the Report and Order in one sense, as it would allow broadcasters to survive by consuming bandwidth in the cable systems, but in another sense hinders smaller cable system operators who may wish to leverage their entire possible bandwidth spreads. Several notes include references to the improvement of the regulatory structure over time, that consistent deliberation since 2001.

Temporality not only defines the tone of the regulatory action, but appears in the legal analysis as well. In a final attempt to end the must-carry regime, cable operators asserted that the rules in the Report and Order constituted a form of regulatory taking, which would be a Fifth Amendment matter. In disposing of the objection, the commission uses the passage of time and expectation to resolve the constitutional question. Where the cable companies might argue that the digital transition would constitute a new regulatory action, the commission connects the character of the intervention into the market with those that had come before. In reaction to the reduction of possible investment, the commission responds not that they might reduce future investment, but that the regulated party should have understood that they were going to
be regulated in this way. Either of these rationales would be utterly alien to the analysis of economic activity in Justice Ginsburg’s concurrence in the *Grokster* decision where time and activity might freeze for analysis. This is not to say that Ginsburg would conclude against the FCC, or that the must-carry issue is fundamentally one of copyright – it is not. What I am emphasizing is that the logic of the commission is far more willing to accept a dynamic field of shifting facts. This position will be discussed at length in chapter 5.

The future orientation of the Report and Order can be found in many places. For example, paragraph sixty is an explication of Justice Breyer’s position in *Turner II* that the rapid expansion of cable bandwidth might fundamentally change how the number of speakers is understood.120 The commission invokes Breyer’s idea of fiber optic signal as an unlimited medium, and articulates that position to the situation of cable operators today, crafting the idea that the use of 4% of a cable system for must-carry material would surely not constitute a burdensome use.121 At the same time the commission declined to include newly available digital sub-channels with the must-carry content, much to the chagrin of the Agape Church.122 If your signals were not broadcast before the transition, the FCC would not entertain the idea that the technology of the transition would itself become a mechanism for the expansion of must-carry provisions. In short, the digital transition would not become a mechanism for lower power television stations to gain control of four cable channels.

The deliberative mode of the FCC discourse on the broadcast transition gave way even before the transition itself. In the days before the signal change, the species of discourse used by the agency, and by Commissioner Copps in particular, shifted from the
deliberative to the epidictic. The value positions of the developers of the new technology took center stage – the importance of multicasting, the improved quality of signal, and enhanced wireless telephone service were the topics of the day. Perelman and Olbrechts-Tyteca’s position on the epidictic is particularly instructive here as the epidictic offers a great deal of political potential as it shapes the preferences of a culture, rather than addressing the politics of that culture. As a way of theorizing affect, epidictic rhetoric offers a familiar and productive vocabulary. Building support for the value positions that underwrite policy is far more effective than arguing for those positions in their own right. A fine example of this is the Presidential campaign of Barack Obama. His campaign constructed value positions from which to assign praise and occasionally blame. Struggles during his Presidency could be attributed to the dialectical tension of the epidictic – the rhetor gains credibility through their construction of value positions, and their value positions gain credibility from material change. The audience of the FCC statements is never realized, these are mass distributed press releases, their value and imaginary for the market is one of competition and innovation operating across time. Through their statements the FCC answered the “why” question from the future.

The archive provided by the FCC ends two weeks after the switchover date, with the knowledge that the transition was a success. As Commissioner Copps said one day after the transition:

Yesterday was a truly historic day. For TV broadcasting, it was a final farewell to the Dinosaur Age and the dawn of the Digital Age. We said goodbye to the analog transmission technology that has served us well for the past 60 years and replaced it with something that can serve us even better. Digital will do for television what it has done for every other communications technology it touches—make it better, more efficient, more interactive, more competitive, and
more exciting than ever before. The world is going digital, and I have no doubt that over-the-air television had to go digital as well. It’s a win-win for consumers and for the long-term health of the broadcast industry.126

Digital technology appears as a magic wand that transfigures our old out of date devices into something newer and more productive. The dynamism of the digital market cannot be underestimated – this is a market that is no longer tied to technologies that are stable over time, but a system with technologies that change themselves.127 Copps makes it quite clear that excitement is tied to efficiency, and competitiveness. If we consider his position in concert with that of Commissioner Adelstein’s dissent to the Third Report and Order the value position becomes clearer. Adelstein found the must-carry provisions of the report and order too onerous because they might inhibit rural innovation. His preference would have been for the FCC to create exemptions to the must-carry provisions, rather than using the waiver system that was established in the order as difficulty incumbent in encountering the legal apparatus might be enough to dissuade innovation. The magical power of the digital transition is quite real for the commission; the value of flexibility and creativity is paramount, yet the instrument of transformation is quite fragile, to the point that the mere pretense of effort would break it.128

The great trick of the Commission is to include an epidictic twist in almost every deliberation. The forensic recedes. A mere two weeks after the transition the FCC stopped updating the archive. Shortly after that, the FCC completed one final deposit of information about digital television coverage in the United States that did not call for any additional explication – further indicating that they would not respond to inquiries about that deposit. The final deposit was a set of maps that show where coverage was gained, and lost in the transition. A forensic reading of those maps is what I undertake next.
Mapping Digital Television

With the Wilmington test complete and a relative success, the stage was set for the national digital transition. Originally slated for February 2009, the Wilmington test showed that the transition might be slowed down slightly to insure that the public would be fully aware and ready. What comes across in the introduction is that the loss of signals for some in the Wilmington area is not a real loss; there will be some people who lose access to television in the transition. What comes across in an even more interesting way is how utterly uncontroversial the transition seemed to be for the FCC. Starting in the early 1990s, the idea of continuing the progression of advanced television technology seemed like a soon coming development. The central question was not if the transition would be desirable, but how interference might be mitigated either with medical devices or other systems. The focus on interference would be at the core of the FCC mission from the time of the Communications Act. In the context of the digital broadcast transition, the idea of interference is less important than the ways in which signals might carry through the atmosphere. 1997 saw the FCC agree upon using the Longley-Rice method for measuring signal reach and interference, and the special issue of the code three errors.

The Longley-Rice model was developed in the 1960s for determining the reach of analog television signals. What is particularly strong about the model is that it uses a particular, rather than ideal frame of reference for the propagation of signals. The model can account for irregular terrain through the use of subroutines that can extract a geographic database, which then feeds the particulars into the system. Written in Fortran with an update in C++, the Commerce Department has made a computer program available to the public that can implement the Longley-Rice process and output
transmission maps.\textsuperscript{132} The introduction to this dissertation makes a distinction between analog and digital signal processing that is particularly pressing in the context of the Longley-Rice model. Where analog signals might be processed with only partial reception, digital signals require a full signal to be processed, also known as the digital cliff effect.\textsuperscript{133} A criticism that has been made of Longley-Rice diagrams is that they are presumed to always include the area that has some signal but not enough signal for digital. A reading of the engineering manuals reveals that the Longley-Rice method recognized the problem of weak signals through code three errors. The code three errors had been intentionally overlooked in analysis of analog television transmissions, but were not necessary to overlook in developing charts. For the purpose of evaluating the digital transition, the FCC commissioned Hammett and Edison, who did just this.

The importance of the charts produced by Hammet and Edison cannot be understated for this project. Instead of allowing the number of customers without digital television service to remain uncharted, the FCC took the dramatic step of isolating each potential block of the public with lost reception and marking it with a red triangle. The firm conducted an analysis for every station that filed construction permits in the United States, accounting for those who gained service, those who lost service, and those who would switch to service from a different affiliate of the same network. While the map is peppered with red triangles, noting those who lost service, there is an abundance of green, in some areas green triangles so dense that they might outnumber every red triangle on the map in a small area. The politics of the green triangle versus red triangle debate can be tricky.
First, we should consider a few areas that apparently gained a great deal from the conversion. One such area is around Palatine, Illinois.\textsuperscript{134} The area around this northwestern suburb of Chicago seems to have gained television service both for stations in the Chicago market, as well as those in the Rockford market, and for their neighbors slightly north, from the Milwaukee market. While this might at first appear to be a triumph, the reality is that these communities were never underserved by broadcast television. If you take the maps at face value, Northwestern University’s campus may have been underserved by television until the transition. Oskaloosa, Iowa provides a similar example involving four markets claiming coverage of a similar area. According to students from the area, their level of television service has never been higher, with multiple Fox affiliates on the cable system. In near by Ottumwa, a CBS affiliate has announced that they intend to begin television news service. Ottumwa-Kirksville is one of the smallest media markets in the United States, and could easily be the smallest to feature regular local news. The only rationale that I could find for entering the market would be that the enhanced coverage maps could see this station carried in the Iowa City-Cedar Rapids-Waterloo-Dubuque market, where a very weak Sinclair owned Fox/CBS duopoly lags behind established NBC and ABC stations.

These areas had television service before and continue to have television service after the digital transition. The FCC counts the number of customers who have gained service at nearly ten million. It is difficult to see what it means to have gained service when the new level of service implies that you now have access to the same network feed on multiple channels. This is not to say that all green triangle areas are illusions, consider the case of Fox Fargo.\textsuperscript{135} Due to good planning, their digital transmitters are now able to
reach into highly populated areas of Minnesota that allow their reach to exceed any other station in the Fargo market. While the station has lost concurrent viewing in Northern South Dakota and Southern Canada, the commercial benefits for the station could be quite handsome. The fate of the other news stations in the Fargo market is not so upbeat, as will be discussed next.

Second, we should consider that red triangle areas truly have lost service. The problem posed by the digital cliff is most acute in areas where there are tall buildings that create reflections and disrupt the signal path, and in areas distant from the transmitter, where the signal is too weak to reassemble. For those in the Ozarks, rural Mississippi, or any number of other remote areas, there is no second station looking to fill-in for the loss of coverage. When television service was lost, the only alternative was to turn to pay-tv options. A fine example of this can be found again in the Fargo media market. It might surprise some to know that some of the worlds tallest structures are in Eastern North Dakota, one of the flattest places on the surface of the earth: the KVLY and KXJB television towers, for the Fargo NBC and CBS affiliates respectively. At the time of construction the two were competitors with only WDAY offering news services, now the two are a duopoly. To reach the entire viewing area for the Fargo market, an area easily larger than some states, the stations elected to build very tall towers that could carry deep into Minnesota, where the heart of their viewing audience actually resided. Forum communications, the owner of WDAY elected to build a small transmitter in Fargo and a second transmitter for a sister affiliate in Grand Forks, WDAZ. This strategy allowed them to reach a large audience, and to provide product differentiation versus the Fargo-centric NBC and CBS offerings.
The towers offered the Fargo stations a unique pedigree -- they were broadcasting from important landmarks, some of the tallest buildings in the world. What they could not have foreseen was the impact of the digital transition. From the perch at the top of the KVLY tower, over six hundred meters up, the signal from a digital transmitter could not propagate much past Moorhead. Populous areas around Detroit Lakes and Barnesville would no longer be in their viewing area. North Dakotans in Devils Lake and Jamestown would now be satellite or cable subscribers. At one time the towers allowed the stations to effectively reach incredible distances with a minimum investment, now the towers are anchors, drawing the stations under. The local Fox outfit maintains four towers with towers less than one-third the height have an advantage in the tens of thousands of viewers. Those who lost access really lost. While I may not have the same knowledge of broadcasting in rural Mississippi, I would venture to say that the story is the same.

If the green triangle is either real or imagined gain and the red triangles are very real losses, the yellow triangles would seem less relevant. However, when we consider one of the less visually prominent features of the map, the role of the yellow blocks becomes quite clear. On the maps, counties are drawn in, shaded counties represent the media market, and a third set of lines represent which congressional districts would be attached to which transmitters. The question of congressional districts puts this in somewhat clearer relief, as the all to real analog politics of campaign advertising would be quite easily suited for adaptation on these maps. Consider the case from the introduction: the preponderance of yellow and red triangles now means that the money needed to win the South Carolina 2nd district needs to be spend at three different transmitter sites, where in the past it could all be allocated to the Wilmington NBC
affiliate. In particularly populated areas, the over-lapping areas of coverage could easily compel a candidate to spend money in states and media markets quite a ways from their core.

After the completion of the process the FCC was satisfied with the results. Aside from some concerns about public safety, which were resolved through night-lighting provisions; the conversion has been a smashing success. The outbreaks of red triangles are not really a problem for anyone with meaningful decision making power, the ointment for urban areas of distributed transmission systems are not in use, and subscriptions to pay television services despite slight setbacks are still running high.137

The values present in the regulatory discourse have been implemented. Our television stations are no longer trapped in times where a triceratops horns might be used for an antenna, high quality digital programming is available to more Americans than ever before. The lack of perception of the cost of this shift is striking. To cover the impact of the transition some people were made to buy new televisions, to subscribe to cable, or to simply drop out of public culture. The impact of wires will be at issue in the next chapter.

Context and the Dialectical Reading of the Digital

In this chapter Ronald Coase’s challenge to the idealized frames of reference in classical economics is combined with a surrealist variant of critical legal studies to offer a vocabulary for discussing the appearance of networks and markets. In as much as Benjamin rejected the position of dialectical materialism with regards to a theory of progress in as much as it lacked context, the move to use surrealism to infuse context into the rhetorical critique of the economics of the transition offers a way of theorizing legal
change in the digital. Continuity with established legal principles protecting television allows a system of clear distinctions that have protected innovation, while movements toward the murky space of ownership and tests of intent invite indeterminacy. As a critique of normative legal theory this would support the idea that the digital through the creation of clear distinctions might actually provide better support than the analog. Yet, if the terrain shifts from the ownership of reflexive capital to the legal protection of the right to listen, the energy aesthetic, not the grid becomes the source of progressive authority. Might is the key term here since the legal justifications are in flux between aesthetics, and the image metaphors used to describe the technologies and markets are the political categories that enable reflection.

If we return to Adelstein quotation from the epigraph of this chapter we see the use of a strong metaphor – the digital transition is not a poorly coordinated clandestine operation, but a widely known issue with a few old, distant, computers. Y2K appears as a stand in for a claim of puffery. While on the surface simply self-congratulatory, Adelstein’s statement confirms that the story from the introduction of this chapter, television today is tied to the Internet. Unlimited technological capacity increasingly appears to be the leading image for digital technology, and the Internet in particular. The digital transition here appears to be something other than a technological change, but a marking point for a shift in the entire structure of media finance.

What is particularly striking is that the key mechanism for the digital paradigm shift in the production of programming is the presentation of intellectual property law. This chapter ends with what some might think of as the largest aspect of the digital transition, the end of analog broadcasting. If we leave that assumption in place we
continue to work through the mindset of analog media – that the accumulation of fixed capital is the most important variable – while the truth lies somewhere closer to the accumulation of symbolic capital. The rise of digital media has gone hand in hand with a slide form thinking of media in terms of speech to thinking of media in terms of property. The context for the existence and the political utility of media are erased; replaced with a system of plain object relations that are just as problematic as indeterminacy. Chapter five takes a similar analytical posture to this chapter, however where there are broadcast towers in this section, there are cable systems in the next.
Notes


3 The FCC announced the pilot program in May, and had several large programs in the run up to the transition. Federal Communications Commission, “DTV Transition Debuts in Wilmington, North Carolina.” May 8, 2008.

4 This chart is incredibly useful for understanding the Wilmington case study. Federal Communications Commission, “Wilmington, NC DTV Transition,” September 10, 2008.

5 The use of channel 6 is controversial since it interferes with spectrum allocated for public radio broadcasting. This also tends to cause levels of interference that would push television stations on those frequencies off the digital cliff. Due to the nature of electromagnetic signal propagation, both signals would be substantially disrupted. National Public Radio, “DTV Channel 6 Interference to FM Band Reception Final Report,” 1998. http://www.npr.org/euonline/dtvch6/ (Accessed October 27, 2011)

6 Consult the transmission map for WECT. The report from Hammett and Edison on mapping the transition is a result of this particular instance. Rajat Mathur and Robert Smith Jr., “Mapping Coverage Gain and Loss in the U.S. Transition to Digital Television.” (San Francisco: Hammett & Edison, Consulting Engineers, 2009). This technical report is required reading for anyone working on the digital transition in American television as it both provides key context, and is the basis of much of digital public policy. It is important to note that Hammett and Edison have been involved in substantial debate with the FCC and were instrumental in correcting FCC errors in signal processing.

7 Federal Communications Commission, “FCC Announces Revised Participant List for Statutory Analog Nightlight Program Listed Stations Granted Blanket License Extension Through July 12, 2009,” MB Docket No. 08-255, June 12, 2009. As this item has a docket number it is considered to be a form of binding regulation, rather than the press releases that are also cited in this chapter that do not have a number, which are taken as a public relations effort.

8 See note 2.

9 As a solution to urban transmission problems, the commission drafted a rule that would allow urban stations to obtain permission to deploy distributed transmission systems. Federal Communications Commission, “DTS Rules Now In Effect,” DA-O9-528, February 27, 2009.

10 The standards for digital transition include a robust discussion of the purposes for the transition, the final regulatory document that established DTV as we know it would be the Forth Report and Order. Federal Communications Commission, “Fourth

11 For background about the creation of the advanced television systems committee, or ACATS, see: Jim Slater, *Modern Television Systems: To HDTV and Beyond*, (Boca Raton: CRC Press, 1991).


13 Several sources repeat the claim that the KVLY tower cost $500,000 in 1963, which would only make sense given the incredible height of the structure.

14 Pierre Schlag, “The Aesthetics of American Law,” *Harvard Law Review* (115), 2002. P. 1051 This is also the response that I would have to James Boyd White’s move to attempt to prove that the law is a glorious institution. While I appreciate his contribution in attempting to popularize the idea of constitutive rhetoric in legal study, his work reads like an advanced composition reader rather than an innovative theoretical work. White’s early work has a flavor similar to that of the Arcades project mixed with a casebook. James Boyd White, *The Legal Imagination*, 1973.

15 Ibid, 1104.

16 Ibid, 1060. I cite here the seduction of the grid aesthetic, that the self is left out of the analysis, and the clean lines might easily be something akin to the Danish modernists that are discussed in chapter 2.

17 Ibid, 1050.

18 Ibid, 1060.

19 This same story appears in almost every volume on music and intellectual property, a situation that will be described in more detail in the following section. What was so ridiculous about the Biz Markie case was that the judge repeatedly cited the Ten Commandments, rather than the text of the law. Kembrew McLeod, *Freedom of Expression*, (Durham: Duke University Press, 2007), 78.


21 Ibid, 1062. This can take a pathological form as classification mania.

22 Ibid, 1065.

23 Ibid, 1066-1067. Restraint is critical for the grid thinker, as the presumption that the grid becomes figure and the non-grid becomes something other than ground animates the approach. To put that in less obtuse terms, the grid thinker would accuse those who think without the grid of activism or some other charge because they might disturb the artificially clear language politics that the grid includes. What is some what remarkable is the idea that these grid thinkers may be the real activists as they are implementing a structure into the law that was never there. The question of judicial
legitimacy then is often elided with the question of restraint. Restraint is an aesthetic preference, legitimacy is a rhetorical condition that binds audiences to speakers, in this case the Federal Court system. Confusing these concepts allows a great deal of trickery.

24 Ibid, 1070.

25 The idea that knowing location, speed, and direction of a single molecule is impossible as the act of measurement would change one of the other factors.

26 My interest in the species of discourse will become clear as the chapter continues, the forensic is understood to be a juridical investigation of the past, the deliberative an engagement on the future, and epidictic a form of value building speech that works toward the future. The way that I would like to position deliberative discourse is largely Habermasian, and in other chapters in this book the idea deliberative discourse can be abstracted from the activity of deliberation proper. Epidictic functions in the place of cultural studies in this sense. The species of discourse from Aristotle are read in this chapter through the lens of The New Rhetoric. James Jasinski, Sourcebook on Rhetoric, (New York: Sage, 2001), 210. See Also: Chaim Perelman and Olbrechts-Tyteca, The New Rhetoric, (South Bend: Notre Dame University Press, 1969).

27 Schlag, Aesthetics, 1071.

28 Ibid, 1073. Schlag argues that most decisions become some form of the grid. Creativity in legal aesthetics is less common. His citation for the claim that balancing tests are rare: Richard H. Fallon, Jr., The Supreme Court, 1996 Term—Foreword: Implementing the Constitution, 111 HARV. L. REV. 54, 76 (1997)

29 Schlag, 1075. This is discussed as “the missing architecture.” The idea of the grid and deference appears here quite clearly. If the grid thinker is sufficiently normative and yet restrained the Court could easily engage in a repetition compulsion to ask for Congressional action. In the discussion of the uses of the Fortnightly dissent that come later in this chapter, the idea of asking for Congressional action is transfigured into restraining activity until Congress would act. Enacting the idea that Congress, and the Court are the self-same. Zizek’s reading of this move in Congressional discourse about the upcoming war in Iraq suggests that it is not an uncommon move, and that it is a quintessential way for a policy maker to deal with anxiety over alterity. If we take energy and ambiguity in the law as a form of the discourse of the other, the grid aesthetic would come to see members as just more members of the Supreme Court. To paraphrase Zizek, if you take the sport coat off a Congresswoman, a Judge in a black robe is just waiting to jump out from inside. See: Slavoj Žižek, “The Iraq War: Where is the True Danger?” March 13, 2003. http://www.lacan.com/iraq.htm (Accessed October 27, 2011)

30 Responses to the CLS movement and Schlag’s work in particular, tend to emphasize the normative potential of the legal apparatus for producing social change. The version of CLS that is seen in this chapter is inflected both by Schlag and by John Lucaties move to connect Critical Legal Studies and rhetoric. At the same time, returning to a version of CLS that was stale three decades ago is not an answer. John Lucaties, “Between rhetoric and “the law:” Power, Legitimacy, and Social Change, Quarterly Journal of Speech (76)4, 1990.
The response to CLS often comes in reactions against elements of the critique. One of the greatest rebuttals to the indeterminacy thesis came from Solumn, who argued that the indeterminacy thesis opened the space for mysticism which is counter productive in that it would allow the critique to deform into a conservative position. Solumn contends that the indeterminacy thesis is useful, but should retain a concrete referent so that we might have a better strategy to read the law. Lawrence Solum, “On the Indeterminacy Crisis: Critiquing Critical Dogma,” University of Chicago Law Review (54)462, 1987.

A particularly weak reading of CLS and Schlag in particular comes from David Gray Carlson, who among other things argues that Schlag is a structuralist, solipsist, whose critique can be reduced to a call for critics to stand on tables and quit their jobs. To wage his critique, Carlson willfully limits his range of readings and his interpretation of Schlag to deal with but a single polemic from the late 1990s. Schlag comes off in his account as a pesky teen-age rebel who doesn’t much care for the man and would like people to get in touch with their true feelings. Carlson’s reading contends that there is a facticity to the law, some that Schlag would not doubt, and further that post-structuralist position where the law is discursive all the way down is the case. Schlag makes the case for a post-structural reading of the law, and much like the reading of Kittler, is so in tune with actually implementing post-structuralism in his writing that he does not need to go out of his way to show that he is doing it. Carlson’s article seems to be yet another article by a psychoanalytic critic to claim that Hegel did it (the authors argument) first and better. Lacan and Zizek alone become the authorized arbiters of the Hegelian tradition. Rhetorical studies has the ultimate trump card in this world in that Aristotle clearly did everything first and better. What is clear is that Carlson’s critique of Schlag is ungrounded, and further that the utility of his framework for understanding the aesthetic dimensions of legal reasoning is unmatched. Even if we took Carlson’s critique in its strongest form, it would only lead us to validate a critique founded on Schlag’s position, not to refute it. See: David Gray Carlson, “Duellism in Modern American Jurisprudence,” Columbia University Law Review, (1999).


33 Ibid, 1080.
34 Ibid, 1081. For those interested, this is where Schlag situates Lawrence Tribe.

35 The idea that change is rhetorical was explored in footnote 30.

36 The realism/formalism distinction is explored by Lucaties, and was useful until the distinction itself became inoperative.


38 Ibid, 1084.

39 Ibid, 1102.


42 Ibid, 12.

43 Shares went from $78 to $250, landing hard at $3.50. Ibid.

44 David Harvey’s experimental geography offers a great deal for media studies scholars. I am citing this particular work by Harvey, as he clarifies the definition of the spatial fix in this article. David Harvey, “Globalization and the “Spatial Fix,”” Geographische Revue, February, 2001. Timothy Havens in Global Television Marketplace works through the industrial and identity dynamics for the international licensing of television programming.


46 Ibid, 25.


50 Ibid, 75.


53 This theory of rhetoric as public reservoir has been discussed at length in this dissertation.


55 Chapter three has a critique of the idea of the ownership of the means of production as the central struggle for class relations. This is echoed in this layer of analysis.


59 Ibid, 27.

60 (McChesney and Herman 1998; Dagness, 2010; McChesney and Nichols 2010). They have a very good point that is clearer all the time. This stands in opposition to the claim that centralization, rather than diffusion leads to good news content. Discuss this as a problem of preferences in the market, without perception the market can’t form.

61 Ibid.


63 Derek Kompare, “Reruns 2.0: Revising Repetition for Multiplatform Distribution,” *Journal of Popular Film and Television*, 38.2 (Summer 2010).

64 Alissa Peren, “Business as Unusual: Conglomerate-Sized Challenges for Film and Television,” *Journal of Popular Film and Television*, 38.2 (Summer 2010).


66 Daily Tech, “Good Bye HDMI, Hello HDBaseT,” July 2, 2010, http://www.digitaltrends.com/home-theater/goodbye-hdmi-hello-hdbaset/. (Accessed October 27, 2011) The alliance of companies that changed the standard maintain a site promoting the standard, the politics of which are framed in technical terms. The power relations at stake in the discussion of data compression are beyond the scope of this paper. The documents can be found at: http://www.hdbaset.org/
67 Discussed at greater length in chapter 3

68 Governmentality is what is at stake here, at least in a form that isn’t a crude Foucaultian theory. A more robust discussion of historiography can be found in chapter one.


70 Dana Cloud, Steve Macek, and James Arnt Aune, “The Limbo of Ethical Simulacra’’ A Reply to Ron Greene,’ Philosophy and Rhetoric (39)1, 2006. 72-86.

71 McCloskey, Rhetoric of Economics.

72 Ibid. 81.

73 Ibid, 87.


75 Economic criticism is a fine way to brand rhetorical critique of economic discourses.


77 I am inclined to read bubbles rhetorically, there are gestures toward government intervention being the key, but those seem half hearted at best.

78 Works in this area include, Kembrew McLeod’s, Freedom of Expression, and Owning Culture; which detail the ways in which highlight capitalized corporations run amok claiming ownership over the social world and collapsing the potential for creativity.78 James Boyle in The Public Domain, takes a dialectical approach to the apocalyptic and utopian possibilities in copyright law; finding that a reconnection with the real media ecology is a prerequisite for the reactivation of public discourse about intellectual property.78 Mark Andrejevic in The Work of Being Watched highlights the use of terms of use and other low visibility legal strategies by corporations to organize and control user produced information and information about users of media systems. Absent an apparently natural world of speech, claims about ownership and theft of ideas dramatically change. James Boyle, The Public Domain (Durham: Duke, 2007). Mark Andrejevic, Reality TV: The Work of Being Watched, (Lanham: Rowan & Littlefield, 2003). Eva Hemmungs Wirten, Terms of Use (Toronto: University of Toronto Press, 2008).

79 US Statute

80 Boyle, The Public Domain.

81 Vaidhyanathan, Copyrights and Copywrongs,
There are two distinct positions taken by Coase that are important to this dissertation; his theory of transaction costs, and his work on the nature of the firm. The firm offers a dynamic way of describing the reasons for integration of media companies, which can be seen as a proto-version of the reduction described in his work on transaction costs. Ronald Coase, “The Nature of the Firm,” *Economa* (4)16, 1937, 368-405. The transaction cost related theories will be described in greater detail in the text proper. Ronald Coase, “The Problem of Social Cost,” *Journal of Law and Economics* (3)1-44, 1960.

Pigou’s work will not be discussed at length in this dissertation, as the Coaseian position is critical to understand the television market. Pigou is a fine figure to write against, and his ideas are still quite alive today.

Consider the latest waves of Law and Economics scholars, their work is wide ranging and tends to use an idealized frame of reference to cast objections. The website *The Volokoh Conspiracy* is quite influential and has daily postings from this perspective. If we take their position on the individual mandate, which is the key to the suits against the Federal Government, we should not consider the person in their daily life as almost always being involved in a health care related transaction but instead as being NOT in the health care market by default. By framing the issue from the idealized reference of being either in or out, Law and Economics scholars rig the game to make coercion appear where it does not.


Ibid, 161.


Economist’s Amicus Brief in Eldred v. Ashcroft on behalf of the Petitioners. NO. 01-186. (2002). Coase and Milton Friedman joined this brief.


Section 303 of the Communications Act of 1934. Public Law 416.
195 FCC V. SANDERS BROTHERS RADIO STATION, 309 U. S. 470 (1940)

96 Area including footnotes 8 and 9.


98 Ibid, 197.

99 Ibid, 237.

100 Ibid, 229. This is a particularly important note, as Justice Murphy was active in attempting to aid those escaping the Nazi’s, strong protection of individual rights, and dissent in Korematsu. Frankfurter characterized his jurisprudence as highly emotional. His position offers an insight into how the court might think in terms that would be appealing for critical legal studies. Gary Maveal, “Michigan Lawyers In History—Justice Frank Murphy, Michigan’s Leading Citizen,” Michigan Bar Journal (73)3, 2000. http://www.michbar.org/journal/article.cfm?articleID=42&volumeID=6 (Accessed October 27, 2011) For more on Murphy’s anti-Nazi activity, see:

101 Swift, Thomas P. "Red and Blue Networks of NBC To Be Split; WJZ May Be Sold," The New York Times, Friday, January 9, 1942.

102 Personal attack doctrine was distinct and did not end until 2000, although even then it should have been retained.


104 Ibid, 386.

105 Ibid, 390. The ellipses are where string cites were used to show the history of this reading.

106 The marketplace of ideas position has substantial problems as it assumes that the market has a dialectical rather than rhetorical function, this can be found in the moment where the decision where truth is used as the standard, rather than persuasion. The Frankfurt school inflection of the decision is refreshing as rationality appears as a way that people might be able to sort out the true from the false. The marketplace of ideas as a truth function has unfortunately become a slight of hand where the dialectical image of the market is used for legitimating normative claims, while a more slippery audience centered reality is in place. This is not meant as a denouncement of rhetoric, but to diagnose an important confusion. If we consider this by the same aesthetic standards that are present in the heart of this chapter we could see that the dialectical formulation of the market is much akin to a grid aesthetic, and the rhetorical formulation would appear like energy. This is counter-intuitive, as markets are often seen as sources of energy. In this case, the dialectical position makes the energy safe, and allows populists to accord the terror of the mob the legitimacy of rigorous testing.

107 In Miami Herald v. Tornillo, the Court was unwilling to force a newspaper to print a response to a personal attack as Tornillo could print and deliver his own newspaper. In League of Women Voters v. California, the Court began to call footnote 28
to more attention. The idea that will eventually come from Turner II that technology will overcome any scarcity, leading to democratization will be discussed in the context of the Fourth Report and Order.

Footnote 28 is a clear place in precedent where adding more voices is the goal of the First Amendment: We need not deal with the argument that, even if there is no longer a technological scarcity of frequencies limiting the number of broadcasters, there nevertheless is an economic scarcity in the sense that the Commission could or does limit entry to the broadcasting market on economic grounds and license no more stations than the market will support. Hence, it is said, the fairness doctrine or its equivalent is essential to satisfy the claims of those excluded and of the public generally. A related argument, which we also put aside, is that, quite apart from scarcity of frequencies, technological or economic, Congress does not abridge freedom of speech or press by legislation directly or indirectly multiplying the voices and views presented to the public through time sharing, fairness doctrines, or other devices which limit or dissipate the power of those who sit astride the channels of communication with the general public. Cf. Citizen Publishing Co. v. United States, 394 U. S. 131 (1969).

Harvey, Spaces of Capital, 408. The strong analogy is to his position on theme parks and sports stadia that might be financed by the public are limited. There can only be one Disney World, and even then it could easily lose money.

If technological change is accepted as a reason for vacating structural legal theories a new framework for constitutional law would need to be produced.

Lotz, The Television Will Be Revolutionized. Lotz argues that fin-syn rules opened the space for real negotiations that were not possible in a vertically integrated television market. What Richard Nixon did for vindictive purposes was ultimately beneficial for those who he sought to harm. The end of fin-syn saw the rapid vertical integration of the industry and declines in program production. The decision making theory proposed by Lotz contends that the perception of loss that one might feel from a failed pilot investment would lead them to continue to produce a program for a season, causing them to lose tens of millions when they could limit their losses to a few million at any given point in the early phases of production. As a form of a gambler’s paradox, cognitive theorists would understand this as a problem in prospect theory. The regulations created distance from the pain of failed pilot ideas and thus improved decision making.


See footnote 26.

The website is housed at: http://transition.fcc.gov/dtv/ the site provides regulatory information going back to the Fourth Report and Order, and some regulatory postings involved in finalizing the transition from the Advanced Television project to Digital Television.
The politics of the FCC archive and the ephemeral nature of the net. This creates a powerful official transcript that is difficult to intervene into via a reading of local interest groups.


Ibid, 5.

The path of the report and order from genesis in 2001 to the Third Report and Order is a careful balance between an expansive view of the must-carry rights desired by stations and the narrow must-carry rights desired by cable operators.

Ibid, 35-37.


Ibid, 32.

Ibid, 12. Any religious organization would be happy to control four cable television channels.

The letters are in the FCC archive running up to the June 12 ancillary deadline.

See Footnote 26.

De Certeau’s rhetoric also works on this tension as was explored in chapter two.


The idea of the self-organizing public sphere is discussed at length in chapter 1.

Discuss the idea of the fragility and yet total durability of the theory of latent demand. This is a really critical rhetoric since it provides the image of the silent, durable majority.

See Footnote 1.

This was officially declared in OET Bulletin 69. Unfortunately, this is not included in the archive currently.

The Federal Resource for Longley-Rice can be found here: http://flattop.its.bldrdoc.gov/itm.html A guide for developing your own Linux approach for Longley-Rice analysis can be found here: http://www.tvtechnology.com/article/11490

Ibid.
The digital cliff appeared in popular press articles and Congressional press releases immediately after the Wilmington test.

The map for Palatine is available from the FCC archive website.

Everything about Fox Fargo I know from working in the media market. I was not involved in academic research when I worked in the market.

Bruce Gronbeck confirms that this was a part of their appeal when they went on-air.

See: http://benton.org/node/18703
Comparing the main economic benefits and costs of the CTEA, it is difficult to understand term extension for both existing and new works as an efficiency-enhancing measure. Term extension in existing works provides no additional incentive to create new works and imposes several kinds of additional costs. Term extension for new works induces new costs and benefits that are too small in present-value terms to have much economic effect. As a policy to promote consumer welfare, the CTEA fares even worse, given the large transfer of resources from consumers to copyright holders.

Economist’s Amicus Brief in Eldred v. Ashcroft

It's not hard to foresee a day when Americans come home and, using an Internet TV system that would probably look a lot like your DVR menu, queue up the latest situation comedy or key in to a live news broadcast. Maybe shows will have traditional ads, maybe they'll be ad free but cost a dollar each, or maybe viewers will get to choose. But payment model would be just the beginning of the changes. Networks, no longer forced to fill exactly 24 hours of daily programming, would act more like movie studios, releasing as many or as few titles as they wished. High-quality shows would prosper as networks dropped the unneeded filler. The market would open up to anyone with a camera and a server host, inviting a flood of independent TV shows produced on a shoestring by directors with broad creative license. Ironically, the much-troubled print journalism business could find its way into broadcast. Outlets like the New York Times and the Atlantic already put out video. One day, Atlantic TV could compete with Nightline and Meet The Press. We're no Katie Couric, but it's better than paying a cable bill.


On August 4, 2008, the Second Circuit Federal Court decided an important case regarding intellectual property and television programming with little fanfare. In the case, Cartoon Network and Cable News Network v CBC Holdings and Cablevision, (herein Cablevision) the Court addressed Cablevision’s plan to deploy a system called a Remote-Storage Digital Video Recorder, RS-DVR for short. A conventional DVR is a set-top box kept in the home of a user, which is connected to a cable service. The DVR
records programs and stores them on a hard-drive system for future play back. You can think of a DVR or digital video recorder like super-charged videotape that can record whatever you want at high quality. The RS-DVR has the same functions, but stores the data at a facility owned by a cable operator. At stake in the decision are fundamental copyright concepts – clarifying the meaning of both fixity to a medium and public performance. In denying the Plaintiff’s claim of a copyright violation, the court found that the storage of media on a server does not represent fixation to a medium, and further that broadcasting the stored data to an individual subscriber does not amount to public performance.

The significance of a remote storage or Cloud DVR for consumers is substantial. By shifting the location for material storage from the home to a server at a central facility, the Cloud DVR would decrease the number of wires and complexity of the technology in the home, eliminating the need for the storage of media purchases and changing the relationship between the content producer and consumer. For content producers, the Cloud DVR risks a loss of an important revenue stream, as users would now have the capacity to produce their own libraries of content that could be accessed anywhere, almost effortlessly. For cable network operators, the Cloud DVR is a critical step toward a new framework for monetizing the post-network media environment.

On May 27, 2010 Senator Hebert Kohl of Wisconsin sent a letter to the Chairman of the FCC, Julius Genochowski asking for the agency to closely examine the potential purchase of NBC by Comcast. Aside from the expected concerns about the concentration of media ownership, Senator Kohl raised in no uncertain terms that Comcast might use their position to restrict or force access to the TV Everywhere program. The service
known as TV Everywhere constitutes a departure from the separate relationship of the broadcast and Internet units of a media company. A cable subscriber with TV Everywhere would have access to broadband streaming of their cable content from any location or device of their choosing. The comparative advantage of conglomeration is clear: if Comcast were allowed to purchase NBC-Universal, they would not only have control of a vast distribution network, but direct ownership of several major cable television channels, and their associated carriage fees.

July 1, 2010 there was a press release from a consortium of large electronics manufacturers. On this hot summer day, a group of prominent media equipment companies declared that they would change the standard cables used to connect television sets and set top boxes. The HDMI cable that had been the standard for linking video devices for several years was obsolete. HDMI was fundamentally limited -- it was simply a video cable. Cables in the future would be called HDbaseT, or as they are commonly known, Ethernet cables. By using an existing cable standard, users would be freed of expensive, specialized wires, as the Ethernet cables are durable, interchangeable, flexible, and inexpensive. At a deeper level, the change in the cable standard is a critical step in the transition of media business models in the twenty-first century. Ethernet cables are superior for consumers and are superior for business interests as well. Instead of using a video centric wire, the Ethernet linkage allows the direct connection of a television display device to the Internet. The change in cable standards will make the connectivity of the living room display device ubiquitous: there will be no painful change over, just the slow progression of technical standards. Cables are the circulatory system
of information. On the eve of the Fourth of July, the home entertainment system very quietly received a quadruple bypass.

At first these examples seem to run the gamut of possible media topics -- how does the development of a new set-top box relate to the organization of a media conglomerate? How do either of these stories relate to a new standard for home video cables? Although the Cloud DVR, TV Everywhere, and the HDBaseT cables are on the surface unrelated, they are all signs of changes in the underlying metaphor for space in contemporary American media business. In this chapter, I argue that TV Everywhere and the Cloud DVR both depend on the changing metaphysical conceptions of space in the media industries.

While this chapter stands apart, it continues the theoretical and historical commitments found in chapter four. Namely, the chapter will conduct a rhetorical reading of legal texts on media regulation with a particular attention to the aesthetics of those enactments. This chapter breaks from the previous through the emphasis on systems that are connected by wires rather than broadcasts. To that end this chapter will offer a short history of cable television systems, which will interact with a discussion of the time-shifting technologies of the late 1970s, and concluding with an analysis of the decision in *Cartoon Network v. Cablevision*, which offers insight into the future of media production in the twenty-first century.
From Grid Enhancement to Mandatory Ditch Access: A

Short History of Cable Television

The history of cable systems is in one sense very similar to that of the broadcasting model, it included most of the same programming (entire channels in most cases) and also dates to the late 1940s. What differs from the account of broadcasting is the spatial relationship between the center and the margins, and the economic relationships between them. Money circulates between the distributor and the viewer directly in addition to advertising revenue. In this section I will take up two parts of the cable television story, securing content and digging ditches.

One of the greatest drawbacks to the early broadcasting model was that the signal could not reach into valleys and outlying areas. As early as 1948, viewers began working on ways to secure television where the broadcast signal was weak. In these rural areas, a “community antenna” could be placed on a very high hill where the signal could be received. These local cable operators would then string a wire into town that would provide television service. In these early days, broadcasters largely ignored cable operators, as they would serve to amplify their signal and increase their reach. The Sloan Commission report on cable television is interesting in that it suggests that two-way connectivity could be coming in the early 1970s, suggesting that the spatial fix for cable operators has always been transactional. The metaphor for this relationship would be quite different from that of broadcasting, since wires, cash transactions, and viewing information could change hands. This changed when cable system operators began to challenge the spatial fix of the broadcasters.
Early cable television related Court decisions were able to use the logic of the grid to provide a rationale for allowing CATV, mainly that cable systems would provide a wider audience and thus would enhance the commercial mission of the station. In this sense, the economic vision inflected the outcome of the Court in decisions like Teleprompter and Fortnightly.10

As the 1970s continued, urban cable systems had begun to proliferate and a new visceral spatial challenge would come to dominate the landscape. In order to install a cable system wires must be connected from a central location or “head-end” to every potential place where cable would be accessed. To accomplish this, one would need to dig up the streets, or string new wires on electrical poles. This operation was familiar for areas where rural CATV first offered access to television; the entire town would be connected by wires to a central antenna. In the city, this would require a fundamental reconfiguration of the underground spaces provided for public utilities. The physical space of the city would need to be disrupted. Streets would be torn up, and flowerbeds trampled. Cities used this as leverage to write a series of exclusive contracts, where one cable operator would be allowed access to the underground space, to the exclusion of all others, in exchange for particular local priorities being followed by the cable operator. In some places, this required the cable operators to have fixed rates for access, to wire schools, or to provide services to outlying areas of cities.11 As these arrangements went on, they became increasingly problematic as cable television operations became quite expensive.
Preferred Communications v. Los Angeles

The solution for the cable operators was to change the spatial logic once again, moving toward Congress and the Federal Courts for relief from what they thought of as abusive city negotiating practices. Cities used their exclusive right of way to force cable operators to wire schools, to provide service to unprofitable areas on the outskirts of town, or to give substantial numbers of channels to local governments.\textsuperscript{12} The key case in this area was \textit{Preferred Communications v. Los Angeles}.\textsuperscript{13} In \textit{Preferred}, a cable system operator that was not involved in the initial bid to be the exclusive Los Angeles cable provider sued the city, challenging the legitimacy of the exclusive license granted to a competitor.\textsuperscript{14} After several years of litigation and four different hearings before a Federal Circuit Court, Preferred won and fundamentally changed the landscape of cable television licensing by ending the use of the cities’ right to create cable monopolies.\textsuperscript{15} While the Federal Circuit heard the case several times, the Supreme Court heard the case only once.

Rehnquist’s opinion in \textit{Preferred Cable} relies on the category logic of the grid aesthetic. The opinion of the Court is that the case law cited by the City of Los Angeles is primarily derived from the Fifth Amendment and not the First. Rather than viewing the case from the perspective of a context shift and a new aesthetic, the Court showed how there was not shortage of physical capacity in the underground spaces used for cable conduit, and thus disposed of the economic scarcity argument by turning toward the First Amendment concern that Los Angles would serve to limit speech to a single speaker.\textsuperscript{16} To be clear, the Court found that a second wire could go in the pipe, and that fact enabled the distinction that short-circuited footnote twenty-eight. Since the case is formed around
a negativity, that it be remanded, the Court need only enforce the rules of the existing grid, rather than come to any conclusion. The case works through the classic logic of the grid, which can be more clearly seen in Blackmun, O’Connor, and Marshall’s concurrence. The question for those justices is if cable television can effectively fit into the category provided for broadcast television in *Red Lion* or if it should be placed with newspapers as in *Tornillo*:\(^\text{17}\)

…the Court must determine whether the characteristics of cable television make it sufficiently analogous to another medium to warrant application of an already existing standard or whether those characteristics require a new analysis. As this case arises out of a motion to dismiss, we lack factual information about the nature of cable television.

The dissent is an ad hoc theory of medium specificity. By declining to answer, they validate the strength of the decision to reactivate the case through the remand. The question of the authority of the city became secondary to the question of how new categories should be developed into which we might place a new medium. If we take the logic of the concurrence at face value, then the remand functionally equated cable television to a newspaper rather than a television station.

The early phase of the spatial fix for cable was local either in the sense that the people of a community deployed the system on their own or that a city might negotiate with a cable provider, using it’s position in controlling the right of way as a form of spatial power. The late phase of the spatial fix in cable operates by decreasing the cost for connecting the network infrastructure by removing a situated stakeholder (cities) from the situation. By shifting the locus for understanding the control of the right-of-way to the level of executive agencies and state level authorities, the cable television industry made the politics of digging a ditch into a national concern.
Spatial Relationships in Time Shifting

Sony v. Universal City Studios

An important shift in the broadcast landscape came with the introduction of home recording devices that would allow users to change the schedule of television to fit their needs. The legal crux of this practice was the Betamax case, where the Supreme Court ruled that it was legitimate for a home videotape system to include a recording function. It is this understanding that is the genesis of contemporary practices of television time shifting. Once the technological capacity came into existence for users to create their own flow dynamics, the centrality of network-produced flow was in danger. I want to be clear from the outset, I am not claiming that users had the power over the media returned to them, but that the core characteristic of the network era, monodirectional transmission and absolute control of flow, were put into flux. The power of television to put people in similar spaces at any given time was no longer assured. Worse still, a Betamax or VCR could allow the viewer to avoid watching commercials, undermining broadcast and cable business models. If all consumers were to fast-forward through commercials, the only remaining source of non-subscription revenue would be product placements, which provide some revenue, but cannot sustain production.

The Betamax decision, more formally known as Sony v. Universal City Studios, concerns the development of video tape recorders for home use. Sony was alleged to have provided a technology that would allow individuals to make copies of material that could violate copyright. As a response, the Plaintiff’s sought redress not by holding Sony liable for any number of copyright violations, they sought to prohibit Sony from distributing a home VTR with a recording function. The aesthetic difference between the
positions can be found in the same discussion of the role of ambiguity, this case applied
to individuals rather than an executive agency. For the majority, the ambiguity over
issues of the uses of the technology could be omitted from the decision, since the
question was not about the activities of the home users but a question about the
technology itself.20

During initial deliberation the Supreme Court was inclined to reverse the ruling of
the 9th Circuit, finding that the technology facilitated the violation of copyright and thus
should be prohibited. Careful writing and skillful negotiation allowed Justice Stevens to
persuade judges to switch positions through a perspective change.21 The dissent does not
constitute a screed against infringers that we saw in music related cases in the section on
intellectual property law in chapter four, but turns on the question of delegation.
Blackmun would have the Court defer to future Congressional action under the principal
established in the dissent in *Fortnightly* that, “do as little damage as possible to
traditional copyright principles . . . until the Congress legislates.”22 The idea that there
could be substantial non-infringing uses would not come into play in this analysis, since
things that appear to be out of bounds are in fact out of bounds. The fact field that was
created by the idea of non-infringing uses would not be relevant if the test to be employed
could be envisioned as creating a clear line. In more flippant terms: machines don’t
infringe copyrights, people infringe copyrights. It is a clean, crisp distinction that hinges
on possibility, rather than an on-balance analysis of activities that actually took place.

*Grokster v. MGM*

The *Betamax* precedent created the basis of future action by the Court that could
recognize the importance of non-infringing uses. What the majority opinion does so
effectively is that it productively erases the margins; the crimes committed downstream would not be articulated to the core technology. This appears differently in the *Grokster* decision where Justice Souter avoids the question of the technology used in the majority opinion in the *Betamax* case by referring to the additional “words and deeds” taken by Grokster to facilitate infringement. While all nine justices joined Souter’s opinion, the concurrences written by Ginsburg and Breyer take distinctly different lines on the status of the *Betamax* case. For Ginsburg, the *Grokster* decision contracts the rights conferred in the original case, by restricting the analysis of the Court to the technology at issue rather than the class of technology, going on to ominously foreshadow that a failure to award summary judgment on the remand would force the Court to overturn the *Betamax* case.

The facial test of infringement in this case is much akin to the idealized frame of reference from the Coase theorem, in that Ginsburg’s opinion, had it been the majority, could never be taken in isolation from the context in which the case was decided. The spatial fix for Ginsburg would operate outside of the empirical world, as we understand it, where the power of the classificatory grid itself would be sufficient justification for the legitimacy of a rule.

On the other hand Breyer’s concurrence disagrees with Ginsburg’s use the grid to presume that the absence of a clear rule implies a rule in itself. For Breyer, the *Betamax* case creates a strong presumption that in light of evidence of non-infringing uses that a new technology should be protected from litigation. Breyer’s dissent goes further into the economic structure of the industry than does Ginsburg. Where Ginsburg accepts the testimony of an MGM expert that there would not be non-infringing uses, Breyer enlists substantial evidence that the actual economic impact of file sharing is substantially less
than that claimed by the industry, that non-infringing uses occurred like sharing archival footage, and further that the protection posed in the *Betamax* case is in fact critical to innovation. By invoking context, Breyer reframes the debate as being about the reprimand of a particularly egregious offender, *Grokser*, rather than allowing a vision of clarity to override the strategic ambiguity that Stevens gave the law in *Betamax*.

**The Absence of DVD Litigation**

It is also interesting to note that the second generation of commonly used home video technologies had a substantially different paradigm for information control than the videotape. The digital versatile disc or DVD, was just that, versatile. Rather than simply reproducing a video signal that could be displayed on a monitor, the disk contained an entire performative program that would control the playback device and the possibilities of where, when, and how the DVD could be used. Region coding controls when and where a disc can be played, for example a disk intended for use in Australia cannot be used in Africa without special equipment, and a special region has been reserved for playback on international flights. There is no engineering reason why a DVD should have region controls. On the other hand there are compelling commercial reasons why DVDs should be tied to particular spaces and times, not the least of which is the prevention of piracy. The question of how a DVD would be used is more interesting both for our understanding of space and time. A DVDs performative programming can require that a user view trailers for upcoming movies at its start, or that they use particular keys on their remote control to view the film. In this sense the DVD does not break the relationship between the user and the corporate structure -- it enhances it. With broadcast or cable television you could change the channel, with video you could fast
forward, with a DVD corporations have a unique position to push commercials on the audience. In the broadcast world, you would adjust your schedule to watch a program, with a tape you could watch at a time of your choice. With a DVD you can watch at a time of your choice, but only if you accept the control of your time at the moment of playback that is incumbent with the DVD program. In this sense, the DVD brings the political control of network flow into the volitional decision making process of purchasing and playing a DVD.

Where the deployment of tape technology lead to litigation, the deployment of DVD technology was far less contentious. DVD development was conducted by rival trade groups, who eventually appealed to Lou Gerstiner, President of IBM to resolve differences in standards for the operation of videodiscs. The adoption of DVD technology seemed tenuous as late as the mid-1990s, however the ascent of Disney, Paramount, and other Hollywood firms gave the credence for the rapid consumer adoption of the technology. By 1999, DVD technology was a sweeping success. As a case study in the Coase Theorem, this tends to side against the market in that the result of the pure bargain was a regime that was exclusively the province of initial owners of capital. What the reading of the deployment of the DVD via the Coase theorem loses is the impact of the intractability of anti-trust law, which is the essential challenge that one might make the DVD in any event. The only reason why the Patent pool would need to exist is because the largest and strongest firms would not be in a position to muscle the smaller firms out of the business by other means. If the underlying business of a patent owner were to be destroyed by their adversary, they would not be in a position to sustain litigation. The DVD standard is open to anyone who is willing to use the technology and
follow the standards, there is no policing of what it would mean to make a DVD or to distribute it, and no faction would use access to DVD technology as leverage. This is even more egalitarian than the discussion of codecs in chapter three, since the DVD Forum is a patent pool, but requires very little to gain access.30

The TiVo Patent Dispute

The most recent iteration of the time-shifting technology is the DVR. The capacity for the DVR to shift time is more profound than the DVD (which were cumbersome to record at home at best) and less labor intensive than the VCR where a user would either need to pause the recording during commercial breaks or fast-forward during playback. The DVR does other spatial work in that it no longer requires para-textual artifacts, like tapes or discs. With the latest developments, DVR simultaneously breaks the spatial and temporal fix on media use. Reorganizing material relations is never an easy process, with the transition to DVR technology presenting an important new challenge for media businesses.

DVR lacked the clarity of a patent pool and has been racked with lawsuits that have done serious damage to the industry. TiVo has successfully litigated against other providers of DVR technology such as EchoStar and DirecTV to extract hundreds of millions of dollars in damages from their competitors.31 Patent litigation is often a way of bringing about the worst case scenario for the Coase theorem, in that it maximizes transaction costs, shows how difficult it is to trade externalities, and how bargainers might decide to work toward the least efficient distribution.

To contextualize this section in the economic terms of the spatial fix, the way that markets are imagined by opinions with a grid aesthetic tend to remove the market from
context. Repeating the fundamental mistake of misreading Coase as Pigou. What the perspective shift accomplishes is the ability to recognize the operation of a market or at least a plurality in operation. If the grid is able to refine our aesthetic sensibility to require a surface reading alone, the question of potentiality would be evacuated of any meaning and deliberation would lose any capacity to become deliberate.

What the DVR patent controversies gesture toward is the disruptive potential of innovation when taking place outside of an established cartel. Take the amicus filings in *Grokster*, the firms that one might find in Northern California file on behalf of the Defendant, while the interests of Southern California line up behind the Plaintiff. This distribution of support would make sense in the context of intellectual property rights as understood as a form of capital pooling. Initially, Hollywood formed as a response to the aggressive intellectual property activity of Thomas Edison. Firms in Northern California are protected by their control over physical assets and a robust collection of patent protections of those hardware items. This is much akin to what was seen in chapter three, where the development of cheap production systems saw the development of a new series of material relations. The hardware operates at a prior level to the software. The screen is necessary to experience the good. In terms of a discussion of a discussion of classes of goods, those goods that one might find as content to be viewed are essentially post-experience goods. Where in *Betamax*, the grid served isolate the company from the experience, the grid returns to lump the experience with the users in *Grokster*.

Fortunately, the perspective that Ginsburg foreshadowed has not been sustained by the court, as we will see in an extended discussion of the key case regarding
intellectual property and advanced DVR and cloud distribution systems to this point, 

*Cartoon Network v. CSC Holdings and Cablevision.*

**Courting The Cloud: The Second Circuit and The Cloud**

**DVR**

Cablevision’s plan to deploy a system of network DVRs or a cloud DVR system had been challenged by several cable channel owners, including Cable News Network, Cartoon Network and others. The Plaintiff’s claim was that the spatial difference from existing broadcast, cable, DVD, and DVR models ran afoul of the provisions of copyright law. A District Court decided that Cablevision’s system infringed on the copyrights of content providers. The Second Circuit Federal Court reversed the District Court. This analysis is concerned with the use of metaphor in the decision of the Second Circuit, as written by the Honorable Judge John M. Walker Jr.

The *Cablevision* decision regards three claims of direct copyright infringement by Cablevision: First, that by routing a live television signal through a dual buffer system for 1.2 seconds, Cablevision fixed a copy of the Plaintiff’s content to a medium. Second, that by providing a technology where a third party might produce a copy, Cablevision should be held liable for producing those copies. Third, that retransmitting content from a hard-drive constituted a public performance. Inherent in each element of the decision, is a nested metaphorical debate about the nature of the spatial relationship between a user and a media company.

In the opening section of the decision is background of how a DVR system works, and the metaphors underlying the decision are directly juxtaposed. The District Court found the RS-DVR system to be: “a complex system requiring numerous computers,
processes, networks of cables, and facilities staffed by personnel twenty-four hours a day and seven days a week.” The Circuit Court used a different metaphor, thinking of the system as an extension of the DVR and VCR: “The principal difference in operation is that, instead of sending signals from the remote to an on-set box, the viewer sends signals from the remote, through the cable, to the Arroyo server at Cablevision’s central facility.” As envisioned by the District Court, the RS-DVR system is a giant, exotic mechanism, rather than the extension of a widely used and accepted technology. Built into the District Court’s metaphor is a feeling of time duration and spatial fixity. The reference to the size of the network and the amount of time the facility is staffed bring an understanding of the facts in that is plainly not accessible through a reading of the case or the law. On the other hand, the Circuit Court reads the case through a lens that neutralizes the threat posed by the new technology, allowing it to be treated through established legal heuristics. An extension of the remote control is far less threatening than a factory that breaks copyrights.

The first claim of infringement is on the basis of direct infringement by buffering. Cablevision did not deny that the buffer was an embodiment; surely the memory chips exist. The idea of embodiment is that copy or derivative work would need to be produced in a stable form that might be relayed to others, it would need to exist for more than an instant. What Cablevision contested was if the information was embodied for more than a transitory period of time, a claim that the District Court had disregarded. The incoming stream of programming would pass through the buffer almost instantaneously; the buffer would not be a storage system but a part of the transportation system for data. In the language of the decision itself, it would be possible to read this as the District Court
simply making a mistake, by losing track of the word transitory, yet they had ignored a meaningful distinction.

The circular logic implicit in the Plaintiff’s argument would be persuasive, if the complexity metaphor had already been accepted. If when deciding the case you have already imagined the RS-DVR system as an industrial operation, it would be obvious that the embodiment was not transitory: factories take time to work. The Plaintiff’s argument as per Judge Walker’s reading of the District Court decision is this: “Against this evidence, The Plaintiffs argue only that the duration is not transitory because the data persist “long enough for Cablevision to make reproductions from them.””\textsuperscript{37} The argument here is circular -- the criterion for being not transitory would be embodiment. A judgment for the Plaintiff would redefine all electronic systems with random access memory as copies, even a crystal radio set could infringe if the standard for making a copy is reduced to relaying a signal.

The second claim was for direct liability for making copies. Here, the logic of the VCR metaphor returns with great effect. The distinction to be made is about the agent that chooses to make the copies. Judge Walker writes:

In the case of a VCR, it seems clear--and we know of no case holding otherwise--that the operator of the VCR, the person who actually presses the button to make the recording, supplies the necessary element of volition, not the person who manufactures, maintains, or, if distinct from the operator, owns the machine. We do not believe that an RS-DVR customer is sufficiently distinguishable from a VCR user to impose liability as a direct infringer on a different party for copies that are made automatically upon that customer’s command.”\textsuperscript{38}

Judge Walker’s metaphor extends the map of the user-device relationship beyond the bounds of the home. The District Court would find the other way, as the image of the server plant would always already include the volition of Cablevision to make the copies.
Why else would they employ a staff working round the clock, in a maze of complicated copy machines if they did not intend to copy something? Judge Walker’s remapping of the relationship is productive because it avoids the fear of sanctioned lawlessness. The alternative to the position of the Plaintiff is not copyright anarchy, but the extension of an established, viable legal framework, that of the VCR. Further, Judge Walker cited the *Betamax* decision, to add precedential force to the VCR metaphor, making it difficult at best for the Plaintiff to generate any coherent basis in the case law for their theory of liability.\(^{39}\)

The third claim was for the public performance of the recorded content. As a non-lawyer, this may not seem to make a great deal of sense. If you were to read the opinion, Judge Walker takes pains to ensure that all possible readings of the Plaintiff’s claim of public performance are addressed. It seems there are two primary theories for liability for public performance. One theory would be that the program as recorded on the servers could be potentially played for everyone, as if the possible total audience of a performance should be considered to be the actual audience. The VCR metaphor would plainly deny this theory of liability, just because we might go door to door playing a videotape, does not mean the law should regulate VCR technology as if we do. The second theory of liability is that by running a live cable channel and storing the information on a buffer, Cablevision would be publicly performing for itself. The problem with this theory of public performance is analogous to the first theory of public performance; never does the idea of the public in the case law or legislative history come into the picture. For the Plaintiff at this point, it appears as if the public could exist without a single person being present.
Beyond the power of the VCR metaphor to remap the relationships and to provide a coherent spatial metaphor whereby the copyright claims of Cartoon Network and company could be countered, there is a second operational spatial logic at play here. The Plaintiff seeks to protect a thing they have produced in their facility that is now being distributed. Cablevision provides a liminal space where the volitional decisions of both the Plaintiff and the cable customer can interface. In simple terms, Cablevision is a distributor. Distribution matters. The position of the distributor becomes central in this vision of the spatial fix, not the receiver or the producer of the content.

By collapsing the liminial space, the Plaintiff’s argument became incoherent, as it attempted metaphorically to assert that Cablevision was not simply a liminial space for personal recordings and data storage, but rather some sort of common sphere where data might mingle and disperse. The cable operator would appear not as a distributor of content and a provider of data services, but as a co-conspirator for a public of thieves. In this sense, the Plaintiff staked entirely too much on successfully introducing a faulty metaphor for a technology. The great weakness of the Plaintiff’s metaphor is that it depends on mystification – the RS-DVR would be shrouded with fear, uncertainty, and doubt. Let me be clear, the Cablevision decision at the Circuit Court level did not introduce a new understanding of spatial relationships in new media: it applied a limited grid aesthetic with the idea that the Betamax precedent should be sustained. The perspective aesthetic allowed the District Court to decide against the Plaintiff. The grid stabilized the opinion for the Defendant. The decision used metaphors already in circulation: the politics of regulating new media would seem to be old.
Spatial Understandings of New Media

In a widely circulated report, cable industry analyst Craig Leddy argued that the industry had finally found a way to “solve its Hulu problem.” The solution? – TV Everywhere, a new paradigm where cable television would no longer be tied to a fixed head-end and home-end cable box, Leddy concludes: “TV Everywhere will serve as a catalyst for a migration to more IP-centric video delivery and, potentially, all-IP delivery in the long term.” In plain terms, your cable TV subscription will soon be accessible to you anywhere, not just at home. At the heart of TV Everywhere has been Comcast’s effort to renegotiate licensing deals with content providers, providing a new business model for the cable industry, one that has its own proprietary web interface. Further, this effort has drawn Comcast to taking unprecedented efforts toward vertical integration, such as purchasing NBC, to ensure that they would have access to content on their terms, and more cynically that they could gain control of their only possible challenger, Hulu.

The underlying advantage of the cable business aside from the physical network of wires is the inbound flow of money. Users pay for cable services. One of the largest challenges for the future of advertising supported programming is the proliferation of media outlets, splitting the revenue stream into many individual flows. TV Everywhere essentially refigures this by posing as a centralizing node. Comcast will gather stronger advertising metrics, while retaining the stable revenue stream of a cable operator. Other research has suggested that a “Google-like” central interface for programming would add enough value to cable content that users would be willing to pay even more. To this point, the interface would be straightforward and require just a user-name and password.
This is not just a story about Comcast; Verizon, Time-Warner and others have signed on. Recentralization is the name of the game. This industry includes measurement firms as well. The coming structural transformation of online content access is not just going to be like Hulu on steroids, it will include more ads, more tracking and more capacity to know who is watching what and where. The spatial logic comes full circle here – it is only when the spatial fix between the producer, the distributor and the consumer is made concrete, that it becomes valuable again.

Current online models for revenue fall short as they lack both the volume of commercials and the articulation of commercials to larger audiences. Claire Atkinson reported in *Broadcasting & Cable* that the Disney-Hulu license agreement was predicated on a 70/30 revenue split; where Hulu would keep only 30% of the incoming cash while Disney would receive 70%. The report is also clear that even with keeping nearly a third of the revenue, Hulu is still losing money. Larger questions loom for Hulu, particularly engineering questions related to the ability of the company to finance the bandwidth they use. The largest problem with the Hulu model is the sparse distribution of commercials, with only four appearing per half hour of television. In an experiment in early 2009, Fox debuted “Remote Free Friday” where the amount of commercial time available per episode was reduced by half, with the idea that fewer commercials could be sold for substantially more money. The experiment was a failure, with the increased prices for advertising failing to cover the reduced revenue from the time not sold. Alternatives to the traditional advertising model are simply inadequate. Cash needs to enter the business ecosystem at some point if new programming is to be made.
In July 2009, Hulu ended speculation with the announcement that they would introduce tiers of service, with some free service, and some programming requiring payment for access called Hulu Plus. Even with these changes, Hulu’s future is in grave doubt. Advertising to a narrow audience is not the end of the story for television distributors; other sources of money are critical. Likewise, TV Everywhere is attractive because the cable operators have a regular source of cash flow and a revenue model for paying carriage fees that has already been proven. For all the excitement that has accompanied new business models, the cable model continues to generate the largest and most stable revenue stream.

Cord Cutters – The Techno-Romantics

Cord cutting is a form of techno-romanticism. Young pure consumers are taken to be unshackling themselves from the monster of big cable, if only for the purposes of joining big satellite. The majority of individuals disengaging from cable service are not returning to over-the-air broadcast or to online services, but to the signals that come through direct broadcast satellite systems. The essential difference between satellite and cable systems would seem to be that the largest media company in the United States, Comcast, is a cable company, while the second largest media company, DirecTV is not Comcast. Cord cutting discourses all too often seem to conflate the expansion of cable systems with all of the negative implications of media consolidation posed by anti-consolidation theorists. As an everyday way of theorizing convergence culture this allows opposed factions to find common ground. Using convergent technology would allow cord-cutters to get more for their choice than simple entertainment – it could be a stand
against the dregs of the media industry. For DirecTV and the DBS industry, this invisibility is a blessing.

While DBS systems may benefit from the anti-cable discourse, over-the-air broadcasters stand to gain far more. Consider the historical use of must-carry rules by PAX TV. By locating transmitters near but not at the center of a media market, PAX was able to force their way onto cable systems using must carry rules.\textsuperscript{56} At this time, local broadcast television stations were included on cable systems as a matter of course. The digital broadcast transition saw local television stations receive carriage fees akin to cable television channels. As a form of regulatory discourse this is called a retrans dispute. Local broadcasters withhold their signals from cable or DBS systems until they receive a fee that they find acceptable. As this dissertation is written the FCC has already begun to review the practice of withdrawing retransmission consent. The struggle between the broadcasters and multichannel distribution systems is clearly inflected by the reality that the cord, be it from cable or satellite has displaced the use of bunny years or other antenna technologies in the United States. What is most striking about the proposal is that it would end exclusivity rules that bind a cable system to the local providers of signals.

The advent of digital technology and the proliferation of alternative means of gaining access, consumers might have alternative ways to obtain network content. The idea that the FCC might allow cable operators to import whatever version of a network they see fit would spell the end of the priority of localism in broadcast regulation. A cable operator could choose between Fox affiliates until they found the one that they were looking for. Or worse, Fox might decide to negotiate with the cable operator directly, becoming something of a cable superstation akin to WGN. Local news provides the
leverage that an affiliate might use to remain on a cable system. If the FCC follows the logic of the Supreme Court in finding that diversity has been accomplished and thus that the legal protection of access is no longer required, then the economic value of the local news, not the existence of it will become paramount.

Cord cutting provides a key narrative for the broadcast side of the industry -- they are often those who might watch a local television broadcast station. Unfortunately for the broadcasters, the online activities of these individuals would provide the very proof that the idea of must-carry is obsolete. Net-neutrality would become the clear horizon of activity for the FCC and for any serious form of media activism. Conservative arguments against net neutrality function only on the most simplistic figure-ground distinctions made in old dissents in broadcast law. If the Congressional action to delegate authority for net neutrality were not utterly explicit, then the authority would be lacking for agency level action. The idea of the free market is a zombie in the net neutrality debate – the market has failed, throttling is common, and distribution costs are rising, not falling.

Cord cutting might appear to be satisfying as a reaction against the increasing power of cable companies who are financed by cash flow, but just as cord cutting offers individuals choices in their media purchases, the act of purchasing becomes dispositive evidence that they do not need localism in the first place. Much like Hulu, Netflix and other systems like it increasingly feel the pinch of the revenue needs of rights holders, and the grid like aesthetics copyright law will foreclose the long term viability of cord-cutting as a form of consumer emancipation. In what would be a perverse conclusion, the per-episode revenue for a content producer would actually be substantially greater than that found in carriage fees. The cash flow from purchasing a single episode of a
television show on iTunes is greater than the carriage fee ever was. What is interesting about the legal aesthetics of cord cutting is the primacy not of regulatory discourse, but of the forensic discourse of copyright law. Cord cutting works because of the relative stability of licensing and ownership rhetoric.

A fine example of this techno-romantic fantasy collapsing in on itself is the second epigraph for this chapter, where a staff international affairs writer for The Atlantic goes as far as to explicitly say that the distribution system will simply evaporate. His consideration of the structure of the industry is non-existent and in all reality backwards. The cable industry wouldn’t have it any other way.

The Future is Wired

In the first turn of the media distribution story, broadcasting, the development of centers required the accumulation of capital in one place, with a diffuse audience. The actual position of that audience was difficult to ascertain. In the cable relationship, a similar number of distribution centers were physically connected directly to the site of reception. This technology, in combination with the development of lightweight measurement systems promised to make the entire grid knowable. Even more advantageous for the cable companies, the viewers directly channeled money to the center through monthly payments. Just as this arrangement began to become popular, time-shifting technologies once again made the real activity of watching television impossible to fully monitor. DVD technologies resolved the issues with measurement by controlling when and where the media could be used. Early online television websites appeared viable because of the currency of the broadcast model; the commercials sold during the programs would be the key source of cash. Yet, this model failed because the
value of the commercials was inadequate. In the popular imaginary for the Internet, companies are all too willing to believe that they could distribute and profit from programming without any meaningful attention to the logistics of distribution.

In legal cases in the middle of the century ideas of scarcity and necessity worked productively to successfully produce a regulatory environment that could make the market work. As technology evolved the grid aesthetic was asserted to show clear zones where the market might be allowed to operate without the prospect of the public interest interfering. It is important to understand the relationship between the grid and the figure of the market as being without context. It is in the moment when the grid can be implemented that the market loses the character that makes it market like. The prospects for engagement are lost and stability becomes the primary virtue of the system.

Further, the ways in which the eclipse of access to analog signals is written out of the maps provided by the FCC is telling. The spatial fix for the market provided by digital alchemy is inherent in the function of must-carry rules. The value of a transmitter is that one might redistribute that transmission via a wired system. It would be all too simple for the FCC or some other body to omit the transmission step from the process all together, to force cable system operators to include signals on their system from what would be locally produced cable channels. This option is entirely unacceptable because it would forfeit the stability of the grid aesthetic of law, and the comfort of fixed capital. Instead of allowing the passive voice to take hold and the technology to decide on the normative politics of distribution for us, human actants would be forced to choose on their own. The romance, fragility, and power of the imaginary of the market would come full circle.
As seen in the *Cablevision* case study, this formulation of easy distribution framed in intellectual property law went further in the Plaintiff’s view, to elide the production of a media artifact with its possible reception, as if the politics and presence of a circulation system were neither necessary nor existent. The arrival of the new TV Everywhere framework and the Cloud DVR challenges the spatial fix by making home spaces mobile, yet knowable. The Cloud DVR accomplishes this through ownership of the means of distribution, rather than the ownership of content. The *Cablevision* case was denied certiorari the Supreme Court, and will not have the same cache as the *Betamax* case. It is good law, but other Federal Circuits could disagree. Cablevision’s victory is important because it marks the ubiquity of the transition of cable companies into the cloud, a technological and economic development that media studies has not recognized. Media studies scholars continue to read the future of television through a broadcast metaphor, when a cable metaphor is more appropriate for understanding the capital relationships between companies and consumers.

This slippage between the two phases of the spatial fix is critical for understanding the spatial politics of post-network television. For media companies, the most effectively profitable route for future operation would appear to be a conversion to the second phase of the spatial fix. Profit would depend on shedding fixed capital, and allowing others to handle logistics. This analysis suggests that the emerging model for twenty first century conglomerates is not found in the second phase of the spatial fix, but in the first. Ownership of fixed capital is the key. In the *Cablevision* case study, the Second Circuit placed the interests of the owner of fixed capital assets before the owner of cultural assets. The spatial model from cable television, with direct payments from
viewers to a service provider, did not disappear with the arrival of new media. If
anything, new media have only strengthened the position of the cable business model.
The largest media company in the United States is headquartered in the media capital of
Philadelphia, not Los Angeles or New York. Future studies of media capitals will need
to include the places produced by distribution, rather than those that flourished during the
era of debt finance. The management, politics, and cultural flows coming through
hundreds of cable channels to fully mobile viewers are distinct from those of the
broadcast model, even when the Internet is the mode of distribution.

TV Everywhere and Cloud DVRs present an important development in the spatial
politics of television because they represent closure for the diffusion models of both
broadcasting and the Web. If the home of a cable subscriber follows them into the world,
and exists in any number of simultaneous locations, mobile privatization has been
extended beyond the home, or even the individual media user, to include the functional
privatization of the means of transmission of their content. The tensions inherent in
privatization are striking: the cloud would magnify existing concerns about decline of the
public sphere, while simultaneously providing a new revenue model that would facilitate
the creation of a host of programs that would not have been possible in the past. Revenue
streams created through regular payments to a cable company can finance the production
of programming without the need to incur a great deal of debt. For the future of content
production, the rise of alternative financing offers a way to find money that was not
available through debt finance; cash flow financing presents an alternative way of
producing programming. Programs that would not have been viable to support with
advertising find their way to air, giving cable channels leverage to negotiate for higher
carriage fees, and for online distribution. Firms like Comcast that have excellent debt-to-equity ratios could eliminate the need for debt financing, much as companies have attempted to displace debt finance through international co-production. Disputes over which channels must be carried and how those program sources are compensated will be increasingly important as distributors become vertically integrated. Unfortunately, there is no reason to believe that vertically integrated distribution companies will not suffer the same fate that Lotz found for vertically integrated broadcasters, that the sense of risk inherent in program production made broadcasters conservative in their decision making, even as their revenue rose. Losing money on a failed investment is painful, whether a firm uses transmission towers, satellites, or buried cable. What might offer hope for greater access and program variety is that companies might operate with less fear of debt service. Losses would still be painful, but the sting dulled.

Fortunately for the content producers, the grid aesthetic as embodied in Ginsburg’s concurrence in the Grokster decision is the future, not the past, and with any luck the values inherent in the FCC position on net neutrality will be persuasive. The energy aesthetic is profoundly analog, and the grid digital. The future of digital television production may depend on it.
Notes

1 Economist’s Amicus Brief in Eldred v. Ashcroft on behalf of the Petitioners. NO. 01-186. (2002). Coase and Milton Friedman joined this brief.

2 This is the bourgeois dream, and the ruin should be clear, this fellow would save the media industry by shutting down distribution. It is particularly troubling as he is now the primary international beat writer for The Atlantic. That does not inspire confidence. Max Fisher, “Cable is Doomed,” The Atlantic, March 18, 2010. http://www.theatlantic.com/business/archive/2010/03/cable-tv-is-doomed/37675/ (Accessed October 27, 2011)

3 Cartoon Network and Cable News Network v. CSC Holdings and Cablevision, (2nd Cir. 2008). Herein this decision is referred to as Cablevision. The copy of the decision used for this paper was downloaded form the Electronic Frontier Foundation, rather than from the Federal Reporter. It can be downloaded at: http://www.eff.org/files/filenode/studios_v_cablevision/cablevision-decision.pdf


5 Daily Tech, “Good Bye HDMI, Hello HDBaseT,” July 2, 2010, http://www.digitaltrends.com/home-theater/goodbye-hdmi-hello-hdbaset/. (Accessed October 27, 2011) The alliance of companies that changed the standard maintain a site promoting the standard, the politics of which are framed in technical terms. The power relations at stake in the discussion of data compression are beyond the scope of this paper. The documents can be found at: http://www.hdbaset.org/


9 Sloan Commission, note 13.

10 In Loretto v. Teleprompter Manhattan CATV corp. the Court established that installation of a cable system as per the law of a state was a regulatory taking, but that the impact was negligible as it increased the value of the apartment building. There will be a more robust discussion of regulatory takings in the discussion of The Fourth Report and Order chapter four.


12 Ibid, 435. Many of these abuses were presented by a VP from a large cable company to a law school class that I was in. There is documentation of many of them.
13 Ibid, 434.


15 LOS ANGELES v. PREFERRED COMMUNICATIONS, INC., 476 U.S. 488 (1986)

16 There is a fundamental disconnect in the Court’s positions from Midwest Video and forward, if technological capacity has liquidated the need for debate because all channels are included, then how in FCC v Midwest Cable can the Court conclude that the choice of channels is a meaningful form of speech? This directly implicates Preferred, and is also a critical conceptual structure in debates over net neutrality.

17 Ibid.


22 Sony, 464.


24 Ibid, page 3 via independent pagination.


29 A host of works in disruptive innovation theory would attempt to explain this transformation. This chapter is written from the perspective of continuity, rather than paradigmatic change.

30 Patent pools are really curious because they let folks into the market but they create the conditions of the market as a form of legitimate collusion.
The TiVo-EchoStar dispute was eventually settled for five-hundred million dollars. The dispute is a textbook reason why a patent pool for a new innovation is productive. This is even more the case in cell phone related patent disputes which could be devastating for the market. Reuters, “Dish and EchoStar Settle Patent Dispute with TiVo,” May 2, 2011. http://www.nytimes.com/2011/05/03/technology/03patent.html

The capital pooling via IPR idea is key to understanding the production industry today. It only makes sense because the Hollywood firms work as a holding company, rather than a production company. Many features of negotiations have been off-loaded to the talent agencies, which are now often facilitating transaction costs. This is one of the greatest examples of firm formation, which is also Coaseian.

See Boyle and Vaidyanthan.


d Cart oon Network and Cable News Network v. CSC Holdings and Cablevision, (2nd Cir. 2008), 8. Herein this decision is referred to as Cablevision. The copy of the decision used for this paper was downloaded from the Electronic Frontier Foundation, rather than from the Federal Reporter. It can be downloaded at: http://www.eff.org/files/filenode/studios_v_cablevision/cablevision-decision.pdf. (Accessed October 27, 2011)

Ibid, 8-9.


Ibid, 23.

Ibid, 27.


Ibid.


Brian Steinberg, “Comcast and NBC eye merger,” Advertising Age, October 5, 2009.


Ibid.


Ibid.


I would venture to say that it is likely that Hulu will be gone by the time my dissertation is printed out for defense. The market niche held by Hulu has been taken by other services, combined with their utterly weak revenue model, their future is dim. Netflix faces similar difficulties. The twist in Netflix case is that the equilibrium price for their services is artificially low. It will be interesting to see if the market ever can reach equilibrium when network and reputational effects are so strong.

Grego offers a fantastic reading of the coming era of cable payments to stations inside their broadcast area. The need for pools of capital to form to produce content is under-discussed by the public. Melissa Grego, “Retrans...The Battle to Save Broadcast Television,” Broadcasting & Cable, December 14, 2009, http://www.broadcastingcable.com/article/439916-Cover_Story_Retrans_The_Bloody_Battle_to_Save_Broadcast_Television.php?rssid=20065&q=grego


This is the punch line because DirecTV and Comcast are really quite similar.


This claim is based on my work as a media producer. While negotiating distribution with IndieFlix I was quoted a 70/30 per-play revenue split for distribution via
iTunes, Netflix, Amazon’s Cloud Resource, and several other venues. Since this was with a distributor, it would be two layers of 70/30 for me, and one layer for a larger firm. In practice this means that I might sell my film through iTunes for two dollars, I would receive ninety-eight cents after Apple and IndieFlix took their cut of my two dollars. For a firm like Comcast, they would likely keep $1.40 or more per episode purchased through this apparently liberating technology. Since most carriage fees are around sixty-five cents per channel (save ESPN at nearly three dollars) the purchase of a single program by a cord cutter would more than double the revenue that they sought to preclude reaching the media conglomerate. This is the failure of the romantic flavor of cord cutting; it actually increases media company revenue.

59 Ibid, 2. This article is particularly terrible, and I quote it because it traffics in links to press release level articles and bourgeois dreams of publicity. The comments on the article are particularly nice as they demonstrate the utter factual failures of the essay.


62 Timothy Havens, & Amanda Lotz, (2011). Understanding media industries. New York: Oxford University Press. Havens & Lotz report that Fox had ventured that they could get co-production from a Middle Eastern country to replace their debt. What is so difficult about these matters is our dependence on industry sources. Hopefully, a rigorous approach to reading financial documents will displace our reliance on ethnographic and industry sources. This is not to say that industry studies that use interview evidence are bad, but that we might have an alternative empirical basis for our work if we use public texts, rather than private stories.

63 Lotz, The Television Will Be Revolutionized, 148. The key distinction to parse here is between demand as a function of absolute value and relative advantage over similarly positioned programming. If further evidence need be marshaled, consult the SEC filings of CBS, particularly their 10-K forms.
THE ETERNAL RETURN OF THE PUBLIC

In this mood, the notion that the citizens of a political community could still exercise collective influence over their social destiny through the democratic process is also being denounced by intellectuals as a misguided Enlightenment inheritance. Liberal confidence in the idea of an autonomous life is now confined to the individual freedom of choice of consumers who are living off the drip-feed of contingent opportunity structures...In our own countries, too, the national press, which until now has been the backbone of democratic discourse, is in severe danger. No one has yet come up with a business model that would ensure the survival of the important national newspapers on the internet.

Jürgen Habermas, from an interview with Stuart Jeffries, April 30, 2010

This resignation without hope is the last word of the great revolutionary. The century was incapable of responding to the new technological possibilities with a new social order. That is why the last word was left to the errant negotiators between old and new who are at the heart of these phantasmagorias. The world is dominated by its phantasmagorias – this, to make use of Baudelaire’s term is “modernity.”

Walter Benjamin, *Paris Capital of the Nineteenth Century*

It is revealing that in an interview, a rarity for Habermas, he would connect the fate of liberal democracy and online business models. The fate of liberal democratic societies does not depend exclusively on the force of democracy in history, but on the technologies of publicity that form the public sphere. This was also the case at the turn of the last century, where the nineteenth century social order was unable to adapt to the force of new technological possibilities. For Benjamin this struggle between old and new is modernity. In the epigraph for chapter one, Buck-Morss frames this relationship between old and new as an ongoing political struggle, which can only be ended if the contradictions that founded the community are resolved. Modernism and post-modernism are merely political positions locked in an ongoing struggle. At the conclusion of the interview Habermas is cautiously optimistic, as the mechanisms of public sphere could
lead to effective economic reform and political change even without the guarantees of the analog world. In the contemporary public sphere, the force diffusing the potential for public action is no longer the perverse effect of the games of the welfare state, but the contingency of the market. Habermas’s optimism shows that this interview is not his last word, but a call for renewed democratic activity.

At the outset this dissertation was framed in explicitly Benjaminian terms. This choice of terms was not intended to explicate the work of Benjamin, but to provide an approach for constructing a treatise on a crucial cultural idea in this time period. My rationale for this choice has several elements. First, Benjamin’s surrealism allows a critic to operate in a world where connections are being made between things on the basis of perception alone. This view of connection is expansive. In the Paris essay Benjamin connects the same domains that are connected in this dissertation, publicity, law, aesthetics, interior design, urban planning, and bourgeois dreams of the future. By keeping the view of connections expansive, Benjamin is able to avoid the hubris of humans, and through this gesture we can get a more expansive view of the networks that form the world. The Proustian version of writerly attention called for in the Arcades project offers a more detail-oriented version of events, offering stronger insights about affect. Second, Benjamin is not an orthodox materialist. Benjamin is not a Marxist. Benjamin was well positioned to avoid many of the pitfalls of structuralism that haunted Marxism in the later half of the twentieth century. History is not driven by piles of objects, but by politics, economics, aesthetics, and any number of other features that cannot be reduced to their exclusively economic dimensions. It is important to note that Benjamin proposes a version of economic critique that does not come from the
proletariat; it is the bourgeois dream that collapses under its own weight. Ruins are the places where the dream world would fall apart because of the conditions of possibility for the dream in the first place. Feedback loops are a fine example here, and the Jiffy Lube story from chapter four is a good example. The dream of unlimited profit contained the idea of unlimited growth, which is impossible. Jiffy Lube was not caught because someone turned them in, but because the fraud as dream ran its course. There were simply no good places for new oil change garages. Although this is just one example, the plans of the Bourgeoisie highlighted in this dissertation are often designed to fail. Third, Benjamin is a grand theorist. Much like Habermas, Benjamin was willing to take risks to make arguments about the human condition in contemporary existence -- any number of routes can get to that point. What one cannot do is take all the routes, making the choice to engage the fundamental question of the humanities requires a decision. Making a strategic choice about the archive is an important step and functions as the critical distinction between this dissertation and the creation of a collection of factoids.

The essays in this dissertation should be taken as attempts at extending the story of the public sphere, and to make it a viable factor in contemporary debates where it has fallen out of fashion. Considering the public sphere forces scholars to seriously evaluate the rhetorical dimensions of how worlds are formed and to attend to the lateral connections that make our worlds possible. It is apropos that this is developed in the context of the digital, a term that is defining our world in a multitude of incongruent ways.

At the conclusion of the introduction I proposed three questions: in what ways has the digital transition been a continuation of the structural transformation of the public
sphere? How does this reflect on the meaning of the digital? And, what does this mean for the prospect for politics? The chapters have attempted to answer these questions by focusing on particular material and rhetorical features of late twentieth century and early twenty first century life. The answer to each question will be summarized as one of the following sections.

The Digital Transition as Structural Transformation?

In the introduction of this dissertation, Habermas’s *The Structural Transformation of the Public Sphere* is presented as an idealized case for the operation of the literary public sphere. His historical narrative is provocative as it proposes that modernity is the result of a slow moving process of educational and technological changes, rather than a paradigm shift. Central to Habermas contention is the idea that there is a public sphere and a range of distinct social mechanisms that connect with it functioning as civil society, public culture, and the lifeworld. This view of the structure of public life is productive for rhetorical scholars as it can show the development of discourses across the system, from their affective nursery in the lifeworld to the moment of decision in the public sphere. Rationality in this reading of Habermas’s work is a mood that must be cultivated, rather than the original position of the public. This is not the Habermas that so many scholars see fit to critique on the grounds of being an idealist, but the Habermas who focuses on the intersubjective and rhetorical aspects of the production of the public sphere.

As noted in the introduction public culture and academic studies of the public after the end of the cold war were in an intractable crisis. The prospects for world obliterating nuclear war provided incredible sources of energy, topics, and scholarly attention. After the end of the war, the fragility of publics, rather than their durability is a
central scholarly theme. Connecting new social movements on the basis of environmental
crisis or disease is far more difficult than connecting them on the basis of nuclear
destruction. Late analog culture was faced with a creeping sense of illegitimacy and
cultural institutions that had been paramount began to decline. The mid 1990s saw the
proliferation of cable television channels, strife between the state and separatist groups,
and the impeachment of Bill Clinton. I want to be clear here, this dissertation is in no way
a nostalgic account of the 1990s or of analog public culture. The collapse of democratic
legitimacy that was at hand in twenty years ago is the same that we see today, and has a
trajectory that goes back decades, if not longer. Publicity, the lifeblood of the public
sphere and bourgeois dream number one is both the agent of democratic decline and the
salve. Pharmakon returns.

The rapid expansion of media vectors that made a material circuit breaker for the
feedback loop are gone and the old standbys of the rational public sphere like
professionalism in journalism or the economic limits on program production to appeal to
a mass audience have been substantially weakened. In the worst cases, the dialectical
tensions that had maintained the balance and stabilized the relationships between the
public sphere, civil society, economic exchange, and the lifeworld have become fixed.
Even as the imaginary basis for the public sphere was eroding, the public sphere
continues to make decisions that have legal force. With the mechanisms of analog public
culture weakened, most of the world still held together. It would only make sense that
scholars would posit theories of the public sphere that would be self-organizing since the
organizational mechanisms that we had known were seemingly off-line.
Chapters four and five contend that the public sphere actually has retained many of the same structural elements that it once had. Companies with money still produce media content that is a commodity for purchase. The most meaningful change on this front is that the companies have operated by a post-Fordist logic, whereby they dispose of depreciable capital. Owners no longer count their wealth through an inventory of goods or tools, but through an inventory of patents, copyrights, and other licenses to litigate. The profit strategy for companies consists not of colonizing the lifeworld by means of systematic coercion, but through the assignment of intellectual property rights to elements of public culture itself. In the past systemic actors attempted to influence public opinion, now they treat it as a material for sale. Paid access distribution systems have now taken the place of shareable media and free access broadcast. By exploring the evolution of new cable technologies and satellite we can find that the future of the public sphere is not tied to the access of signals, but to the function of the wired communication network, the key vector for the internet. The suggestion for these chapters is that television as a form is migrating to the Internet, and that this migration will only accelerate the fragmentation of the audience. Outreach to produce new political centers on the Internet will be critical for the public sphere of the future. This view of distribution politics suggests that the premier issue for media theory and rhetorical contact in the future is net neutrality, or some other political position that speaks to the question of the quantization of the political voice.

Chapter three focused on the idea that technologies like printing are no longer held in just a few hands. Cheap non-linear editors have made printers of us all. This proliferation of editing technology would seem to allow a great surge in the variety of
content produced and jobs available. Unfortunately, just as the digital technology makes everyone a possible publisher it forces the burden of high production values on the public writ large. Further, the rise of these micro-level production outlets does not enable original production, but the use of below the line workers as interchangeable parts. The ownership of the means of media production by the workers has had the unfortunate effect of mechanizing the workers, rather than workerizing the mechanisms of media business.

Chapter two established the fundamental continuity of the lifeworld between the analog and the digital. Similar pretensions have prevailed in the home since Victorian times. Back then, people used black walnut to show that they had money, now they use expensive looking technologies. What this chapter demonstrates about these publics is that they are attentive to meta-discourses. The story in Better Homes and Gardens runs the narrative from start to finish, at first technology should be hidden it is uncouth for an aspiring bourgeois person to watch television. At the mid-point, the digitality of the technology allows it to appear as outside of the established trajectory of public culture. Finally, the use of the technology is taken as a personality trait, and thus much like how personality decorating allowed the gas light in the drawing room; digital signal processing would allow the television in the living room. The lifeworld in this story is constantly circling between romanticism and rationalism. Homes are the stages where struggles between leisure and labor are played out.

These developments in the public sphere tend to confirm the Benjaminian reading strategy. Classical Marxist conceptions about culture and ownership are less relevant, and seemingly unimportant for the operation of media business and television in the digital
world. The differences in the legal imaginary can be instructive here; the decisions of Courts and regulatory bodies about the progression toward digital technology have little to do with precluding inference in the signal. The decisions hinge on how we describe technologies and how we imagine their operation. Once we set aside all pretenses that the digital transition is about a technological progression we can see clearly that it is about a marker in human judgment, like the public sphere has always been.

In terms of the disciplinary arguments from the introduction: that this dissertation reactivates a rhetorical tradition in television studies, and contributes to the digital turn in rhetorical theory; the similarity of the model with the structural transformation is important. The rhetorical approach to the formation of publics offers a vocabulary and a meaningful disciplinary history, which connects the various contexts inherent in the digital world. Rhetoric can help the discussion by adding a sense of continuity. At the same time, rhetoric enriches the discussion by bringing both subjective and objective formulations of the rhetorical situation to bear on television. Here the lack of continuity in rhetoric is productive. For rhetorical scholars, television offers a powerful source of publically available meanings, and the historical record of television as a force for the production of publics is well known. The capacity for television to be changed is both a great strength for rhetorical study and a weakness, the medium changes with incredible speed as this dissertation has noted. Taking instability into account in the inaugural phase of a study will be critical for rhetoric to meet the digital challenge. New forms of television are not new media, but emerging media – the forces that are pushing their existence forward are highly complex and interdependent. Every digital media text will
require Benjamin’s dialectical approach – continuity, discontinuity, and trajectory will be key terms.

**What is the Digital?**

The digital is simultaneously a new signal processing technology and a speech act. Make no mistake -- there are important technological differences inherent in digital technology as is evidenced in chapters three, four, and five. This has meant less access to public culture for some, more work for others, and a host of new and fascinating possibilities. The idea that technological progress could eliminate scarcity based media regulation is increasingly real; the other side of that sword for media companies is that unlimited bandwidth eliminates the justification for their claim to editorial voice. The digital is alien. It destroys the media world, as we knew it. Digital signal processing becomes a definitive way to show that a certain media form really is new media. And just as much as scholars might enjoy pushing on the idea of new media, the digital really is new and in this cultural moment this is a difference that matters. In this sense the digital is a speech act. We pronounce something digital and it becomes new and different. As a liminal thing the digital works by defying categorization, at one moment it is a simple silicon chip, then it phase shifts to become a marker for social change. Digital rhetoric and digital media studies are distinct from digital production. The first two are political positions; the third is a physical fact. That sentence is also reversible, rhetorical and media studies scholarly works are produced and distributed by digital means, and digital production is a political argument to persuade workers to ask for less money. As a speech act the duality between the discursive aspect of naming and the physical aspect of the technology is essential, they sustain and legitimate each other.8
What does this mean for politics?

This dissertation has established that the public sphere after the analog is not self-organizing, and further that economic institutions have undergone fundamental changes that have been rippling through the economy as a whole. The conclusion of chapter five argues that this is important because it shows that the bourgeoisie are trying to imagine distribution itself out of existence. Immediacy would prevail, both in the delivery of physical stuff, as well as in the features of programs. As a form of impatience this is troubling, immediate gratification does not bode well for any project that takes more than an instant to complete. Post-experience goods that take more than an instant to consume look like a bad investment, which would be a factor in the rise of advice columns for affluent teens to skip college and start their own businesses. If politics become a race for rapid pleasure then any number of narcotizing platforms lie ahead for Americans. Suspending education and infrastructure development would make perfect sense. Distributing vouchers for wine coolers and speedboats would be the perfect economic recovery project.

What cuts against this future is the humanity inherent in the digital transition. As was established thorough out this dissertation, digital technology will not lead to substantive equality, or the end of antagonism. The contradictions of community will remain as active as they ever have. The digital is persuasive, it is not necessary for all those confronted by a fancy new microchip to take up certain ideological positions. The material effects of digital signal processing are quite real; the legitimacy of rhetorical forms of the digital depends on that physicality. Intervention into politics requires an attention to the persuasive aspects of the digital. This dissertation has been predicated on
the idea that paying attention to the dreams of the digital transition would reveal the values inherent in our upcoming digital society. Bourgeois society values cheap, beautiful things that they can perceive to be in good taste. As an opening for a political debate this is excellent, the existential hollowness of this way of life demands consideration and justification in the face of a grounded critique. Politics depend on what they always have, getting a sense about a sensibility. Since this is a struggle over the inflection of a cultural touchstone this conclusion is hopeful. Political struggle can always be successful if we are sure not to mistake the materiality for rhetoric, and rhetoric for materiality. As long as communication as understood to be a human capacity then all will not be lost, debates will continue and the ongoing struggle between political positions will continue for the foreseeable future.

The intractability of human communication and our endless circling between dialectical positions can be found in studies of the shopping mall, coffee houses, television, and many other everyday things. These circles will never end, and that is the promise and the peril of the digital.
Notes

1 This is an important footnote and it accomplishes a few things: it invokes Nietzsche and allows us to get a handle on the second epigraph. The great revolutionary that Benjamin speaks of is Blanqui, who theorized eternal return in a very compelling way years before Nietzsche. A key reference to eternal return via Blanqui from the Arcades is at D10a,1: “Life within the magic circle of eternal return makes for an existence that never emerges from the auratic.” This is a fantastic idea because it confirms that the auratic is not a exclusively negative feature of the work of art but is inherent in the production of democratic potential.


3 Blanqui appears in the 1939 version of the essay, which is really more about access to an American patron than his dream theory, which we could say was likely Adorno. What the 1939 version does so effectively is to challenge the primacy of the waking metaphors from the 1935 version, which is not to say that there isn’t utility in that view, but that late Benjamin while adopting more Marxist categories actually moved further from a Marxist theory of ideology. A wonderful essay on this issue: Margaret Cohen, “Walter Benjamin’s Phantasmagoria,” New German Critique 48(3), 1989. 87-108.

4 To be completely clear here, Habermas also quotes Luhmann in this interview and reconstructs what some would think of as a declinist narrative for the public sphere. I elected to agree with the interviewer that Habermas was optimistic, but a pessimistic reading could also be easily taken of this interview.

5 Several versions of Marxism are discussed in this dissertation. The strongest pay attention to naming and imagination. The weakest are tautological.


8 This view of speech act theory is supported by Shoshanna Felman, who contends that the speech act is as much about the promise as the seduction. In the context of the seduction, the story of Don Juan is particularly instructive. It is not merely his promise to marry the woman that makes him appealing, all too many would falsely promise. The difference between Don Juan and other men the physical trace, particularly his mouth. This is much akin to the relationship between the physical and rhetorical aspects of the digital. Simply saying that something is new or digital isn’t enough, by referring to a particular property the speech act is far more effective. Shoshanna Felman, The Scandal of the Speaking Body, (Stanford: Stanford University Press, 2002).
BIBLIOGRAPHY


Bateson, Gregory. “Number is different from quantity.” *CoEvolution Quarterly* (Spring 1978): 44-46.


Conaster, Trey. “There’s no ‘I’ in Information: some naysayings for new media studies.” *New Media and Society* 12, no. 3 (2010).


Englert, Roy T. *Economist’s Amicus Brief in Eldred v Ashcroft on behalf of the petitioners*. Amicus Curiae Brief, 2002.


*FCC v. Sander Brothers Radio Station* 470 (United States Supreme Court 1940).


Flint, Joe. “Mr. McMahon wants to take the ‘wrestling’ out of WWE.” *Los Angeles Times*, April 7, 2011.


George, Steven, and Murphy, Myatt. 2004. “What’s in Santa’s Sack?” Better Homes and Gardens, December, 123.


Gregg, Melissa. “A mundane voice.” Cultural Studies 12, no. 3 (2010).


———. “From chaos to control”, 2009.

———. “Lamps around the TV”, 2009.


Shakespeare, William. *As You Like It*, n.d.


