The Piratical Ethos: Textual Activity and Intellectual Property in Digital Environments

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ABSTRACT

The Piratical Ethos: Textual Activity and Intellectual Property in Digital Environments examines the definition, function, and application of intellectual property in contexts of digitally mediated social production. With a focus on immaterial production - or the forms of coordinated social activity employed to produce knowledge and information in the networked information economy - this project ultimately aims to demonstrate how current intellectual property paradigms must be rearticulated for an age of digital (re)production. By considering the themes of "Piracy," "Intellectual Property," and "Distributed Social Production" this dissertation provides an overview of the intersection between peer production and intellectual property today. Next, this project develops and implements a communicational-mediational research methodology to theorize how both discursive and material data lend themselves to more nuanced understandings of the ways that technologies of communication and coordination effect attitudes toward intellectual property. After establishing both a methodology and an interdisciplinary grounding for the themes of the work, this dissertation presents a grounded theoretic analysis of piratical discourse to reveal what I call the "piratical ethos" or the guiding attitudes of individuals actively contesting intellectual property in piratical acts of distributed social production. Congruently, this work also investigates the material dynamics of piratical activity by analyzing the cultural-historical activity systems wherein piratical subjectivity emerges, emphasizing the agenic capacity of interfacial technologies at the scales of user and system. Exploring the attitudes of piratical subjects and the technological genres that mediate piratical activity, I contend that the conclusions drawn from The Piratical Ethos can assist Writing Studies researchers with developing novel methodologies to study the intersections of intellectual property and distributed social production in digital worlds.
THE PIRATICAL ETHOS: TEXTUAL ACTIVITY AND INTELLECTUAL PROPERTY IN DIGITAL ENVIRONMENTS

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My time in graduate school has been marked with a long history of collaboration and coordination among my cohort, the Syracuse Writing Program faculty, generous readers and responders from the wider discipline, my friends, my family, my context and myself. This work bears the inscriptions of that working-together as it couldn't exist if it weren't for the generous contributions of all the folks that have made this work through me. I am deeply indebted to all of you.

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I would also like to show gratitude to the other members of my committee. Becky Howard provided me with extensive theoretical and practical knowledge of how Writing Studies engages intellectual property and plagiarism. Discussions in her office on the economic versus moral nature of citation and attribution have fundamentally shaped my own approach to source use in digital media composition both personally and pedagogically. Iswari Pandey provided a transnational perspective on my research, encouraging me to think seriously about the function and operation of intellectual property outside of Western metrics. Iswari also introduced me to some of the most exciting theory I've come across in my young academic career - and he's a great conversationalist! I'll certainly miss discussing international relations, South Asian politics, and global resistance movements as the snow fell outside his office window. I first met Bradley Dilger at the Dartmouth Seminar for Composition Research in Summer 2011. He and I struggled through multiple rounds of coding qualitative data with varying levels of success. Beyond the incredible experience of the Dartmouth Seminar, I thoroughly enjoyed wiling away the afternoon hours in conversation with Bradley over Long Trail Double IPA. I look forward to future collaborations - both academic and fraternal.

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0. Introduction

Computer mediated activity is increasingly characterized by social coordination over networked interfaces that facilitate multimodal production of objects. These objects often range beyond what we've traditionally defined as "texts" by expanding our notion of writing beyond alphabetic, filmic, and aural creations toward coded objects such as browser plugins and social networking tools. Perhaps most interestingly, "texts" in the digital world are often socially curated, peer collaborations that take the form of archives. Digital archives are of particular significance to researchers in Writing Studies as they provide sites to investigate a range of disciplinary concerns, most notably: 1) How are intellectual property and authorship reconfigured when metadata creation and archival curation supersede "big-A" Authorial creation?; and 2) How do we reconceptualize the Subject and Agency in moments of distributed peer production where digital tools mediate experience and community attitudes influence individual participation as well as tool production and use?

In light of these research concerns, it is somewhat surprising that while a handful of book-length works and multiple academic journal articles found in the pages of Computers & Composition, Kairos, and College Composition and Communication (see, e.g., Sullivan & Porter 1997; Wysocki, Johnson-Eilola, Selfe, & Sirc 2004; McKee & DeVoss 2007) produce insights into digital writing research methodologies, relatively few develop methodologies to trace acts of distributed social production and archival curation in digital environments. Despite an ever-increasing amount of evidence that distributed social coordination characterizes digital writing in networked information economies (see, e.g., Allen 1983; Drucker 1988; Johnson-Eilola 2005; Benkler 2006; Tapscott & Williams 2006) and that these digital writings are increasingly commons-based (Benkler 2006; Moxley 2008; Hardt and Negri 2011), specific methodologies for locating digital writers and digital writings inside such sites of activity go largely unarticulated1. If Writing Studies scholars value collaboratively created digital texts such as

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1 Kennedy (2009, forthcoming) explores commons-based writing in both digital and analog environments in her studies of Wikipedia and the encyclopedic tradition. Relying on rhetorical criticism and historical comparison, Kennedy's research provides one possible methodology for exploring the dynamics of distributed peer production in digital environments.
individual Wikipedia articles or the entire Archive.org collection as promising sites of digital writing research, we should develop novel methods and methodologies for investigating some of our core disciplinary concerns; namely, the writing subject, writerly subjectivity, agency, and attitude. It is toward that end that this dissertation proceeds.

The rise of networked electronic communication in recent years has altered the worlds of work and play. By flattening time and space, internet technologies provide individuals the ability to connect to other individuals who share an affinity, regardless of temporal, spatial, and cultural distance. This flattening produces an entire host of fascinating hybrid associations, drawing together disparate actors into virtual networks centered around a variety of different activities. So that you have a more tangible example of the kind of peer production networks I'm considering in this project, consider the recent examples of World of Warcraft, Wikipedia.org, and Archive.org. Game worlds like World of Warcraft (WoW), where eight million subscribers implement complex, real-time strategies to combat the enemies of Azeroth, Northrend, and Pandaria, are fascinating leisure-based sites of peer production. While questing, or "raiding," is a core element of WoW gameplay, so is participation in community-based systems such as guild membership, through which players form associations, creating a social atmosphere in which to enjoy the game^2. Of course, not all collaborations over virtual networks are created by entertainment giants like Square Enix or Blizzard Entertainment. Though not a game, Wikipedia is also a massive distributed peer production whose outputs are knowledge production and community formation rather than quest completion and familiarization with the formalized game logics.

As the world's largest peer-produced encyclopedia, Wikipedia draws volunteers into systems of knowledge production, creating a user-generated archive whose approach to authorship is decentralized and whose scope is massive. The shared outcome for those participating in Wikipedia article creation and curation is simple: an open-access record of all of the knowledge in the world; however, membership in smaller, subject-specific communities allow users to connect to other individuals who share an interest in niche subjects. Through cycles of creation, division, revision, and consensus-building, Wikipedia

^2 For an extended consideration of community-based, social gaming, see Barton's Dungeons & Desktops (2008).
contributors often build social ties and discover virtual community, all while contributing to the largest repository of knowledge ever assembled.

Wikipedia is a participatory archive or a digital space populated with user-generated data that allows users to create, share, and connect with each other around content. In Wikipedia's case, that content is knowledge; however, other digital participatory archives, like their analog counterparts, are filled with media such as songs, books, movies, and pictures. As a participatory archive dedicated to digitizing all media whose intellectual property status has fallen into the public domain, Archive.org makes available over two million individual pieces of media to the digital public. Archive.org contents are often user-generated, as in the case of self-recordings; however, more often, these artifacts are digitizations of found media whose copyright status no longer protects against reuse or appropriation. Because the collection at Archive.org is so massive, visitors use a variety of sifting and search functionalities to quickly move through the archive to find media. These include technological tools like tagclouds and affinity maps that generate novel pathways of exploration and discovery, transforming user intention and creating serendipitous moments of media discovery. After finding the media they're after, users at Archive.org have the ability to directly download the content from Archive.org servers or can make use of the Bittorrent protocol to more quickly pull the content from other users who previously downloaded and are making available the media files. This complex ensemble of tools, motives, and purpose in sites like Archive.org make participatory archives fascinating sites to study human-technology interaction.

As a participatory archive, Archive.org provides visitors and contributors access to digital media artifacts in a way that Wikipedia does not; namely, individuals who access the site can acquire digital copies of audio, video, and image that are no longer under copyright protection. As many public intellectuals, copyleft advocates, and Writing Studies scholars point out, the availability of such digitized media are important to the continued health of the public domain inasmuch as their use, reuse,

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3 Reagle's work Good Faith Collaboration (2010) emphasizes the highly collaborative nature of Wikipedia, highlighting the importance of community and social ties as the most interesting aspect of the transition of encyclopedias from analog to digital environments.
appropriation, and reapplication in contemporary contexts creates novel forms of symbolic expression. By allowing culture to build on culture through artifactual reuse, the argument goes, creatives invigorate public dialogue and critical engagement with the galaxy of digitized artifacts that proliferate digital spaces.

While the reuse and reproducibility of media in the digital age is lauded by free culture advocates, other entities are less enthusiastic about the ease of replication and distribution facilitated by new information technologies like the participatory archive. Copyrightists from the culture industries as well as individual creators voice vociferous opposition to reuse of their media, be they a century old song like "Happy Birthday" or the film *The Matrix*. These intellectual property advocates exert their influence by coordinating with legislative bodies the world over to extend intellectual property protections, insuring against reuse of cultural artifacts without appropriate compensation. Despite copyright extensions, copyrightists continue to struggle against the kinds of media replication and proliferation made possible by the rise of participatory archives as the technologies of media reproduction widely available to lay users worldwide provide simple methods of copying and sharing content over digital networks.

In contrast to legal participatory archives like Archive.org and Wikipedia.org, illicit participatory archives also attract large numbers of web users searching for media still under intellectual property protection. Individuals who visit, take from, and contribute to these spaces are known colloquially as "pirates" and have long drawn the ire of copyright defenders the world over. Yet, as this research project goes on to demonstrate, internet pirates, and the networks they participate within, aren't exclusively "thieves" pilfering digitized media on the electronic seas; rather, internet pirates and piratical communities provide fascinating spaces of investigation into alternative attitudes toward intellectual property and the distributed dynamics of electronic peer production in contemporary participatory archives.

The purpose of this dissertation is to tease out the many threads that constitute the piratical knot of distributed peer production. As complex sites of digital writing and digital activity, piratical participatory archives draw attention to how technological mediations and attitudes toward intellectual
property intertwine, providing a novel example of how humans and non-humans coordinate their collective efforts toward the production of massive information objects. This intertwining has profound repercussions for the development of alternative attitudes toward intellectual property as well as the design and structure of mediating technologies in sites of distributed social production. To conduct this inquiry, I'll draw on a variety of methods and methodologies from Writing Studies as well as Anthropology and Sociology. In the process, I hope to bridge some of the methodological binaries rooted in conflict over the value of empirical versus hermeneutical research. I'll also make use of a variety of data in this study, relying on statements from pirates concerning their attitudes toward intellectual property to complicate the mainstream description of pirates as simple thieves. This data will also capture the multivalent and sometimes contradictory attitudes pirates evince toward intellectual property and piracy. I'll also rely on an analysis of new media technologies to draw out how agency is distributed across participatory archive networks. Drawing attention to the role of social technologies like folksonomic tagging systems, these analyses will highlight how user attitude and tool development are constitutive of one another. Taken collectively, the analysis of attitudes of piratical subjects and the agency distributed among technologies, individuals, and collectives coalesce into what I call "the piratical ethos," a rhetorical identity deeply imbricated in technological networks that is shaped from without, performed from within, and constantly involved in a state of technologically mediated transformation.

This project, if successful, presents a methodology for theorizing writing subjects, writerly subjectivity, and agency in sites of distributed peer production; further, it provides a complex rendering of attitudes toward intellectual property in sites of participatory archive creation and curation. Yet, without further methodological experimentation and analysis by other scholars as well as myself, the conclusions of this research project aren't generalizable beyond the present sites of research. Going forward, I hope future researchers will extend, refine, reject, and revise the methods, analysis, and conclusions of this inquiry into the dynamics of distributed activity in digital environments.

*Plan of Work*
1. Commons Based Peer Collaboration and Intellectual Property: Locating Contemporary Authorship, Ownership, and Textual Production

The opening chapter of the dissertation introduces the two main clusters of the research project: distributed social production and intellectual property. Considering distributed social production, chapter one explores the practice by reviewing literature related to its definition, intersection with rhetorical genre studies, and uptake in Writing Studies. In the second portion of the chapter, I review intellectual property in three movements: movement one explores authorship theory from the Enlightenment to the posthuman; movement two explores the disjunct between technological and social advance, drawing special attention to the differences between analog and digital intellectual property paradigms; movement three explores intellectual property in Rhetoric and Composition, paying special attention to work in collaborative authorship, technical communication, and piracy studies. The goal of this chapter is to provide readers a basis in existing literature concerning the under articulated connections and overlaps among processes of distributed social production and the contested plane of digital intellectual property policy.

2. On Streams of Language and Sociotechnical Ecologies in Writing Research

The second chapter of the dissertation provides an explanation of the methodology of this research project. Writing Studies research in the United States has a long history of oscillating between methodologies that adopt empiric or hermeneutic epistemologies. The inherent tension that results this methodological bifurcation organizes disciplinary camps, impacting research and scholarship, graduate program education, and broader institutional assessments of the field. The methodological division endures in digital writing research, focusing studies in this relatively new scene of writing on either writerly subjectivity or the writing subject. Utilizing both empirical and hermeneutical methods circumscribed by an Activity Theoretic orientation, the communicational-mediational methodology I describe in this chapter and employ in this research project produces outputs that unveil the attitudes and ideologies writing-subjects use to justify their participation in distributed peer productions while also paying close attention to the ways that distributed agency and tool-mediated activity construct the writerly subjectivity of those same individuals. This methodology maps the recursive oscillations between
writing-subject and writerly-subjectivity and offers a starting point for developing research methods and methodologies that consider distributed social production in digital environments in using qualitative and quantitative methods.

3. **Piracy Ahoy! The Piratical Ethos in Streams of Language**

The third chapter of the dissertation conducts an analysis of discourse related to intellectual property gathered from digital piracy communities. By conducting a quantitative analysis of qualitative data, this chapter renders an account of the *piratical subject* by exploring site user attitudes and ideologies concerning intellectual property and piracy. Varying attitudes toward intellectual property are produced from the data. The outputs of this analysis challenge mainstream articulations of the piratical *ethos*, drawing attention to the complex and often contradictory attitudes that pirates evince with respect to intellectual property. Special attention is paid to attitudes that convey resistance to intellectual property on technological and economic grounds.

4. **Piratical Activity Systems: Technological Mediation and Rhetorical Genres**

The fourth chapter of the dissertation carries out an analysis of the technological tools or mediating technologies that structure piratical activity in the same sites analyzed in chapter three. By conducting a rhetorical genre studies inflected analysis of tools at the meso and macro levels of activity, chapter four produces an account of the distributed subjectivity of piratical users; or, said differently, this chapter renders an account of the *piratical subjectivity*. The outputs of this analysis support notions of tools as transformational/ideological not tools as instrumental. Special attention is paid to the role of interface for understanding new media rhetorical genres; further, Activity Theory is used to coordinate piratical attitudes and technological tools with communities of practice in the digital wilds[^4]. This chapter also draws attention to the importance of participatory archives in sites of distributed social production.

[^4]: Following many conversations with Krista Kennedy on this topic, I define the "wilds" of digital activity as the spaces wherein individuals coordinate activity to carry out collective action outside the boundaries of formal and institutional settings. Examples of these spaces include participatory archives like Wikipedia or the Question.c'd piratical archive. They also include MMORPGs like World of Warcraft and scientific collaborations like the SETI (Search for Extraterrestrial Intelligence) Institute.
highlighting the ways that tool-based rhetorical genre ecologies coordinate user activity at meso and macro levels of scale.

5. Conclusion: Implications for Digital Intellectual Property Policy, Technical Communications Research, and Methodology in the Digital Humanities

The final chapter of the dissertation anticipates sites of future research and gestures toward other areas where Writing Studies might take advantage of alternative intellectual property paradigms and distributed social production to move itself forward at the departmental and disciplinary levels. From the methodological perspective, chapter five explores the epistemological and ontological repercussions of communicational-mediational research methodologies, emphasizing the role that such methodologies might play in future researches in the digital humanities. Future sites of research include ethnographic observational analysis of distributed social production in corporate and institutional settings to investigate the role of user attitude in tool development as well as the capacity of tools to affect user attitudes. This future research could be influential in developing new schemes for distributed production and curation in formal, institutional sites of technical communication and interface design. The implications of this research for Writing Studies are myriad; however, I speculate in this closing chapter that the attitudes and mediational tools that guide piratical practice aren't so different from the ideologies and collaborative platforms used by the open access movement in Humanities publishing. As such, the final section of the dissertation anticipates these convergences, proposes new research trajectories, and speculates on a broader open access ethos that characterizes participation in distributed sites of social production in the digital age.
1. Commons Based Peer Collaboration and Intellectual Property: Locating Contemporary Authorship, Ownership, and Textual Production

Introduction: Orienteering Point-of-View

In the years following the First World War, former Swedish military Major Ernst Killander turned to orienteering in an effort to salvage what he perceived as waning interest by young people in athletics. Using traditional topographical maps and a compass, Killander sketched out the contours of orienteering, a sport that requires individual participants to navigate from one point to another over diverse and unfamiliar terrain at speed. Visiting different "control points," or checkpoints, orienteering competitors must correlate the material experience of wilderness hiking with graphical representations of the surrounding area in map form as well as the technological data produced by using the compass. In other words, orienteering requires actors to move quickly through unfamiliar, often wilderness, territory checking in at important stops aided only by two navigational technologies: compass and map.

In this introductory chapter, I hope to provide my reader with both the compass and map for moving through the underexplored conceptual and material terrains of this dissertation. We'll be moving at speed, attempting to cover a wide range of linked, but often underarticulated, practices, beliefs, and theories related to the ways that digital-born communities use technologies to create media archives. While navigating, we'll be checking in at various "control points," or topical networks that have important contributions to make concerning practices we'll observe in future chapters.

It is important to note that the various control points that we'll visit aren't subordinated to one another. Put another way, the topical cores where we'll check in aren't in a relationship of hypotaxis; rather, they are linked but symmetrical constellations whose existence depends on their constitution in other control points. You might even think about the relationship between these different topical foci as different points-of-view from a pentadic perspective. Adopting Burke's dramatistic orientation means approaching each of these control points from their rhetorical situatedness as Act, Scene, Agent, Agency, Purpose, and/or Attitude; furthermore, it also means balancing the ratio of each element to another. Because this research project is intimately concerned with how individuals in digital-born communities
socially assemble texts and archives across digital networks, the literature review will emphasize Agency and Attitude as more weighty rhetorical elements to explore the Act(s) of Agents involved in textual coordination in the Scene of digital-born communities. Ultimately, this dissertation is concerned with the purpose of the entire drama that is distributed social production in digital spaces; however, this purpose cannot be illustrated in the literature review and will only be revealed after a deep analysis of Agent, Agency, and Attitudes throughout chapters Three, Four, and Five.

To begin the trek toward discovering this dissertation's purpose, as well as the Purpose of the communities I'm researching, we'll start with an in-depth analysis of Agency. While all of the pentadic elements are present and important to consider in this work, Agency is perhaps the most remarkably transformed and novel. In other words, the ratio of Agency to all other elements is markedly different in the move from traditional writing and authorship to distributed writing and networked authorship. After mapping out various control points that define distributed textual agency in the fields of Philosophy, Sociology, and Writing Studies, the literature review will shift to focus on Attitude. By exploring interrelated theories of authorship and intellectual property from legal, technological, and Writing Studies milieus, the second portion of the literature review will reveal what particular Attitudes govern Acts of textual production and ideologies of Actors in the Scene of digital coordination.

*Agency: Definitions and Potentials of Distributed Social Production*

Put simply, Agency is the "means or instruments used" by an Agent to perform an Act; or, simply, "how he [Agent] did it [Act]" (*Grammar* xv). When Agency is foregrounded in the analytic, other pentadic elements accommodate themselves to Agency's pragmatic logic. So, as Burke notes, the scene becomes the material Agents employ in the process of growth and adaptation (*Grammar* 287). Likewise, the Agent himself becomes a network of means, distributed to the service of other pentadic elements in the construction of what *appears* to be a unified Agency. In the following section, I'll review how different means - instruments, systems, texts, and technologies - problematize Cartesian theorizations of Agency when considered in the Scene of the networked information economy. Relying heavily on Benkler's work on commons-based peer production, this section will sketch the contours of distributed
social production to present Agency as a networked dynamic, a nexus of mediations that authorize Acts of Agents in distributed electronic environments.

Wikipedia, the largest and most general reference collection that exists on the Internet, houses over twenty one million articles on topics ranging from neuroscience and biochemistry to Norwegian Black Metal and 1960s protopunk. There are 283 language editions of the online encyclopedia and over 100,000 active contributors making pages, revising articles, and working through disagreements over site content in distributed\textsuperscript{5} instances of rhetorical negotiation. For all intents and purposes, it is the largest collaboratively authored text to have ever existed and it functions without an economic motive: Wikipedia is volunteer based.

Obviously, Wikipedia poses real problems for traditional theories of authorship, originality, and intellectual property\textsuperscript{6}. Because the creation, revision, and transformation of Wikipedia articles depends on often anonymous agents collaboratively creating texts by making both minor and major edits, Romantic notions of textual creation can't adequately accommodate the variety of authorships that litter individual Wikipedia articles\textsuperscript{7}; furthermore, because Wikipedia exists only in digital form and is open for anyone with an Internet connection to access and modify, use of "property" or "sweat of the brow" to justify

\begin{footnotesize}
\textsuperscript{5} In this dissertation, "distributed" refers to symbolic analytic work that takes place over digital networks. Distributed production stands in contradistinction to traditional models of industrial production wherein the factory or datacenter houses individual workers who must coordinate in live space-time to create products. Typically, distributed employees in the networked information economy are symbolic-analytic workers. Johnsen-Eilola defines this work in \textit{Datacloud} as activity that is comprised of gathering information, parsing it, circulating it, reorganizing it, seeing patterns in it, and gleaning concepts and new ways of work from it (19). Elsewhere, Johnson-Eilola characterizes symbolic-analytic workers thusly:

Symbolic-analytic workers identify and solve problems; in Reich's words, they are "strategic brokering" people. In some ways, symbolic analysts are similar to routine production workers because they typically compete on an international level for positions; because so much of the work of symbolic analysts takes place in computer-mediated communication, they are more likely to telecommute. But in most other ways symbolic analysts differ from the other job classifications in terms of status, responsibility, mobility, and pay. Because they are often highly recruited, they are more able to move from place to place because of their higher disposable incomes and because companies will often pay moving expenses for their services. In essence, symbolic analysts act out the movement away from history (where an employee often worked in the same location and position as their parent and even grandparent) to power over global information spaces. ("Symbolic-Analytic Work")

\textsuperscript{6} For an extended investigation into the complex knot of authorship, originality, and intellectual property on Wikipedia, see Kennedy (2009, forthcoming).

\textsuperscript{7} Kennedy's work on bot-written Wikipedia texts extends the ambiguity of Wikipedia authorship, highlighting the role of non-human agents in the construction of participatory archives. See Kennedy 2009.
\end{footnotesize}
copyright of entire articles is often impossible. In this section I'll explore what legal scholar Yochai Benkler calls "commons-based peer production" or what I refer to as "distributed social production" to draw attention to the myriad ways that agency in digital writing is often networked and distributed. This theoretical account of agency turns to rhetorical context to explain textual production; further, a pentadic orientation to agency demands revisions for analog intellectual property policy. To sketch the ways that agency operates in networked writing environments, I'll turn to four theoretical milieus:

- Definitions and Potentials: Definitional work on distributed social production from Yochai Benkler sketches how social engagements in digital spaces challenge traditional theories of political economy and intellectual property. By focusing on how and why human activity is coordinated in systems of distributed social production, theorists like Antonio Negri and Michael Hardt, as well as Benkler, offer instructive studies on the ways that new modes of social activity in digital environments have far-ranging theoretical implications for economics, political subjectivity, agency, and autonomy.

- Genre: Work in North American Genre Studies focuses on one element of distributed social production in order to connect alternative models of media creation to the field of Writing Studies. Intimately considering the function of texts-as-mediational-tools, North American Genre Studies highlights the role of discourse communities in the shaping of distributed social production while also revealing how genre is socially responsive and iteratively constructed.

- Technical Communication: Work by theorists and pedagogues in technical communication highlights how non-Romantic, collaborative, multiply authored textual creations have a long-standing history in corporate environments. Utilizing intellectual property theory devised for corporate textual production, scholarship in technical communication offers useful heuristics for understanding how agency functions in distributed social production when put to work in hierarchical, institutionalized environments.

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8 Some critics of intellectual property argue that "property" is rendered untenable by the non-rivalrous nature infinitely reproducible digital artifacts. The distributed nature of Wikipedia texts makes attribution to the sweat of a singular brow difficult, if not impossible. See Reyman (2008) for more information.
• Writing Studies: Work in Writing Studies takes up distributed social production primarily through studies of textual circulation and rhetorical velocity. By considering the wide array of discourse communities and activity systems where digital texts travel, Writing Studies scholarship highlights how analog intellectual property paradigms are inadequate for enforcing textual ownership because of myriad instances of distributed agency.

Taken together, these milieus provide a rich context for exploring the agenic dynamics of commons-based peer production in digital environments and demonstrate how distributed, coordinated textual creation challenges analog articulations of intellectual property.

As the brief description of Wikipedia provided earlier makes clear, distributed social production changes the ways that human beings collaborate in environments mediated by electronic communication technologies. In fact, distributed social production isn't merely a new form of social networking or an alternative production paradigm for those with a commitment to knowledge, an Internet connection, and some spare time on their hands; rather, according to some scholars, distributed social production is the future of human economic organization. Furthermore, because distributed social production may become the norm in globalized labor processes, some theorists argue that the move away from Fordist production to distributed social production will lead to emancipation of the individual from capitalist modes of subjectification - provided intellectual property doesn't prevent such transformation. This section will explore definitional work on distributed social production by considering the work of Yochai Benkler in *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. Benkler's work will provide explicit descriptions of distributed social production in electronic environments while also drawing out the implications of distributed social production for business and information technology policy. Next, I'll take up the work of philosophers Michael Hardt and Antonio Negri to consider the ramifications of distributed social production for political economy. This section will provide a post-Marxist view of the potential of distributed social production if allowed to flourish under a commons-based ethos.
In *Wealth of Networks*, Yochai Benkler, Law scholar and co-director of the Berkman Center for Internet and Society at Harvard University, argues that the modes of economic production in developed economies are shifting away from what he calls the "industrial information economy" toward "networked information economy." Rejecting the idea that information has only recently entered economics as a central commodity, Benkler outlines how culture industries throughout the 20th century created high production-value cultural "artifacts" - such as songs and film - in order to mass produce cheap copies for distribution or broadcast. In this "industrial information economy," capital intensive systems for initial production and then distribution demanded that intellectual property was protected to insure a healthy return on investment. Further, despite occupying an important segment of the economy, industrial information production still paled in comparison to physical industrial production during the Fordist and post-WWII period. Yet, as Benkler notes, transformations in the tools of production and distribution made possible by the development of new communication technologies challenged the old means of cultural production and shifted the economic sector away from natural resources based economies toward the creation of information. Benkler claims:

Radical decentralization of intelligence in our communications network and the centrality of information, knowledge, culture, and ideas to advanced economic activity are leading to a new stage of the information economy - the networked information economy . . . . The most important aspect of the networked information economy is the possibility it opens for reversing the control focus of the industrial information economy. In particular, it holds out the possibility of reversing two trends in cultural production central to the project of control: concentration and commercialization. (32)

Highlighting how the most valuable commodity in developed economies is now "human meaning and communication" expressed over a networked personal computer, Benkler argues that the shift toward the networked information economy was enabled by dramatic reductions in the price of communication and reproduction technologies. Because of this movement, computation, communication, and storage of
information dramatically reduced in cost so rapidly that regular, everyday users began to access the means of information production.

According to Benkler, these shifts have important and far-ranging consequences for individuals living in contemporary information economies. They include enhanced individual autonomy, a healthier, more vibrant public sphere, an increased sense of justice and pursuit of human development, and a more critical culture at large. Yet, as Benkler highlights, the production of goods or commodities in the networked information economy undergoes significant modification because information is inherently a non-rivalrous good, dependent only on the human ability to produce or replicate more information. Thus, shifts in economic production away from natural-resource dependent commodities such as oil and flour toward information production relies only on the human capacity to produce more knowledge through various forms of distributed, coordinated social action. This modification of human labor has important implications for intellectual property. As Benkler shows, cultural production in the networked information economy depends on reuse of information to create new forms of wealth - a wealth unbounded by the

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9 Benkler claims the ability for individuals to make rational choices outside of market logics and pressures increases in the NIE because distributed coordination toward the creation of non-economic productions results in an ability to act outside of the bounds of capital. In many senses, Benkler rejects the cultural pessimism typical of the Frankfurt School when posing how the NIE allows an escape from dialectic of consumption and regression posited by Adorno et al. 

10 Because the NIE allows for the creation of alternative media that exists outside the strict control of the content and culture industries, independent sources of information production challenge the dominant information consumption paradigm. Again rejecting the Frankfurt School's cultural pessimism in the late age of capital, Benkler argues that the creation of alternative forms and forums of media enhances public debate over important legal, political, and economic issues and provides important sites of resistance to the dominant narratives of the bourgeoisie. 

11 Benkler links the coordinated peer productions of the NIE to ethical behavior by claiming that the digital divide that currently separates information have and have-nots is increasingly bridged by nonmarket productions, non-proprietary open source initiatives and peer-produced education, healthcare, and agriculture resources. Nonmarket production has always played a greater role in the production of information goods than standard economic goods. Traditionally, non-market production includes such acts as street performances, storytelling by the campfire, religious texts that are given away, not sold, folk songs, free galleries, etc. What is changing in the networked information age is that means of producing and exchanging information, knowledge, and culture have not only been drastically reduced in price, but also have been widely dispersed throughout the population, allowing regular individuals to participate in their leisure time in non-market production. 

12 While the proliferation of independent media sources in the NIE leads, in theory, to the production of a more critical public sphere, Benkler claims that culture at large develops new modes of critical thinking and being because of its connection to others through what he calls "networked social relations." In essence, culture is rendered more critical in the NIE because it is: 1) more transparent; i.e., because many eyes and hands are involved in the production of any cultural artifact, it is better vetted and more clearly explored; and 2) more malleable; i.e., because of open-source commitments that ease the digital distribution and circulation of information in the NIE, individuals are better able to engage with culture through cycles of appropriation, creation, and redistribution. This results in a more critical culture, informed through active engagements with previous forms of cultural production.
resource thresholds of industrial capitalism. He argues that traditional economic theory posits that individuals participating in the creation of information goods in the industrial information economy traded off dynamic efficiency for static efficiency. In essence, this claim posits that exclusive rights to cultural commodities enforced through intellectual property doctrines like copyright ensure that a financial incentive motivates individuals, and more commonly companies, to produce more information goods for consumption; however, when the tools of (re)production and distribution cost substantially less, the barriers to creation of meaningful cultural commodities are lowered, facilitating an explosion of social production that fosters more social production. Using open source software movements as an example, Benkler argues that non-rivalrous, dynamic-efficiency economic models characterize the emergent networked information economy and provide new avenues for pursuing a utilitarian bargain between information producers and consumers - or, *prosumers*\(^{13}\). Benkler notes:

> Given the nonrivalry, those payments made today for yesterday's information are all inefficiently too high, from today's perspective. They are all above the marginal cost -- zero. Today's users of information are not only today's readers and consumers. They are also today's producers and tomorrow's innovators. Their net benefit from a strengthened patent or copyright regime, given not only increased potential revenues but also the increased costs, may be negative. If we pass a law that regulates information production too strictly, allowing its beneficiaries to impose prices that are too high on today's innovators, then we will have not only too little consumption of information today, but also too little production of information for tomorrow. (38)

In addition to outlining a theory of distributed social production and its effects on the developing digital economy, Benkler also considers *why and how* individuals participate in systems of production that challenge industrial information paradigms; in other words, he considers *agency* in the service of *motive*. Rejecting traditional liberal economic theories predicated on the existence of a profit motive, Benkler instead posits that internal - not external - motivations solicit participation in moments of distributed

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social production. Using the open-source software movement as his primary example, Benkler notes that while some programmers participate in software development projects because of their positions in managerial hierarchies or because of a profit motive, the "critical mass of participation" in open-source projects are intrinsically motivated, sustained by individual investment in the creation and sharing of information commodities that exist outside of the pressures of market and firm. Participation in these distributed systems suggests a new production paradigm that Benkler calls "commons-based peer production" (60). He describes this activity as a network of actors "radically decentralized, collaborative, and nonproprietary; based on sharing resources and outputs among widely distributed, loosely connected individuals who cooperate with each other without relying on either market signals or managerial commands" (ibid.).

In Benkler's terms, "Commons" refers to the anti-proprietary nature of information creation and undergirds the transformative potential of distributed social production in the networked information economy. Because no one central person or institution completely controls commonly held informational resources - such as open-source computer language or human knowledge - the use, reuse, modification, and rearticulation of any commonly held resource is disposed to use by anyone; because of this, common resources are antithetical to property both in concept and application. Structural and occupational transformations that include the proliferation of ubiquitous hardware, the almost infinite decrease in cost of digital reproduction, and the division of large-scale projects into modular units allow commons-based peer productions to thrive in digital environments that foster new social relations. Because these new relationalities challenge classical liberal theories of intellectual property and the economic models supported by analog intellectual property policy, the networked information economy necessarily has important ramifications for theories of political economy.

Michael Hardt and Antonio Negri are perhaps best known for their work Empire, the first in a trilogy concerned with developing a post-Marxist theory of political economy in the age of globalization. Though critiqued for an overemphasis on the non-empirical use of Deleuzian jargon and postmodern
theory, *Empire* and its successor *Multitude*, both posit a post-identitarian politics of negation-as-resistance against the pervasive tentacles of postindustrial, imperialist capitalism. While *Empire* and *Multitude* anticipate the import of distributed social production for the creation of alternative forms of political subjectivity, the third work in the trilogy, *Commonwealth*, more fully articulates the ways that a networked information economy might transform socioeconomic infrastructures for utilitarian ends.

Recognizing globalization's silver lining is the creation of a shared, common world, Hardt and Negri note that the project of *Commonwealth* is to "articulate an ethical project, an ethics of democratic political action within and against Empire" (vii). The "becoming-prince" of the multitude - or social body of a globalized world - must learn the art of self-rule and democratic social organization if it is to contest the abuses of transnational capital. Like Benkler, Hardt and Negri rely on an ethics of the common to explore potential transformations in the production of subjectivity - or biopower - that authorizes a movement beyond the tired frameworks of socialism and capitalism. Taking the "common" and "biopolitics" as its key terms, *Commonwealth* goes on to engage distributed social production by locating it in contemporary systems of capital and property before exploring its potentials for liberation.

Treading similar territory to Benkler in *The Wealth of Networks*, Hardt and Negri pose a central question for industrial information economies and Fordist modes of production: how has the creation of information products – education, communication technologies, software, media, etc. – complicated capital’s relationship with production? In other words, when value in capitalist systems is primarily invested in the production of immaterial products – rather than concrete, material creations – how does

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14 For a cogent critique concerning the inaccessibility of the work that still manages to highlight its transformative potential, see Zizek (2001).

15 While relying on a philosophy of immanence and becoming, Lotringer points out that Hardt and Negri's concept of Empire and Multitude still fall back on dialectical dualisms and thus fails to make the virtual actual outside the binary between capitalist imperialism and proletariat becoming. See the introduction to Virno (2004).

16 The "common" consists of the commons of nature as well as the common sociotechnical frameworks of language, knowledge, information, and affect. Achieving an ethics of the common would instantiate biopolitical reason, putting rationality 1) in the service of life not capital; and 2) at the service of ecological needs that include not only environmentalist causes but the entire ecology of social relations that arise between interactions among humans, technologies, and the lifeworld (126).
capital continue to capitalize? Extending their inquiry, Hardt and Negri turn to biopolitical\textsuperscript{17} production to argue that the excess of knowledge and information generated from biopolitical action supersedes the capacities of capital to capitalize, creating new subjectivities that stand outside the capitalist system. These “altermodern” subjectivities continue to engage in immaterial production on the periphery of capitalist activity, creating symbolic-analytic knowledges outside the loop of commodification in the non-privatized realm of the common. Because immaterial production coordinates social action, Marx's theories of dialectical materialism are again inverted: social relations are produced through engagement with immaterial production in environments mediated by material technologies.

If Hardt and Negri's \textit{Commonwealth} sketches out a theory of social, political, and economic change predicated on the move from material to immaterial creation, it closely resembles Benkler's networked information economy and stakes out the potential of commons-based production to fundamentally transform human experience. In the section "Metamorphoses of the Composition of Capital," Hardt and Negri highlight how biopolitical production of immaterial goods like information and knowledge is overtaking resource-based industrial capitalism in developed economies. While this transition is potentially liberatory, capitalism - and an attendant ethics predicated on property - isn't going down without a fight. The authors highlight how intellectual property continues to function as a stopgap measure that prevents biopolitical, immaterial production from fundamentally altering the existing world.

\textsuperscript{17} Hardt and Negri use this term in much the same was as Foucault: the biopolitical offers resistance to the hegemony of biopower; as such, the biopolitical allows for the production of new subjectivities that conceptualize the body beyond the commodity form of property and into all forms of social production and reproduction. In \textit{Empire} the authors what they find valuable in Foucault’s articulation of the biopolitical and biopower:

Foucault thus attempted to bring the problem of social reproduction and all the elements of the so-called superstructure back to within the material, fundamental structure and define this terrain not only in economic terms but also in cultural, corporeal, and subjective ones. We can thus understand how Foucault’s conception of the social whole was perfected and realized when in a subsequent phase of his work he uncovered the emerging outlines of the society of controls as a figure of power active throughout the entire biopolitics of society. (27)

Hardt and Negri further elaborate this point in \textit{Multitude} stating:

We recognize that \textit{immaterial labor} is a very ambiguous term in this regard. It might be better to understand the new hegemonic form as “biopolitical labor,” that is, labor that creates not only material goods but also relationships and ultimately social life itself. The term \textit{biopolitical} thus indicates that the traditional distinctions between the economic, the political, the social, and the cultural become increasingly blurred. (109, emphasis in original)

In \textit{Commonwealth} Hardt and Negri extend this analysis by tracing how capital’s failure to control biopolitical production can produce an altermodernity that creates an environment of revolution.
capitalist system. Because intellectual property doctrine continues to frame immaterial information products as material commodities, it applies proprietarian logics of distribution and control to non-market, collaborative productions. On account of this, the authors contend, intellectual property is the single largest obstacle to the creation of a utilitarian, commons-based social and economic system that balances the interests of both consumers and producers of information.

Hardt and Negri, as well as Benkler, offer compelling theoretical treatments of distributed social production - or commons-based peer production. While Benkler provides definitions and examples that illustrate this new form of electronically-mediated human production, Hardt and Negri locate it in the discourse of political economy from a post-Marxist perspective. All three authors posit the importance of distributed social production as liberatory and potentially transformative for society and political economy; further, all three authors consider the move toward immaterial production a structural transformation that capital - traditionally conceived - can't really accommodate. Finally, *The Wealth of Networks* and the *Empire* trilogy also recognize that intellectual property doctrine is the key element in the current economic system that delimits the agency of distributed social production, drawing attention to the disjunct between analog intellectual property doctrine and the realities of postindustrial work and play.

*Genre: Agency and the Networked Production of Artifacts*

As Benkler and Hardt and Negri point out, distributed social production transforms political and economic agency in networked information economies. While its complete transformative potential is currently limited by various overly-constrictive intellectual property policies, acts of collaborative creation coordinated over electronic communication networks draw attention to the new ways that human beings make meaning and exert agency in digital environments. Because this dissertation is concerned with distributed social production in terms of "texts"[^18] and "writing"[^19], this section of the literature review

[^18]: I adopt an expansive definition of texts, recognizing not only the alphabetic but also visual and archival assemblages as "text."
[^19]: Because my view of texts in this dissertation is expansive, so too is my view of writing. Writing includes creating any kind of mark or inscription in all of the aforementioned textual forms. In this sense, my definition of what
turns to Rhetorical Genre Studies as a way of exploring the *social* in distributed social production. By attending to the ways that discourse communities establish agency, modify textual artifacts, and contest textual genres, I attempt to bring together the act of distributed production with the individuals and collectivities that create them. This union is best achieved by paying close attention to written genres.

European structuralist literary theory and North American formalism both claimed the existence of a singular, identifiable "literariness" and a synchronic system of language. As systems of critique, both movements are rigid and ahistorical, providing little room for human agenics or an adequate exploration of difference. Until the 1960s, genre was largely defined by these literary movements as stable, formal, conventional, and fixed. In fact, little work in Western academic circles did much to question the definition and function of genre as it appeared to be an area beyond reproach - a settled academic terrain that functioned as a foundation for literary critique. Yet, in the early 1960s French theorists like Roman Jakobson and Julia Kristeva began to engage the work of early 20th century literary theorist Mikhail Bakhtin, and in the process unraveled the stability of genre by exploring the dialogic qualities of language.

Bakhtin offers a counterpoint to Saussure's contention that linguists and literary critics should pay close attention to the synchronous, not diachronic, axis of language. Arguing that all language exists in use, Bakhtin's theory rejects what he calls "abstract objectivism" of Saussure to offer a theory of language as *social, communicative action*. As he notes in *The Formal Method in Literary Scholarship*:

Not only the meaning of the utterance but also the very fact of its performance is of historical and social significance, as, in general, is the fact of its realization in the here and now, in given circumstances, at a certain historical moment, under the conditions of

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20 My work in Rhetorical Genre Studies in this section is a prelude to the methodological considerations I'll review in Chapter Two. Essentially, genre is important for understanding distributed social production because mediating technologies function as rhetorical genres in digital activity systems. As Activity Theoretic analysis is a core component of my methodology, it is important to establish a general overview of Rhetorical Genre Studies in Chapter One.
the given social situation. The very presence of the utterance is historically and socially significant. (120)

Written by Bakhtin/Volosinov in the late 1920s, Marxism and the Philosophy of Language argues that Saussurean linguistics is only useful as a way to discover the abstract theory of language - not language that is actually in use at particular times by particular people:

Linguistics, as Saussure conceives it, cannot have the utterance as its object of study. What constitutes the linguistic element in the utterance are the normatively identical forms of language present in it. Everything else is 'accessory and random'. . . . language stands in opposition to utterance in the same way as does that which is social to that which is individual. The utterance, therefore, is considered a thoroughly individual entity. (60-1)

In a late essay penned shortly before his death in 1975 entitled "Towards a Methodology for the Human Sciences," Bakhtin brings utterance, dialogism, and diachronic analysis together to argue that the empirical process of constructing human meaning is contextual, non-absolute, unfinalizeable, and always in flux. Positing a theory of language as arbitrary and dialogic, Bakhtin looks to establish a methodology that can be applied to trace the historical and social contexts that generate meaning in any given object of art.

Bakhtin's connection to Rhetorical Genre Studies brings together his theories of language as social action and the kinds of utterances that are utilized in particular situations. In 1971's The Problem of Speech Genres, Bakhtin investigates the ways that genres operate not just in language or literary use, but in everyday social communication. Elevating the utterance over the sentence as unit of analysis, Bakhtin notes that the primary genres of communication used in everyday engagements with other individuals are stabilized for a time to meet socially agreed upon standards of discourse. Yet, precisely because speech genres embody an 'otherness' in that they're inflected by the social, they are subject to change and flux themselves; in other words, speech genres are dialogic, they "are the drive belts [that connect] the history of society to the history of language" (65). Further, because speech genres are composed of chains of
utterances, and because utterances are always unfinalizeable, genres themselves are subject to social change. Though Bakhtin's work would not gain exposure in Western academic circles until the 1980s, his dynamic theory of language-in-use provides theoretical foundations for future work in the field of Rhetorical Genre Studies.

Though a self-described linguist, Bakhtin's dialogic theory of language is deeply concerned with the phenomenology of social language use, moving much of his work squarely into the realm of rhetorical theory. His dialogic account of language is a move toward symbolic action as rhetorical action, anticipating work by the New Rhetoricians as well as Rhetorical Genres Studies scholars. As Burke noted in 1951, the new rhetoric of identification moved rhetorical inquiry beyond tracing conscious acts of persuasion toward a recognition that social milieu and community-specific motives play an integral part in inducing cooperation among individuals involved in any rhetorical situation (Rhetoric of Motives 43). Though working in two distinctly different contexts, both Bakhtin and Burke deploy different methods of tracing human symbolic activity from sociocultural perspectives and both theorists would play formative roles in the evolution of Rhetorical Genre Studies, a subdiscipline that views language use as a rhetorical act that carries out social actions, frames social realities, and actualizes social roles.

Carolyn Miller's 1984 *QJS* article "Genre as Social Action" marks a watershed moment in the turn toward genre as dynamic, iterative, and socially informed. Building on work by Karlyn Kohrs Campbell and Kathleen Hall Jamieson, Miller's article contends that genres aren't inherently taxonomic; rather, they are socially and historically situated moments of rhetorical action. Rejecting genre as composed of a particular substance or form, Miller articulates genre in much the same way as Bakhtin - a

21 Though their theories on language use as symbolic action intersect at various points, there's little evidence to suggest that Burke and Bakhtin ever enjoyed one another's work.
22 Though both Miller and Campbell and Jamieson explore the function of genre as social motive, they don't rely on Bakhtin to do so; rather, their understanding of genre as social action arises from Schutz and Luckmann's notion of typification in *Structures of the Lifeworld*. Schutz and Luckmann argue that everyday human experience is an ongoing exercise in habitualization and institutionalization that narrows choice and normalizes small-scale human activity. The role of texts in habitualization and institutionalization is ubiquitous as texts mediate the vast majority of activity in information societies. The stabilization of particular kinds of texts, or genres, respond to the rhetorical demands of institutionalization and function as mediating objects that internalize social motives and make navigation of complex realities more manageable by human actants. C.f., Shultz and Luckmann 1980 (229-33), Bazerman 1994, Russell 2011.
pragmatic rhetorical move that conforms to meet particular situational demands. As a dynamic, but
typified and recurrent, rhetorical production, genre is inflected with the situational demands of the culture
in which it operates; or, as Miller notes toward the end of her essay, "As a recurrent, significant action, a
genre embodies an aspect of cultural rationality . . . [it] serves as keys to understanding how to
participate in the actions of a community" (165). The real power in Miller's short essay lies in its
exploration of genre as a typified, recurrent, and dynamic form that, when investigated from a rhetorical
perspective, can tell us a lot about the values, norms, ethics, and practices of identification circulating in
particular discourse communities23.

Miller's article typifies the social turn in Writing Studies during the 1980s and 1990s. By looking
outside the text toward the contexts that shape meaning, persuasiveness, and genre, the postprocess
movement shifted the onus of research away from Emig, Elbow, and Murray's emphasis on the solitary
writer engaged with the creation of text toward a notion of writing as public, situated, and interpretive
(Kent 1). Postprocess theorists such as Gary Olson and Jim Berlin worked to bring the social and cultural
into composition, rejecting introspection without meaningful politics and advocating a critical, democratic
theory of writing-as-liberatory. Similarly, Andrea Lunsford and Lisa Ede insisted that writing was a
collaborative act that posed real problems for atomistic theories of the writing subject and writing process.
While the postprocess movement wasn't responsible for a surge in Rhetorical Genre Studies24, it did bring
together the social and the textual in cogent ways. Because text and context are always mutually
informing and work dynamically to shape one another, early genre theory and the postprocess movement

23 In defining a discourse community, I follow Swales' definition in Genre Analysis: English in Academic and
Research Settings (1990). Swales claims that discourse communities have six main characteristics:
- Discourse communities have a broadly agreed upon set of common public goals.
- Discourse communities have participatory mechanisms that are in place to provide information and
  feedback.
- Discourse communities have specific mechanisms of intercommunication among its members
- Discourse communities use one or more specific genres to communicate its public aims
- Discourse communities not only have their own genres, but usually have developed specific lexis.
- In order to be considered a discourse community, a group must have a minimum number of participants
  who are familiar with the discourse and know relevant content and subject matter germane to the
  community. (21-9)

24 Foundational Rhetorical Genre Studies scholarship actually predates much postprocess work and can be traced all
the way back to Burke's notion of "Discourse is Action" in Language as Symbolic Action.
both recognized that genres operate as both "the situation and the textual instantiation of that situation, the site at which the rhetorical and the social reproduce one another in specific kinds of texts" (Bawarshi, "The Genre Function" 357).

As Artemeva and Freedman note in their edited collection *Rhetorical Genre Studies and Beyond*, Catherin Schryer's contribution to Rhetorical Genre Studies shifts the syntactical value of genre from noun to verb. Highlighting the ways that genres both enable and constrain individuals from participating in communities of discourse, Schryer's exploration - following Jamieson - finds that "genres have complex sets of relations with past and present text-types: genres come from somewhere and are transforming into something else" (qtd. in Artemeva and Freedman 26). In other words, because genre is inflected with social values and norms, it enables participation in a particular discourse community at the same time that it constrains that very participation. In his 1994 article "Systems of Genres and the Enactment of Social Intentions" Charles Bazerman expands the bounds of Rhetorical Genre Studies by arguing that genres are constantly engaged in rich interaction and through said interaction genres transform inasmuch as the discourse communities who use them interact and transform. Positing the existence of "genre systems," Bazerman argues that genre authorizes agency, coordinating actors spread over vast geospatial distances toward the production of distributed discourse communities structured around generic textual norms. Foreshadowing his book-length work on the genre of the scientific article, Bazerman's claim that discourse communities engaged in distributed textual activity rely on a "complex web of interrelated genres where each participant makes a recognizable act or move in some recognizable genre, which then may be followed by a range of appropriate generic responses by others" is expansive and offers Rhetorical Genre Studies a meaningful way to trace generic spread beyond geographically-bounded discourse communities in actions of distributed production ("Systems of Genre" 96-7).

Bazerman's notion of genre systems proves particularly important to work on tracing distributed social production in electronic environments. Building on genre as enabling and constraining social action, Bazerman applies his work on genre and genre sets to a literature review of scientific authors in

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the Enlightenment period. In "How Natural Philosophers Can Cooperate: The Literary Technology of Coordinated Investigation in Joseph Priestley's *History and Present State of Electricity* (1767)," he highlights how the cultural rationalities of an entire scientific community were embedded, embodied, and codified into genre through the work of one scientist. Suggesting that Priestley developed a genre of the scientific article that internalized an entire continent's Enlightenment, empiricist epistemology - or its cultural rationality - Bazerman highlights how the coordination of the European scientific community during Priestley's time was achieved through development of the literature review. As Bazerman notes, Priestley's supreme achievement was the codification of a genre that structures scientific activity to this day: "Priestley's thoroughgoing interest in fostering coordinated work of an extensive community offers a striking point for examining the complexity of cooperative textual machinery that has developed to coordinate the voluminous and undeniably competitive work of contemporary science" (17).

Miller, Schryer, and Bazerman's work in Rhetorical Genre Studies has numerous important implications for the work of this research project. Miller's contention that genres are agenic, non-human agents that authorize forms of social action - actions bound by particular normative communication practices of specific discourse communities - provides an important way to connect the kinds of texts created in distributed social production to the values, norms, and ideologies of digital-born communities. The Janus-faced nature of genre-as-socialization and genre-as-organization will prove useful in illustrating how activity in electronic environments is both constrained and enabled by genres as

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26 I've focused my literature review of genre theory specifically on the work of scholars working in Rhetorical Genre Studies. Other approaches to generic analysis include linguistic analyses in functional and historical/corpus linguistics, literary approaches to genre in neoclassical, structuralist, reader response and cultural studies, and generic uptake in the field of English for Specific Purposes (ESP). My attention to Rhetorical Genre Studies in particular is predicated on the following assumptions: first, while scholars in English for Specific Purposes incorporate the wider rhetorical situation vis-a-vis discourse communities, the emphasis of ESP genre analysis is for pedagogies of language acquisition. Because this research project is not focused on language acquisition pedagogy or genre-based pedagogies, you'll find little review of scholars such as Swales, Bhatia, Bawarshi, or Bechler. Second, the broader methodological orientation of this dissertation is circumscribed by an Activity Theoretic approach. The work of Rhetorical Genre Studies theorists such as Bazerman, Russell, and Spinuzzi have connected generic analysis to Activity Theory epistemologies, yielding valuable studies of texts, agenics, individuals, and collectives. Because of this long-standing association and because of an explicit attention to the agenic capacity of objects such as texts, I've chosen to work in this particular strain of genre analysis. I'll discuss this methodological orientation in greater detail in Chapter Two. As a note of recognition, Bawarshi and Reiff's work in *Genre: An Introduction to History, Theory, Research, and Pedagogy* proved instructive in my research on Rhetorical Genre Studies and led me to other valuable resources.
mediating tools-in-use that authorize participation in intellectual property contestation at the same time that they constrain that very participation. Finally, following Bazerman's work on genres, genre systems, and coordinated textual activity, I can sketch a preliminary theory of distributed textual production made possible through genre as agency. Because digital-born communities involved in the production of texts are by definition distributed over electronic networks, the role of genres as mediators will prove invaluable in tracing how activity remains coherent and true to the aims of the individuals and communities who participate in it despite their lack of geographical proximity. Looking to Rhetorical Genre Studies, this dissertation develops an understanding of how particular kinds of texts both embody the social values of the writers themselves but also dictate the future productions of those same writers. In other words, the genre reflects the epistemological and ideological foundations of the discourse community that produces it while at the same time authorizing the future possibility of textual forms. As such, this dissertation looks to Rhetorical Genre Studies as a means of uniting community values and ideologies with digital production, articulating genre as the space wherein piratical possibility and organized practice emerge.

*Technical Communication: Agency and Circumscribed Scenes of Writing*

Theories and implications of distributed social production and its connection to intellectual property is defined in the work of Benkler and Hardt and Negri; further, Rhetorical Genre Studies provides compelling intersections between the agenic qualities of texts and the distributed discourse communities responsible for their creation. Taken together, these first two milieus of distributed social production sketch a scene of "networked" activity in the post-Fordist information economy and draw attention to the social exigencies that result in the creation of particular genre systems - overlapping generic textual networks that coordinate communal textual production in the digital age. Technical communication - a specialized, interdisciplinary subdomain that studies workplace settings that characterize symbolic-analytic work in the networked information economy - provides the most cogent, sustained engagement with distributed social production in Writing Studies. By questioning the instrumentalist view of communication as transparent, technical communication scholars draw attention
to the ways that the real work of writing in corporate, scientific, and technical environments is a socialization into the epistemologies of particular social practices and in the process draw attention to the ways that technical communication, as distributed social production, poses problems for intellectual property doctrines of the analog era.

Jessica Reyman's research on the intersection of intellectual property and technical communication is representative of work that investigates distributed social production in technoscientific environments. In "The Role of Authorship in the Practice of Teaching Technical Communication" she relies on Rebecca Moore Howard's tripartite properties of authorship - autonomy, proprietorship, and originality - to draw attention to the ways that coordinated textual creation in corporate environments poses problems for analog articulations of intellectual property. Contending that technical communications aren't composed individually, rarely grant exclusive natural rights to the content creators27, and aren't considered original due to their granular28 nature, Reyman contends that "legal authorship" fails in technical communication settings. Reyman laid the foundations for "The Role of Authorship" in a 2008 Technical Communication article entitled "Rethinking Plagiarism for Technical Communication." Herein Reyman investigates the ways that distributed social production in corporate environments results in collaborative textual dynamics that challenge analog intellectual property. Noting

27 Because of the "Work-for-Hire" copyright doctrine, non authorship status is almost always conferred to technical communicators through contractual labor agreements. Authorship for works created in this copyright environment ensures employer ownership of the content even after the writer is no longer employed.

28 Granularity - or modularity - is often taken as a hallmark of distributed work. In this sense, the creation of a complete text is broken down into component units and distributed to various individuals for completion. Single-sourcing modular content toward the production of assembled texts is common practice in database-driven electronic textual artifacts. Yet, some scholars disagree with the idea of single-sourcing as a rhetorically neutral writing process. In "Recycled Writing: Assembling Actor Networks from Reusable Content," Jason Swarts contends that the process of reusing modular texts - or fractional texts - is actually a rhetorical enterprise that depends on the strength of networked associations to be rhetorically effective. Rejecting the model of modularity completely, other scholars contend that granular production models are rhetorically ineffective. These scholars argue that the modularity institutionalized by the division of labor in Fordist production models hinders the creation of rhetorically effective texts in an information-rich writing environment replete with expanded media possibilities. In some respects, the symbolic-analytic information economy worker is an updated version of the manuscript scribe or early printer who oversaw the production of textual artifacts from beginning to end and who made editorial decisions related to typesetting, graphics, layout, and delivery. Working from Elizabeth Eisenstein’s germinal work, James A. Dewar makes just such an argument in “The Printing Press and the Networked Computer: Parallels that Might Illuminate the Future.” Regardless of the rhetorical effectiveness of granular textual production in distributed work environments, neither Swarts nor Dewar's argument can claim authorship status for modular textual production under analog intellectual property paradigms.
that technical communicators create texts by: 1) using boilerplates and templates; 2) using existing designs and layouts; 3) using copy/cut and paste techniques; and 4) using single-sourced, modular textual units, Reyman argues that the distributed nature of technical communication requires revisions to plagiarism policies in technical writing courses. Building on Bakhtin's notion of heteroglossia, Reyman also complicates authorial originality by positing that technical communication instruction should be a process of enculturation into the borrowed discourse conventions and genres of a newly engaged discourse community. So, while Reyman's object is ostensibly technical communication pedagogy, both "The Role of Authorship" and "Rethinking Plagiarism" describe the ways that technical communication - as a distributed process of social production - problematizes analog intellectual property policy.

Reyman's tacit use of Bakhtin in "Rethinking Plagiarism" gestures toward the importance of genre-based analysis in Technical Communication scholarship. Clay Spinuzzi's 2004 NCTE award-winning Tracing Genres Through Organizations: A Sociocultural Approach to Information Design more expansively draws together Technical Communication and Rhetorical Genre Studies to provide novel connections among distributed social production, genre theory, and technical writing. In his book-length study, Spinuzzi provides a "sociocultural" method of studying improvised textual activity in order to improve information design. By studying textual activity in work environments, Spinuzzi traces genres as ad hoc social actions that spread in specific activities and serve to reformulate the work of the Iowa Accident Location and Analysis System (ALAS). While Spinuzzi's book is ostensibly concerned with debunking the traditional user-centered approach to design, his emphasis on genres and genre ecologies provides rich material for drawing attention to the connections between genres and the communities that create/are created by them.

Spinuzzi posits that genre operates at the level of the macroscopic, mesoscopic, and microscopic (Tracing Genres 45). Macroscopic genres are unconscious engines of social memory and tend to be

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29 I'll more fully engage Spinuzzi's work on genre and genre ecologies as mediating tools-in-use from an Activity Theory perspective in Chapter Four. For the time being, this chapter will focus on how Spinuzzi's work on genre reveals how distributed agents engage textual production through mediating written artifacts.

30 These levels of activity will be considered in-depth in Chapter Four.
shaped and sustained by understanding genre as social action. Mesoscopic genres are tools-in-use that agents engage to achieve particular, goal-directed ends. Microscopic genres are merely "coherent collections of habits" or operations that structure work. Spinuzzi considers how different levels of genre - at the level of activity, action, and operation - overlap toward the creation of genre ecologies, or the ways that "people's activities - at all three levels of scope - are mediated in multiple ways by dynamic, shifting collections of genres" (*Tracing Genres* 47). Posing genre ecologies as his scope of analysis allows Spinuzzi to theorize the ways that genres represent a discourse community's history of problem solving and provide insight into the ways that genres might operate as a form of distributed cognition (*Tracing Genres* 48). As such, Spinuzzi's three-tiered articulation of genre provides a powerful connection between the values, ideologies, and historical change of a discourse community and the ways that distributed forms of social production authorize that change - often through texts. For the purposes of this research project, Spinuzzi is especially useful because his genre ecologies - much like Bazerman's genre systems - provision a connection between distributed social production and written artifacts, situating genres as agenic textual forms that internalize ideologies, values, and rules of a discourse community while at the same time providing a heuristic for how to track transformations of those internalizations over time.

*Writing Studies: Agency, Circulation, Velocity*

Because distributed social production in digital environments almost always relies on the accretion, reproduction, and redistribution of textual fragments collaboratively reassembled to create new textual artifacts, a close attention to the dynamics of textual circulation and rhetorical accretion is important to understand cultural-historical textual activity. In the field of Writing Studies scholars rely on "delivery" and "circulation" to uncover the complex ways that meaning and rhetorical affect shift when texts are strategically and tactically appropriated by temporally and spatially distributed users. In effect, scholars in the discipline argue that authorial agency is tightly bound to the availability and proliferation of textual artifacts. Though much scholarship on rhetorical velocity and textual circulation focuses on digital texts, analog archives provide early forays into considerations of textual movement.
In "The Speaker Respoken: Material Rhetoric as Feminist Methodology" Vicki Tolar Burton presents material rhetoric as methodology to pursue "anti-objectivist" feminist historiography (147). In essence, Tolar Burton's main claim is that critical investigations into the "layers of rhetorical accretion" - or material additions to texts that happen in production and reproduction - are important when taking account of the affective nature of a particular historical document. Revisiting Hester Ann Rogers' *A Short Account of the Experience of Mrs. H.A. Rogers*, Tolar Burton uncovers multiple textual accretions to Rogers' original text. By teasing out the contributions to the text from the preacher at her funeral, her husband, a publisher, her female friends, and future readers, Tolar Burton uncovers the multiple - and sometimes contradictory - rhetorical movements made possible through accretions to the original text. Tolar Burton's historiographic methodology is important as it provides an analog precursor to understanding the ways that texts accumulate meaning when made available to audiences over spaces of time; further, her work in "The Speaker Respoken" demonstrates that histories of textual use and reuse have a long, varied history.

Archival research employing methodologies like Burton's yield valuable insights into the rhetorical transformations of texts as they move through cycles of reappropriation. Yet, because of the ease of textual movement enabled by digital (re)production and delivery technologies, rhetorical accretion in digital artifacts occurs more frequently and can often be tracked with different methods. Writing Studies scholarship on accretion in digital texts focuses on rhetorical velocity and circulation as a means of tracking how social agents take up, transform, and redeploy digital media toward new rhetorical ends.

DeVoss and Porter's aforementioned 2006 article "Why Napster Matters to Writing" posits a new method of textual discovery and delivery paying close attention to the ways that New Media compositions are made possible through peer-to-peer file sharing. The authors argue filesharing

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31 Tolar Burton's work in "The Speaker Respoken" was important in generating a methodological foundation for Jessica Enoch's 2005 *RSQ* article "Survival Stories: Feminist Historiographic Approaches to Chicana Rhetorics of Sterilization." In Enoch's work she employs what she calls "historiographic tracking" to try and answer the questions, "What else happened to this rhetoric? Who else was listening? Who might have retold these stories and to whom? And to what effect?" (21). In effect, Enoch's methodology in "Survival Stories" tracks rhetorical effect as it chains out across space-time in much the same way as Tolar Burton's work. Both provide analog precursors to tracing the circulation of digital texts and the accretions that occur as a result.
constitutes a new form of writing that interweaves numerous forms of digital media for networked
distribution to a diverse array of audiences. Further, DeVoss and Porter also anticipate the ways that
distributed social production depends on the availability of digital texts and textual components in order
to flourish under the protection of "fair use" writing. In 2009's "Composing for Recomposition:
Rhetorical Velocity and Delivery," Jim Ridolfo and Danielle Nicole DeVoss expand work on digital
delivery by investigating the ways that digital artifacts are delivered, appropriated, and redelivered to
digital audiences. Investigating how digital media gains accretive, rhetorical momentum, the authors pose
the term "rhetorical velocity" or "a conscious rhetorical concern for distance, speed, and time, pertaining
specifically to theorizing instances of strategic appropriation [of digital media] by a third party." Using
Iraqi insurgent videos as an example, DeVoss and Ridolfo highlight how these short digital media are
designed for distribution, rapid circulation, and reappropriation to meet the specific rhetorical demands of
shifting anti-American insurgent audiences throughout the Middle East.

Jim Ridolfo and Martine Rife's 2011 book chapter "Rhetorical Velocity and Copyright: A Case
Study on the Strategies of Rhetorical Delivery" likewise takes up rhetorical delivery, joins it with Tolar
Burton's notion of rhetorical accretion, and then considers the implications of digital circulation for
analog copyright. Studying the use and reuse of a student photograph, Ridolfo and Rife highlight how
particular digital artifacts pick up and shed meaning through various (re)composition technologies as they
circulate across networks and circuits of electronic delivery. Highlighting the value of fair use policies
toward digital media, the authors rely on Lessig to argue that rhetorical circulation and accretion is
essential for future cultural production. They note that, "Cultural properties are not exhaustible, and, in
fact, depend upon appropriation in order to survive" (15). It is here that the authors take the Utilitarian
tact toward distributed social production, following Lessig in arguing that a culture is only as healthy as
it's public domain. As such, textual appropriation that results as a consequence of circulation on digital
networks is a must for the continued creation of artistic and cultural creation. Yet, just because digital
media can and do circulate over electronic networks and undergo various forms of (re)composition, their

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32 This point is especially salient if we consider the construction of digital archives as a textual endeavor.
reuse shouldn't necessarily be a free-for-all. Relying on perspectives drawn from indigenous studies and postcolonial theory, Ridolfo and Rife also recognize that there is a danger in the idea of the Commons: the appropriation of digital media acquired without cultural sensitivities or context-specific values. In other words, while the authors recognize the important implications that rhetorical velocity in digital environments has for revising analog intellectual property policy to facilitate distributed social production, they also recognize the danger of appropriation without deploying a critical cultural apparatus that recognizes the wishes of cultural shareholders responsible for the creation of the artifacts in the first place.

Rhetorical accretion and rhetorical velocity pose significant questions for traditional articulations of the rhetorical situation. Challenging the traditional speaker-audience-message rhetorical triangle posed by Lloyd Bitzer, Jenny Edbauer's "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies" resituated the act of rhetoric as a moment always in flux, beset by networked agency and distributed affectivities. Edbauer moves away from rhetorical situation as a discrete collection of communicative elements toward what she calls "rhetorical ecologies" or "circulating ecology of effects, enactments, and events" from which rhetoric emerges (9). Drawing on previous work by ecorhetorician Margaret Syverson and composition scholar Louise Weatherbee Phelps, Edbauer traces the circulation of the "Keep Austin Weird" slogan to demonstrate her method. Locating herself at the nexus of associations created by the slogan, Edbauer traces out networks of historical, cultural, psychological, and visual flows, offering a reading of the rhetorical situation that is complex, far-reaching, and always emergent. What is important to note here is that Edbauer's ecological methodology recognizes writing as a distributed act (12) and the rhetorical situation as a "distribution of textual composition across physical, social, psychological, spatial, and temporal definitions" (12-3). When texts are viewed from a rhetorical ecology perspective, they are always in a "process of distributed emergence and ongoing circulation" (13). As such, digital media gain/lose meaning and affectivity as they undergo cycles of (re)appropriation, (re)delivery, and reception. By starting from a Edbauer's expanded sense of the rhetorical situation, scholars taking up distributed social production are provided with an ontological revision of the
communicative act, repositioning themselves to better understand how fragments of digital media are subject to uptake and diffusion across affective rhetorical networks.

In Summa: Distributed Social Production

As a new form of productive rhetoric, distributed social production arises from rhetorical ecologies in the networked information economy. As subjects in developed nations increasingly engage in symbolic-analytic information production, their creative energies are often split between capitalist economic interests and the accrual of social capital in spaces of commons-based peer production. While the emancipative possibilities of this shift toward immaterial production aren't, as of yet, completely understood, the problems created for capital traditionally conceived are pronounced. The question becomes, how will the Republic of Property continue to capitalize on human labor when the bounds of biopolitical production exceed the concept of finite property in the first place? As a stopgap measure, capital has turned to intellectual property as a means creating capital from the immaterial. As distributed social production continues to generate new non-commodities, capital continues to fight the process through the imposition of restrictive, property-based intellectual property paradigms. In terms of this research project, I am interested in how distributed social production connects to archival creation and curation. To make this connection, I posit the existence of distributed social production, or the collaborative act of creating texts and textual archives - broadly defined - through various acts of digital delivery, appropriation, and circulation. Connecting these written co-productions with the discourse communities that create them, I turn to Rhetorical Genre Studies as a means of tracking social agency in distributed social production. This move not only highlights the network of actors responsible for calling digital media into being but also draws attention to the cultural rationalities and norms that are inscribed in texts. Finally, I also turn to work on rhetorical velocity, rhetorical accretion, and rhetorical ecologies to

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33 I am indebted to Kennedy's work (2009, in preparation) on curatorial agency and archival curation to make the connection between distributed social production and participatory archive creation. Kennedy considers curation the collection of actions that circulate in communities of practice such as Wikipedia. In participatory archives characterized by cycles of distributed social production, these actions include dense citation, intellectual property protections, consensus-building, rule-following, and the adoption of neutral point-of-view (Kennedy, Textual Curators, 118).
understand the logic of digital circulation and its implications for mapping distributed social production across interwoven, overlapping rhetorical networks.

In the following sections of the literature review, I'll turn from a focus on the mediations and technologies of production that facilitate textual coordination in digital environments toward the unofficial sixth element of the pentad: Attitude. At present, the conflict over attitudes regarding intellectual property in the digital sphere heavily affects the Agency of Agents participating in the Scene of digital activity. The connections between the Agency in distributed social production and Attitude in the same process are iterative: neither the Agency or Attitude of actors in the Scene of coordinated digital creation is singularly imposing its will on the other; rather, they are iteratively constituting the limits and possibilities of each other. In this process of push-and-pull between conflicting Attitudes toward textual ownership and authorship, important conflicts over intellectual property in the digital sphere are playing out. As you'll soon see, the "how" of distributed social production reviewed in this section on Agency embodies attitudinal conflicts and creates core questions for the chapters that follow: Who is the Agent?; From where do they draw their Agency?; and How is the Act of distributed social production shaped by Attitudes regarding intellectual property?

*Attitude: Writing and Intellectual Property in the Scene of Distributed Social Production*

Citing George Herbert Mead's work in *Mind, Self, and Society*, Burke notes that "attitudes are 'the beginnings of acts'" (*Grammar* 236). This definition appears to be fairly straight-forward; however, in this case, brevity obscures complexity. While Burke notes that attitudes are the catalysts of action, attitudes themselves must come from somewhere - they are the result of social relations, externally derived but internally performed. Metaphorically speaking, attitudes function much like genre: they are socialized responses to typified, recurring situations; they direct action from without but appear to arise from within. One might even say that attitudes are networked identity made material, subject to ecological exigencies that construct both ideology and epistemology.

In the following sections, I'll take up the Attitudinal transformations toward intellectual property in the period from the European Enlightenment to the present. Because the Scene of distributed social
production reconfigures Agency as distributed, networked, and non-singular, Attitudes toward intellectual property and textual reuse should be reconsidered and rearticulated for the contemporary era. In this section I'll first review analog Attitudes toward authorship and ownership. Grounded in an Attitude of liberal humanism from the 18th century Enlightenment, copyright depends on theories of Romantic authorship, Lockean "Sweat of the Brow" doctrine, and Benthamite utilitarianism to protect analog textual production. Moving forward, I'll next demonstrate how Attitudes toward digital textual reproduction outpace formal policy for managing intellectual property. Arguing that technogenesis surpasses sociogenesis, this second section explores how user Attitude transforms as a result of the rich, iterative interplay among systems of coordinated social production and human participation in those systems. Finally, I'll turn to Writing Studies scholarship to illustrate Attitudes toward intellectual property in our own discipline. This section sketches Attitudinal shifts with respect to intellectual property in three milieus: plagiarism, writing process, and digital writing. The literature review closes with a brief consideration of Attitudes toward "piracy" from both disciplinary perspectives as well as the corporate and governmental sectors.

In sum, the second section of the literature review highlights how transformations in textual production discussed in the first section inform Attitudes toward intellectual property. It's important to note that intellectual property and distributed social production aren't in a relationship of hypotaxis; rather, if anything, they are paratactic. Using elements from Burke's pentad highlights as much, allowing me to orient you, the reader, to the different and competing motives that structure possibility and action in the contemporary Scene of digital activity.

Legal Definitions of Copyright: Foucauldian Bookends

In his germinal article "What is an Author?" (1970), Michel Foucault proposes the author-function as a social logic that endows certain rights and affordances to authorship. Noting that the author is a "mode of existence, circulation, and functioning of certain discourses within a society," Foucault rejects both the grammatical position of Derrida's author-as-language itself and Barthes' claim that authorship is, for all practical purposes, irrelevant to hermeneutics (Rabinow 108). As a socially inflected,
discursive construct, Foucault connects the author-function to legal systems by theorizing how culture links "authorship" and "texts" to written transgressions. Tracing further, Foucault then links the author-function to the discourse of property that arose in the late 18th and early 19th centuries to draw together not just author's rights but also author-publisher relations and rights of reproduction. In effect, "What is an Author?" exposes how the notion of "authorship" serves capitalist interests by reifying intellectual creation as valuable commodity, thereby authorizing various structures of capitalist authority to claim dominion over the creation, distribution, and circulation of textual artifacts.

Foucault provides an interesting picture of what constitutes the author. As a discursive construct put to work by those with a vested economic interest in the rewards of intellectual creation, authorship becomes a tool for the management of written transgressions while at the same time rewarding those in power by making commodities of intellectual expression. In effect, Foucault is sketching out a discursive theory of intellectual property that serves the interests of those in the position to claim authorship status - be they singular individuals or corporate publishing houses. I start with Foucault for two reasons: first, his work on authorship is important to a review of copyright because it sketches out how social, economic, material, and discursive elements intertwined in the late 18th century to concretize the "author." Different facets of this definition of authorship functioned as the legal basis for intellectual property and copyright during the European Enlightenment and continue to undergird contemporary articulations of copyright. Second, Foucault's expansive description of authorship as a discursive construct that stretches beyond the scope of a singular individual will provide an apropos addendum to legal articulations of authorship grounded in Romantic theories of solitary textual construction.

The Genesis of Romantic Authorship

Legal scholars almost always consider authorship and intellectual property34 without the inclusion of a postmodern perspective35. This is because legal studies scholarship assumes a tradition of

34 For the remainder of this dissertation I will often use the terms "intellectual property" and "copyright" interchangeably. I am aware that intellectual property is actually comprised of three separate domains: copyright, patents, and trademarks. Because this dissertation focuses on texts, not industrial designs or marketing insignia, copyright is the primary and exclusive domain of analysis and conjecture.
jurisprudence: a philosophy of law undergirded by a liberal Humanist politics predicated on a unified subject capable of making rational choices. This section of the literature review will highlight the history of copyright and it's connections to Romantic theories of authorship to sketch a theory of copyright from the legal perspective. In so doing, it will also provide a detailed description of how copyright and authorship are defined in economic, legal, and popular cultural domains.

As a government secured and regulated statute, copyright has existed at least since the late 15th century. In *Authors and Owners: The Invention of Copyright* legal scholar Mark Rose traces the evolution of copyright from the first "privilege" of printing provided to John of Speyer in Venice in 1469 through to the regulatory printing practices of the English Stationers' Company in the 17th century and the eventual passing of the world's first formal copyright statue, the Statue of Anne, in 1710. Yet, as Rose notes, before the widespread development of marketplace society and technologies of print reproduction in the late 18th century, intellectual property protections tended to attribute commodity status to those responsible for textual reproduction; namely, the publishers of books - *not* the authors who wrote them. It wasn't until the uptake of German Idealism and English theories of originality in the late 18th century that the "author" became the guarantor of legal copyright.

Edward Young's 1759 tract *Conjectures on Original Composition* marks a watershed moment in the development of a budding English Romantic conception of originality and creative genius. Written late in his life, Young's essay was later claimed as the *ur*-text by members of the German proto-Romantic *Sturm und Drang* movement - of whom Goethe claimed membership - and forwards a doctrine of radical individuality, or genius. In *Conjectures*, Young outlines the lofty qualities of the singular author while also levying criticism against publishers and other "invaders of the press" who profit from the labor of the writer. He notes:

> The man who thus reverences himself, will soon find the world's reverence to follow his own. His works will stand distinguished; his the sole Property of them; which Property

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35 This isn't universally true. Cohen's work *Configuring the Networked Self: Law, Code, and the Play of Everyday Practice* will challenge Modernist assumptions of legal scholarship by rejecting a unified, rational subjectivity in favor of a networked, posthuman conception of selfhood.
alone can confer the noble title of an *Author*, that is, of one who (to speak accurately) *thinks*, and *composes*; while other invaders of the Press, how voluminous, and learned soever, (with due respect be it spoken) only *read*, and *write*. (53-4)

As Woodmansee notes in her germinal essay "Genius and Copyright," Young's essay provided German Romantics the theoretical backing to establish ownership of their intellectual products so that copyright would move away from publisher control and into the hands of the authors themselves. This was especially important in the period as economic and political transformations made the patronage system of the Middle Ages increasingly irrelevant, forcing authors to make a living based on public consumption of their goods. As such, material exigencies during the period made Young's claims about originality and genius particularly palatable to a German creative class faced with the emergent demands of leisure-consumption economic systems.

Young's *Conjectures* had a profound effect on the German Idealist-Romantic movement(s).

While perhaps best known for his theory of self-consciousness as a social phenomenon[^36], Johann Gottlieb Fichte's 1791 essay "Proof of Illegality of Printing: A Rationale and a Parable" extended Young's work on originality and genius by arguing a bifurcation between the ideas that inform a work and the unique expression of their "original form" by an author. Fichte's essay claims that in the immaterial aspects of any book there is a difference between *content* and *form*. Form, or unique expression in arrangement, style, argumentative strategy, and so on were the sole possession of the author who created them. Content, on the other hand, consisted of the *ideas*[^37] that undergird expressions of form. Fichte argues the point thusly:

> Now since pure ideas without sensible images cannot be thought, much less are they capable of representation to others. Hence, each writer must give his thoughts a certain

[^36]: See Fichte, *Foundations of Natural Right* (1796).
[^37]: Fichte borrows the notion of "ideas" from Kant's work on transcendental idealism in *Critique of Pure Reason*. Fichte conceives of ideas as *noumenon*, or objects and events known beyond or without the scope of the senses; in effect, ideas are "concepts of understanding" that the mind processes in order to string together coherence from the chaos of experience. As such, *noumena* resemble the Platonic forms and can't possibly be objectified without expression.
form, and he can give them no other form than his own because he has no other. But neither can he be willing to hand over this form in making his thoughts public, for no one can appropriate his thoughts without thereby altering their form. This latter thus remains forever his exclusive property. (3)

Taken together, Young's work in Conjectures and Fichte's "Proof of Illegality of Printing" provide the basis for a new articulation of copyright that arose at the end of the 18th century. Claiming a theory of originality, creative genius, and unique expression, both authors shift the foundations of intellectual property, wresting control of copyright away from publishers and into the hands of authors. In what Woodmansee calls a "transitional phase between the limited patronage of an aristocratic age and the democratic patronage of the marketplace" Fichte and Young provided a two-part philosophical argument concerning the primacy of intellectual creation as authorial property. From their perspective, authorial genius and its expression in unique form constituted the grounds for copyright - not the particular privilege of one publishing entity to reproduce authorial creations. Taken together with the work and advocacy of other authorship advocates of the time, Fichte and Young's description of authorship and expression undergird the 1810 Napoleonic Code's articulation of literary property as authorial province as well as the US Constitutional Copyright Clause and provide the justification of copyright as Romantic, authorial expression.

Copyright Extends: On Labor Mixing and Utilitarianism

In the transition away from a proto-capitalist mercantilist system that dominated the Renaissance and early Enlightenment period, a new form of political and economic philosophy developed that located the individual citizen as the locus of productivity and freedom. Often referred to as "classical liberalism," the ideals of Enlightenment thinkers in the 17th and 18th centuries provided the foundations for many now-common tenants of democratic society. These foundational concepts included limited government, constitutionalism, and personal liberty in the form of various freedoms; including assembly, press, speech, religion, and markets. The political and economic uptake of classical liberal philosophy had
profound repercussions for intellectual property doctrine during the period and provide an important counterpart to theories of genius, originality, and uniqueness of expression.

John Locke - the philosopher most notable for contributions to liberal theory in the 17th century - redefined subjectivity and the concept of self in *An Essay Concerning Human Understanding*. By advancing an intensely empiricist philosophy predicated on a "doctrine of association," Locke refuted the innate doctrines of Platonism and claimed the primacy of the will as constitutive of subjectivity before the influence of all other structures - government and church included. As he notes in Book II of the *Essay*:

> [W]e find ourselves a power to begin or not begin, and to continue or end, various actions of our minds and motions of our bodies, by a mere thought or preference of mind in which it commands (so to speak) that such and such an action be done or that it not be done. This power that the mind has to order that a given idea be thought about or that it not be thought about, or to prefer that a given part of the body move rather than stay still (or vice versa) is what we call the will. (74)

A year before defining empiricist epistemology as integral to constitution of an individual subject, Locke published another work that outlined a theory of civil society predicated on the democratic ideals of natural rights and the social contract. In the *Second Treatise of Civil Government* Locke rejects the monarchical governance of the Medieval period, instead proposing that all men were created equal in their natural state. This equality serves as the foundation for a democratic society wherein individual citizens *consent* to be ruled by governments. Turning away from autocratic systems, Locke's work in the *Second Treatise* also highlights how the individual subject - governed by empirical experience and the

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38 Locke countered Descartes' claim that innate concepts existed at all by claiming that we are born *tabula rasa* or without any pre-existing conceptual knowledges. As such, the knowledge gained throughout one's life is accumulated only through experience - experience mediated by sense perception. Locke went on to sketch out a "doctrine of association" in his work that related sensory experience to the development of ideas. The associations between ideas connected by the mind constituted the human faculty of reason; as such, the sensory experiences of the world led to the development of ideas that were associated with other ideas (embodying previous experiences) by human reason in the constitution of knowledge - knowledge that appears natural and logical. To put it another way, Locke's constitution of knowledge looks like this:

Sensory Experiences --> Ideas --> Association of Ideas by Mind (Reason) --> Knowledge
will - is entitled to private property. This particular entitlement would serve authorship advocates of the 18th century well as they now had a political-economic theory to draw on in order to argue for the sanctity of intellectual property.

In Chapter Five of the *Second Treatise* Locke offers his definition of property and labor-mixing. This concept dovetails well with the articulation of author as genius provided by Young while also protecting the expressions highlighted by Fichte. Locke notes that

> Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he has mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others. (19)

Locke's work in this section effectively legitimizes the privatization of public or common properties by individual subjects and was used as the basis for numerous privatization schemes in the 18th and 19th century. The inclusion of labour-mixing theory was most prominently on display in the British Inclosure Acts of 1773 and 1845 to 1882. Law scholar James Boyle discusses the Lockean justification of the Second Enclosure Movement during the 19th century at length in his article "The Second Enclosure Movement and the Construction of the Public Domain." In effect, Boyle argues that Locke's theory of labor-mixing effectively reframed policy toward common land away from the human right of access for peasant classes and instead posited the importance of individual liberty and a capitalist privatization logics with respect to natural resources previously held in common. According to Boyle, Locke's theory
of property outlined in the Second Treatise was directly responsible for the decline of the public domain and the eventual privatization of huge swaths of the English countryside by ruling elites.

In Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity, legal scholar Siva Vaidhyanathan highlights how Locke's theory of labor-mixing was put to use in redefining intellectual properties. Tracing the history of copyright from the Statute of Anne forward to the present day intellectual property policy in the U.S., Vaidhyanathan notes that the London Stationers Guild intentionally brought cases before the court that relied on the common law of property supported by Locke's theory. As Vaidhyanathan argues, "If the Stationers could get the courts to certify that the principles of common law, which gave landholders perpetual rights to their land and all its uses, apply to works of literature . . . only the exclusivity [of rights to reproduction] would remain" (42). While the Stationers weren't granted "perpetual rights" to the productions of authors and copyright as an absolute right only lasted five years in the United Kingdom39, Locke's theory of labor-mixing would be an important element in the construction of copyright across the Atlantic in the American colonies. Coupled with the newly emergent utilitarianist philosophy of Jeremy Bentham, Locke's labor-mixing theory - or "Sweat of the Brow" doctrine would play an important role in the creation of the first U.S. Constitutional Copyright Clause in 1787.

In the preface to A Fragment on Government (1776), Jeremy Bentham explains the core of his utilitarian philosophy: "it is the greatest happiness of the greatest number that is the measure of right and wrong" (2nd para). With this guiding axiom in mind, Bentham worked throughout the second half of his life to establish a Pannomion or a fully articulated utilitarian system of law. While it is unnecessary to go into the intricacies of Bentham's twelve pains and fourteen pleasures in the calculation of a "happiness

39 Vaidhyanathan demonstrates that the case of Millar v. Taylor (1769) established the law of literary property by striking down unauthorized duplication of a series of poems entitled "The Seasons" and granting publishing rights to its author in perpetuity. Five years later in Donaldson v. Becket (1774) the decision was reversed when the House of Lords decreed that Millar v. Taylor directly contradicted the "spirit" of the Statue of Anne and reestablished the public domain of intellectual properties in the United Kingdom (41-4).
factor. Bentham's ideas about the government's role in ensuring the highest degree of pleasure for the most number of citizens played an important part in the American construction of copyright. Taken together in a tripartite succession, utilitarianist principles, Locke's "Sweat of the Brow" doctrine, and conceptions of the author as creative genius provide a basis for the American system of copyright unto this day.

In Copyrights and Copywrongs, Vaidhyanathan outlines how numerous founding fathers took up the Benthamite position on utility. He notes that James Madison - author of The Federalist Papers - viewed copyright not in terms of property but rather in terms of "progress, 'learning,' and other such classic republican virtues as literacy and an informed citizenry" (22). Further, president George Washington argued for the importance of a healthy public domain when he wrote that "every valuable end of government is best answered by the enlightened confidence of the public " (qtd. on 22). Thomas Jefferson, the preeminent American interpreter of Locke's philosophy, even had some reservations about considering copyrights exclusively in terms of property, eventually conceding to Madison's position in the Bill of Rights noting that, "Monopolies may be allowed to persons for their own productions in literature, and their own inventions in the arts, for a term not exceeding ---- years, but for no longer term and for no other purpose" (qtd on 24). Even after his tenure as president, Jefferson continued to express anxieties about extending the property metaphor in U.S. copyright doctrine. Writing in 1813, Jefferson provides one of the key summations of early U.S. copyright policy:

If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of everyone, and the receiver cannot dispose himself of it. (Lipscomb and Bergh 333-5)

Copyright in the U.S. Context

40 The pleasures and pains as well as the happiness factor are discussed at length in chapters III, IV, V & VI of The Principles of Morals and Legislation (1789).
Article I, Section 8, Clause 8 of the U.S. Constitution is known as the "Copyright Clause." It provides rights to the U.S. Congress "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Herein we get an instantiation of all three of the previously reviewed components of intellectual property guided by classical liberalism in the Enlightenment period. The second portion of the clause - "their respective Writings and Discoveries" implies an exclusive right to the fruits of one's labor, or the Sweat of One's Brow. This section also recognizes the importance of genius, originality, and expression by positing intellectual property as a moment of discovery and writing as the expression of that moment. Finally, the first portion of the clause balances the needs of the creative genius who makes intellectual property with the needs and well-being of the public at large. As the clause notes, "To promote the Progress of Science and useful Arts" implies a protection for the public domain as a site of invigorated dialogue and cross-ideational co-mingling. In short, the ideas of Young, Fichte, Locke, and Bentham are condensed into this short articulation of what constituted intellectual property for the budding U.S. republic.

In the years that followed the publication of the copyright clause in 1789 the U.S. Congress enacted various extensions, reinterpretations, and revisions to copyright law. Yet, the presence of all three core philosophical threads remain; albeit, as many critics of contemporary copyright note, the Utilitarian position has since been severely degraded through various legislative acts that extend protections to authors at the expense of the public domain. In the final section reviewing legal definitions of copyright, I turn to the work of legal scholars who aim to tackle the question of copyright from a position that challenges the liberal humanist theory of the subject. This particular context is appropriate because transformations in communication and distribution technologies have called into question the naturalized categories of "author," "subject," "text," and "property."

*Digital (Re)Production and Copyright from a Legal Perspective*
While different articulations of property, genius, originality, and classical liberal subjectivity undergirded copyright policy and jurisprudence in the analog period of media, the shifts to digital composition, reproduction, and distribution have challenged many of the core premises on which copyright doctrine was founded. With the mass proliferation of technological interfaces that allow for cycles of media appropriation through remix, assemblage, and pastiche, questions of what constitutes an authentic, creative work from a singular author come to the fore. Though New Media composition makes visible cracks in the classical liberal project, the problematics of a unified subjectivity are a long-standing philosophical problem in Western metaphysics. It is only recently that academics have taken on the problematics of this question, providing new conceptualizations of intellectual property and copyright by looking to work in the Posthumanities. Especially important to these considerations of posthuman subjectivity in relation to intellectual property policy is the work of Krista Kennedy and Julie Cohen. Both authors point out the complex distribution of agency across human and non-human actors in both pre-digital and digital contexts. Further, especially in Kennedy's case, the construction of authorship in the legal and theoretical sense is called into question through the distributed, machinic agency of bot-written Wikipedia texts. Kennedy's work is important for this research study because it emphasizes questions and consequences of authority and originality in an age where technologies, tools, and code-based robots play an authorial role in the creation and curation of digital objects. By raising important questions concerning writing as "an interactive process that involves exchanges between multiple agents, texts, and influences," Kennedy's work deeply informs the articulation of intellectual property as distributed, social, and human/non-human found throughout The Piratical Ethos (308). To supplement

41 I refer to the "analog" period as the era wherein the technologies of production were in the hands of relatively few commercial stakeholders; namely publishing houses and the content industries. In contrast, the "digital" era is characterized by radical proliferation of digital tools of (re)production and distribution/ circulation.

42 In Commonwealth, Michael Hardt and Antonio Negri call on the tradition of "immanence" or Kant's dictum "know to dare" in order to mobilize a biopolitics toward the construction of a new world. The author's articulation of a politics of immanence follows the line of Deleuze in speculating about the kinds of virtual intensities that make the realization of the 1960s left slogan, "Another World is Possible." The kinds of posthuman subjectivity I gesture toward in this section was covered at length in the literature review distributed social production; however, at present, it should suffice to say that the Deleuzian strand of materialist philosophy that influences posthumanists and speculative realists in the Social Sciences and Humanities dissolves the unity of the classical liberal subject by instead positing a metaphysics that replaces numerous key liberal ideals: multiplicity takes over substance, the virtual subsumes the possible, and events trump any concepts of essence.
Kennedy's work, this section will work intimately with a recent, and certainly one of the most succinct, defenses of the posthuman legal position. I'll review Julie Cohen's book *Configuring the Network Self: Law, Code, and the Play of Everyday Practice* in order to provide a legal studies take on new intellectual paradigms for the digital age.

Cohen's *Configuring the Networked Self* argues that fundamental changes in the intellectual property system must be made in order to address the technological shift from print to digital production. Situating her work in the context of a "networked information society" Cohen attempts to bring together two increasingly visible stances toward intellectual property: she defines and outlines the position of "cultural ecologists," or free culture advocates whose core premise is "open access," to sketch the benefits of a lax copyright regime. Next, she juxtaposes the cultural-ecological, open-access position to the problem of privacy and privacy rights to highlighting how legal and policy conversations since the spread of networked information society in the late 1990s largely fail to reconcile tensions between openness and privacy. In other words, Cohen examines the access-privacy binary to point out how classical liberal theories of the subject are inadequate for developing generous intellectual property regimes in the digital era. As she notes in her introduction the work,

> For the most part, U.S. legal and policy scholarship about the networked information society shares a set of first-order commitments - to individual autonomy, to an abstract and disembodied vision of the self, and to the possibility of rational value-neutrality - that derive from the tradition of liberal political theory within which legal academics are primarily trained. Those commitments shape both the prevailing understanding of the legal subject and the preferred form of analysis by which a just and intellectually defensible system of information rights is to be derived . . . . This approach has not served either theory of policy well . . . . Moving beyond the bounds of liberal political theory is essential if we are to understand the cultural work that regimes of information

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43 A term from Yochai Benkler's *The Wealth of Networks*. 
rights do and to appreciate the ways in which formally separate regimes of information
rights intersect. (2)

To begin her critique of the liberal subject, Cohen calls attention to problems of liberal subjectivity. Acknowledging that "a theory of 'authorship' as internal and essentially unknowable [genius] derives straightforwardly from the liberal individualist paradigm," Cohen goes on to connect the liberal subject from the Kantian-Lockean tradition to the "disembodied" nature of information in the networked information society. Cohen's argument is cogent and well placed: the networked information society appears to be the autonomous, rational, disembodied self's natural milieu, transcending the particularities of bodies, cultures, and spaces with equal ease" (14). Yet, this legal definition of the self in information environments is the cause of escalating battles over intellectual property in digital environments.

Cohen proposes a new model of subjectivity that draws on her thesis that embodied perception - or the ways that the self is a body and doesn't merely have a body - locates the body-as-self in "social and material environments that mediate experience and perception" (28). Rooted in phenomenological critique, Cohen's articulation of embodied perception redefines subjectivity as intersubjectivity or the development of a self that is interpellated by both individual perception and social consciousness. After making a nod to the connection between intersubjectivity and distributed cognition, Cohen notes that embodied spatiality - or the material experience of a body in space - mediates cognition and social ordering in varying, complex ways. As such, her theory of the subject rejects the classical liberal articulation of all agents as autonomous, rational, and disembodied and instead proposes a rearticulation of copyright that takes into account the ways that networks continually reshape our embodied perception and the experienced geography of information (31).

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44 Cohen's use of materiality draws heavily on Hayles' discussion of the concept in both How We Became Posthuman and My Mother Was a Computer. For Hayles, materiality is "an emergent property created through dynamic interactions between physical characteristics and signifying strategies. Materiality thus marks a junction between physical reality and human attention . . . and is the construction of matter that matters for human meaning" (My Mother Was a Computer 3). This materiality is essential in considering human subjectivity, or the posthuman in Hayles words: "The 'post' in 'posthuman' comes from the idea that there is no a priori self that existed free from the wills of others . . . we have always been networked through our informational and material connections to others that circulate in our orbit" (4).
Cohen's work on embodied perception as the guiding concept of digital intellectual property regimes draws heavily on the work of posthuman theorist N. Katherine Hayles. In effect, Cohen puts Hayles notion of "intermediation" to work in her definition of embodied perception to argue for dissolution of the boundaries between mind-body and human-technology. As Hayles notes in *My Mother Was a Computer*, intermediation is the process whereby "complex transactions [occur] between bodies and texts as well as between different forms of media. Because making, storing, and transmitting imply technological functions, this mode of categorization insures that different versions of the posthuman will be understood as effects of media"; these effects are complex, irreducible to linearity and must be located in the embodied human world (7). In Chapter Six of *My Mother Was a Computer*, Hayles makes the relationship between intermediation and embodied, material perception more clear by pointing out how the Lockean articulation of the "Sweat of the Brow" preferred the classical liberal subject, thereby downplaying the networks of material production and collaboration that actually enabled the creation of any text, both in the 18th century and today. Arguing that literary theory and legal regimes need to pay attention to "flickering signification" or the "fluidly mutating connections between writer, interface, and user," Hayles joins theories of embodied posthuman subjectivity to the intermediation process, anticipating Cohen's claims about the need to refigure intellectual property in the networked information society.

In revising intellectual property for the digital age, Cohen recommends a strict attention to what she calls the structural conditions of human flourishing. These conditions include 1) the mutually constituting relationship between information technology and embodied perception; 2) the importance of tactical, non-linear everyday practice that is not animated by rational choice; and 3) the creative practice of play and the infinite play of chance in everyday life. In so doing, Cohen recommends a lax copyright application that encourages what she calls "semantic discontinuity" or the complex recognition that various material and perceptual interspaces prevent the "imposition of a highly articulated gird of rationality on human behavior" and, in the process, create interstitial sites of play with intellectual properties. In effect, Cohen's work joins scholarly work in phenomenological and posthuman subjectivity
twinned with de Certeauian "tactics" in order to make room for the kinds of play necessary for the continued expression and growth of healthy cultural ecologies. In so doing, she challenges previous theories of copyright and intellectual property from the field of legal studies by positing an alternative human subjectivity engaged with digital artifacts outside of the influence of market effects.

In Summa: Legal Studies on Intellectual Property

At the height of the Enlightenment the notion of intellectual property emerged as an organizing Attitude to address the material constraints created for artists and publishers in a period where systems of authorial patronage gave way to market logics and technologies of reproduction made unauthorized reproduction an economic, not moral, matter. The initial response of both authors and publishers was to look to liberal humanist political theory to stake new claims to their authorial legitimacy. Thus, Attitudes toward authorship relied on assumptions about creative genius, originality, and unique expression to build arguments about copyright in the courts. Contemporaneously, theories of labor-mixing, or "The Sweat of the Brow," posited that intellectual properties worked much the same way as material properties: when ideas were commingled with individual effort, the effort-maker is entitled to the economic fruits of that commingling by making commodity from expression. As a balance to these author-centric articulations of copyright, utilitarian philosophy provided the "greatest benefit to the greatest number" claim, thereby striking a balance between the health of the public domain of common ideas and the private domain of authorial genius. For over two centuries this tripartite concept of intellectual property thrived; however, in the period since the mass proliferation of digital writing and reproduction technologies the grounds for copyright have faced many challenges. By positing a posthuman, materialist conception of the self, contemporary legal scholars and posthumanists argue that to develop an intellectual property Attitude for the future we need to take into account human-technology relations in embodied environments to rearticulate copyright outside the bounds of market logics.

Technogenesis and Sociogenesis

While legal scholarship is largely responsible for sketching out the theoretical and philosophical underpinnings of intellectual property doctrine and policy, technology theorists have been the public face
of intellectual property discourse since the 1990s. Scholars like Lawrence Lessig\textsuperscript{45}, Cory Doctorow, Aaron Barlow, and Kathleen Fitzpatrick bring a range of disciplinary perspectives to conversations about the intersection of digital (re)production technologies and intellectual property doctrine, often highlighting the pronounced disjunct between the speed of technological development and the pace at which institutional structures attempt to manage that development. This disjunct often results in intellectual property paradigms designed to meet features of information dissemination that are anachronistic to contemporary digital life\textsuperscript{46}. In this section of the literature review I'll use the work of Bertrand Gille and Bernard Stiegler to explain the problem of technological revolution vs. technological control. I'll then use these theories as a lens to explore common positions held by technologists concerning intellectual property and copyright. Most technologists argue that the implementation of overreaching control mechanisms enacted through restrictive intellectual property doctrines tend toward a regressive technology policy where previous innovation is rewarded but future innovation is stunted and often punished. This section will review those points to explain the dominant alternative to the current intellectual property paradigm.

Known primarily for his three volume work \textit{La technique e le temps}\textsuperscript{47}, Bernard Steigler's philosophical project demonstrates how inorganic matter operates as human prosthetic for memory and structures temporality. In other words, Steigler's thesis is that \textit{technics}\textsuperscript{48} are inflected with cultural practice and mutually constitutive of the human condition\textsuperscript{49}. As such, technologies are not simply the objectifications of human subjects in tool-form; rather, they are non-instrumentalist technologies that constitute human subjectivity itself. Interestingly, Steigler also argues that \textit{technics} and culture don't

\textsuperscript{45} While Lessig is trained as a legal scholar and has made many important contributions to considerations of intellectual property in work on jurisprudence, I intentionally included him in this section because he is often considered the face for technology-intellectual property discussions in popular discourse.

\textsuperscript{46} One might find analogs between the legislative-practice disjunct I describe here and N. Katherine Hayles' description of the "skeuomorph." For Hayles, the skeuomorph is a "design feature that is no longer functional in itself but refers back to a feature that was functional at an earlier time" (\textit{Posthuman} 15). These designs often "testify to the social or psychological necessity" of an innovation that is tempered by replication and control (ibid.).

\textsuperscript{47} \textit{Technics and Time} (1998).

\textsuperscript{48} Stiegler defines \textit{technics} as the "domain of tools, of instruments, if not only machines . . . first and foremost all the domains of skill" (93).

\textsuperscript{49} Stiegler calls this "epiphylogenetic", or an understanding of human life as always evolving in relation to some form of prosthetic supplement.
necessarily co-evolve at the same pace; rather, relying on Bertrand Gille's notion of "permanent innovation\textsuperscript{50}," he claimed that there appeared to be a divorce

if not between culture and technics, at least between the rhythms of cultural evolution and the rhythms of technical evolution. Technics evolves more quickly in culture. More accurately put, the temporal relation between the two is a tension in which there is both advance and delay, a tension characteristic of the extending that makes up any process of temporalization. (qtd. in Sano 204)

As Sano notes, Stiegler further elaborated on the disjunct between technical and human development in Technics and Time, Vol. 2 claiming that "the adjustment between technical evolution and social tradition always encounters moments of resistance, since technical change, to a greater or lesser extent, disrupts the familiar reference points of which all culture consists" (11). Taken together, Stiegler's work on technics in Technics and Time describe the networked information economy as a system wherein the social doesn't have enough time to adjust to technological transformation. Because of this lack, cultural systems default to a practice of what Stiegler calls "sheer adjustment" or conservative reactions to technological development deployed by social systems when technogenesis outpaces sociogenesis.

In Code 2.0, intellectual property expert Lawrence Lessig also highlights the disjunct between culture and technics. Tracing the development of the peer-to-peer (P2P) file sharing platform Napster, Lessig recounts how paradigms of intellectual property developed in the analog era simply don't fit new technological transformation. Because digital media could be copied without any degradation in quality and because that media could be disseminated freely by any agent connected to the P2P network, the technology behind Napster posed a real problem for the cultural practice governing intellectual property at the time. Essentially, Napster was a networking agent that connected disparate users across distance

\textsuperscript{50} In Gille's conclusion to Prolegomena to a History of Technics he describes the process of technical innovation until the 18th century as relatively slow. As such, human experience was given large amounts of time to familiarize itself with technical development and incorporate that development into cultural systems. Yet, with the onset of the industrial revolution and Fordist production, technical systems developed ever more rapidly. Though Gille published his work before the development of the networked information economy, he saw technological development in the contemporary period constantly increasing in speed, noting that technics now appeared to be in a constant state of revolution.
and time, enabling users to decide whether they would infringe on the reproduction right and distribution right of authors with respect to their intellectual properties. As Code 2.0 reveals, the period of sheer adjustment by intellectual property owners in this instance was severe: through various changes in the code, digital content owners stunted technological change by creating encoded safeguards - or digital rights management technologies - to protect against future infringement. Lessig takes up other examples of code manipulation in the rest of the work to highlight the function of code as a form of social control, preventing individuals from fully realizing the potentials of their technologies and media.

Two years later in Remix: Making Art and Commerce Thrive in the Hybrid Economy, Lessig again highlights the disjunct between technological advance and its uptake by governing institutional structures. Focusing on five critical aspects of copyright, Lessig argues that the future health of a democratic culture depends on the free flow of non-commodified intellectual properties. Criticizing the content industry and media providers for lobbying efforts to extend copyright to protect their monetary interests, Lessig highlights how the current trajectory of copyright expansion poses the most significant threat to a healthy democratic polity. Seeking a compromise between the rapid growth and expansion of technologies of media (re)production and social institutions that govern intellectual property rights, Lessig closes Remix by offering CreativeCommons as an alternative, non-economic licensing scheme that ensures cultural creations can be appropriated toward the creation of new culture while technologies of cultural creation are allowed to grow and transform.

Science fiction author, blogger, co-founder of Boing Boing, EFF fellow, and copyright activist Cory Doctorow also occupies a visible position in the public copyright debate. Like Lessig, Doctorow is a public supporter of the liberalization of copyright law; however, Doctorow's positions are considered more radical as he supports the sharing of all digital media via P2P file sharing technologies. In his collection of personal essays entitled Content, Doctorow takes up the problematics of intellectual property

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51 These aspects include duration (length of copyright), scope (the range of copyright), reach (the length of copyright), control (who gets to own copyrights), and media control.
52 Electronic Frontier Foundation.
in digital environments. In two different essays\textsuperscript{53} in *Content*, Doctorow considers the transition from print to digital with respect to books. In both essays, Doctorow traces how technological development precipitates social change. Focusing on transformations in media from the printing press, to phonorecords, to radio, television, VHS, and now digital .pdfs, Doctorow notes how in each case sheer adjustments in intellectual property doctrine came at the detriment of "democratic-ness" or the wider circulation of textual materials that encourage public debate.

John Perry Barlow, former Grateful Dead songwriter and co-founder of the Electronic Frontier Foundation, shares many of Doctorow's beliefs and is another notable public voice in conversations related to intellectual property and technology rights. After being investigated for a putative act of piracy in the early 1990s, Barlow decided to form an advocacy organization dedicated to ensuring the preservation of Internet civil liberties in the face of increasing government censorship and technologies of surveillance. Along with Lotus founder Mitch Kapor and free software pioneer John Gilmore, Barlow has been one of the leading public figures in insuring that technological control doesn't supersede individual freedoms or technological development on the net.

In his 1994 essay *Wired* essay "The Economy of Ideas," Barlow challenges the intellectual property doctrines that have governed analog media since the early 1900s. Noting that the "property" metaphor doesn't hold in digital environments because resources are non-rivalrous, or infinitely renewable through technologies of reproduction, Barlow highlights how the new technology of the Internet has outpaced social development and regulation, pointing out the lack of a "social contract" that exists between Internet users and their preferred form of Internet governance. He goes on to highlight how understanding information as embodied activity, life form, and relationship assuages problems of information scarcity and signals an alternative direction for economics in the 21st century\textsuperscript{54}. In an essay published in *Wired* six years later entitled "The Next Economy of Ideas," Barlow invokes ecological

\textsuperscript{53} "Free(konomic) Ebooks" (2007) and "Ebooks: Neither E, Nor Books" (2004).

\textsuperscript{54} In many ways, Barlow's work here on "information as relationship" anticipates the work of Shoshana Zuboff and James Maxmin in *The Support Economy* and postdates Zuboff's *In the Age of the Smart Machine*. The movement toward a relations-based networked information economy informs the initial portions of the second section of my literature review on distributed social production.
metaphors to draw attention to the systemic "health" of the system and its possible contamination by overly constrictive intellectual property regimes. He also reiterates the claim that "relationships" are increasingly the spaces where capitalization can occur because transformations in social relations will structure economic systems in non-rivalrous resource environments. While some of Barlow's pronouncements lack the sophistication of legal scholarship on copyright and could sometimes be accused of techno-optimism, his observations concerning the function of intellectual property for the web remain some of the most popular and widely cited by the broader public. His work on the social contract between Internet users and technologies of Internet governance provide a technologist analog to Stiegler's claims concerning the gap between technogenesis and sociogenesis and illustrate a hands-on activist orientation toward intellectual property in the digital world.

In Digital Copyright, Jessica Litman recognizes the race between technogenesis and sociogenesis, arguing that the basic freedoms of society as well as the incentive to produce and expand technology are at stake in current debates concerning copyright in the digital age. Litman's monograph argues that while technology moves faster than the laws that bind it, those laws have been written to benefit the content industry at the expense of the individual as well as the public domain. According to the author, copyright legislation in the analog period provides undue protections to the content industry in a couple of different forms: first, because of the close collusion between legislators and lobbying groups, any copyright legislation passed by congress will only be supported if it leaves the content industry better off than when it started; and second, the rules that bind copyright are typically written to provide protections to very specific entities from the content industry. The first of these protections encourages a "strong" policy wherein reuse or appropriation of copyrighted materials is very difficult for the average user. The second of these protections results in copyright policy that is not only outpaced by technological development but is also incomprehensible to the lay user. Litman contends that these inheritances from the analog intellectual property era are being integrated into digital copyright policy, much to the detriment of the average consumer. Arguing for a streamlined copyright doctrine, Litman presents a compelling case wherein a couple of fundamental revisions to the existing paradigm occur: first, the reproduction right
should be abandoned because digital information cannot be processed and used without making copies (180-1). Second, Litman argues that the public should have access to read, view, and listen to publicly funded and available works - even if it means circumventing digital rights management technologies to secure that access (175-84). Litman's prodding of a slumbering public in *Digital Copyright* proved prescient as waves of Internet activists strongly condemned and protested proposed legislation such as SOPA/PIPA, ACTA, and CISPA in the early 2010s.

Lessig, Doctorow, Litman and Barlow are representative of a large network of Internet advocates, technology sector lobbyists, public intellectuals, and popular culture figures who are in favor of what law scholar James Boyle calls the "cultural environmentalist" position. Drawing on work by David Lange on the public domain\(^{55}\) and the burgeoning environmentalist movement in the United States in the late 1990s\(^{56}\), Boyle's germinal article "A Politics of Intellectual Property: Environmentalism For the Net?" draws an analogy between environmental stewardship through conservation and preservation projects and cultural preservation and protection through lax environmental property regulation. By providing legal protections for non-commercial appropriations of cultural texts, cultural environmentalists argue, that "culture begets culture" through processes of remix, reappropriation, and assemblage. "Health" in both the environmental and intellectual property context is predicated on widespread access to cultural properties and shared public resources. As Boyle notes,

> To me, this suggests a strategy for the future of the politics of intellectual property. In both areas [intellectual property and environmentalism] we seem to have the same recipe for failure in the structure of the decision-making process. Decisions in a democracy are made badly when they are primarily made by and for the benefit of a few stake-holders (land owners or content providers).

Boyle's work in "A Politics of Intellectual Property" broadly defines the position of technologists like Lessig, Doctorow, Barlow, and others. Essentially, technologists celebrate the potential of technology and

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information proliferation for the production of a better informed democratic polity. Technologists also recognize that that information proliferation has the potential to be constrained by social structures - most notably legislative bodies and traditions of jurisprudence - through overly restrictive intellectual property regimes. Because of the fundamental disjunct between technogensis and sociogensis, technologists develop Attitudes toward intellectual property that embody a perpetual state of incompleteness, ensuring that future technological development can occur while the practice of social control is restrained.

*Intellectual Property and Writing Studies*

English and Textual Studies writ large - and Writing Studies in particular - have a long-running engagement with Attitudes regarding intellectual property. Originally focusing exclusively on plagiarism in student writing, other work from Writing Studies questions conservative plagiarism policies by arguing for a social turn, understanding writing as an already dialogic process. Scholars from the discipline also take up intellectual property more explicitly in the move toward New Media pedagogies. Because transformations in the tools of production and distribution of digitized, multimedia texts fundamentally alter the constitution of "writing" in the composition classroom, New Media scholars increasingly look to intellectual property theorists and plagiarism experts to safeguard against the often murky terrain of fair use for educational purposes. Others in the field focus on one particular aspect of intellectual property discourse in developed economic contexts: piracy.

*Writing as Social Act*

Karen Burke LeFevre's 1987 monograph *Invention as a Social Act* is a landmark work on the social turn in Writing Studies. Leaving behind what she calls "Platonic" invention - or another instantiation of the myth of Romantic genius - and instead turning toward internal-dialogic, collaborative, and collective understandings of the inventive act, LeFevre illustrates how writing emerges and to whom said writing might belong. Drawing heavily on work by Freud, George Herbert Mead, and Durkheim, LeFevre's argument makes the canon of invention its focus; however, her book contains many implications for authorship theory and intellectual property by considering how ideas form and to whom their creation might be attributed.
Lunsford and Ede's *Singular Texts/Plural Authors* treads on the same path that LeFevre's work laid out three years before. By collecting survey data and conducting interviews about the processes of group writing at multiple postsecondary educational institutions around the country, Ede and Lunsford tease out a collaborative theory of writing process. While their empirical study of group writing is important and calls attention to the creative process as collaborative, dialogic, and sometimes non-hierarchical, perhaps more importantly they anticipate how new writing technologies erase authorial particularities. The authors contend that because word processing programs and other composing technologies obscure the *trace* of individual authorship, collaboration in electronic environments creates new challenges to conventional views of creativity and intellectual property.

Marilyn Cooper's 1986 *College English* article "The Ecology of Writing" precedes both LeFevre and Ede and Lunsford's monographs and offers a model of language as inherently social. Rejecting what she calls the "tyranny of the solitary author ideal" (366), Cooper instead offers an ecological model of writing that relies on the core premise that "writing is an activity through which a person is continually engaged with a variety of socially constituted systems" (367). Taking a systemic approach means rejecting the notion of authors as autonomous, self-contained entities that objectify readers as generalized others; rather, as Cooper argues toward the end of her article, "Writing, thus, is seen as both constituted by and constitutive of these ever-changing systems, systems through which people relate as complete, social beings, rather than imaging each other as remote images: an author, an audience" (373). Cooper's work on developing ecocomposition was long-sighted and prescient. As scholars in Writing Studies are only now turning to work in postphenomenology, distributed cognition, and speculative materialism, Cooper's early ecological approach is finally getting its due.

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57 Cooper continues fascinating work on distributed cognition and various strains of phenomenology. Her most recent article "Rhetorical Agency as Emergent and Enacted" (*CCC* 62:3) extends the work of "The Ecology of Writing" by challenging autonomous notions of agency and action, instead positing that the ability to act is a property of embodiment; congruently, embodiment is constituted by various ecological systems.
The social turn in Writing Studies provided theoretical challenges to authorship in the field of English and Textual studies by complicating the myth of Romantic authorial genius. Concomitantly, transformations in the theorization of the author reframed the putative problem of plagiarism in student writing and provided Writing Studies its most robust engagement with intellectual property to date. In this section I'll selectively engage scholarship on plagiarism post-1990 to highlight how redefinitions of authors as social agents have led to valuable insights into plagiarism and intellectual property in Writing Studies.

Rebecca Moore Howard's *Standing in the Shadow of Giants: Plagiarists, Authors, Collaborators* (1999) is one of the most - if not the most - influential Writing Studies texts on plagiarism. In this monograph Howard challenges composition instructors and the academy writ large to examine their own compositional practices as a means of understanding the constitution of collaboration in academic writing. To do so, Howard offers a theory of "patchwriting" or "copying from a source text and then deleting some words, altering grammatical structures, or plugging in one synonym for another" to complicate traditional academic assumptions of plagiarist practice58 (xvii). Acknowledging that all academics engage in this dialogic relationship with other authors and have done so from antiquity to the present59, Howard posits an alternative model of collaborative creative process that interrogates concepts such as "originality" and "authorship" while at the same time disputing economic logics of intellectual property that make unauthorized, non-commercial reuse a criminal act.

Johnson-Eilola and Selber's article "Plagiarism, Originality, Assemblage" further complicates traditional depictions of plagiarism by calling into question the hierarchical assessment practices of writing instructors. According to the authors, writing courses often reward students' putatively "unique contributions" and "originality" more than their ability to consult, frame, model, and quote outside

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58 Patchwriting has a long history in academic writing pedagogy that extends all the way back to Greco-Roman pedagogical practices of imitatio and mimesis. C.f., Quintillian's *Institutio Oratoria* (10.2.4), Cicero's *De Oratore*, Longinus's *On the Sublime*, the *Rhetorica ad Herennium* (1.3.2), Malloch (1976), Logie (2003), and especially Muckelbauer (2003, 2008).

59 To make this argument, Howard draws on a rich variety of sources; however, her use of legal theory from Woodmansee and Jansi provide important connections between Rhetoric and Composition and legal scholarship reviewed earlier.
sources in their own work. This emphasis on the original reifies analog conceptions of intellectual property and reinforce the "lone, creative genius" conception of creative production. By placing a greater emphasis on the original, Selber and Johnson-Eilola argue that students are more likely to engage in plagiarist practices, hiding their borrowing and appropriation of texts in order to meet the qualifications of "unique" creative work. As a remedy, the authors propose "assemblance" as a compositional practice wherein writers borrow, remix, and reformulate texts into new texts. Prefaced on an understanding of language use as social and dialogical, Johnson-Eilola and Selber proffer an alternative metric of writing assessment that recognizes how originality is actually constituted through patchwritings that weave together multiple sources, discourses, and genres in the construction of rhetorically sophisticated, creatively written products.

Other Writing Studies scholars have shifted their attention to the intersection of plagiarism and online research. DeVoss and Rosati's 2002 article "'It Wasn't Me, Was It?' Plagiarism and the Web" and Howard's "Understanding Internet Plagiarism" (2007) are representative in this regard. DeVoss and Rosati highlight the complexity of researching ethos in Internet spaces, argue for intellectual property as the focus of course writing assignments, encourage the development of "critical online research" practices and hint at the importance of a "cut-and-paste" compositional ethic that would eventually see its full treatment in Howard's article. "Understanding Internet Plagiarism" turns again to the intertextual nature of textual creation and claims that textual appropriation and remix-based writing strategies are actually constitutive of a digital writing ethic. Reiterating the principles of assemblage that Johnson-Eilola and Selber consider, Howard claims that "Internet plagiarism" often isn't plagiarism at all and the greatest threat it poses is "the widespread hysteria that it precipitates" (12).

In addition to plagiarism studies, authorship studies constitute a main pillar of intellectual property research in Writing Studies. Kennedy and Howard acknowledge as much in their May 2013

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60 DeVoss and Rosati recommend teaching students to evaluate websites for authority, reliability, design, and navigation to deploy practices of critical online research (200).

61 Interestingly, Howard critiques DeVoss and Rosati for reinforcing theories of Romantic authorship by claiming that students either 1) do thoughtful research online; or 2) find things to plagiarize. These two options leave little room for compositional practices that incorporate research in meaningful ways through bricolage and assemblage.
College English special issue on western cultures of intellectual property, noting that "Much of the intellectual property work in English studies has proceeded from an interest in the cultural construction of authorship" (462). This emphasis has been even more pronounced in new media composition, drawing attention to the complexities of collaborative authorship in digital assemblages such as the remix or collaboratively authored Wikipedia articles.

Intellectual Property and New Media Composing

Writing Studies plagiarism scholarship since Howard's 1999 Standing in the Shadow of Giants almost uniformly questions the what Woodmansee calls the "Myth of Creative Genius" and looks toward social and dialogical theories of writing process to understand compositions created in writing classrooms. As the tools of multimodal production have increased in availability and ease of use, composition instructors have recognized the import of new media writing in the digital age62. Yet, as composition pedagogies look to incorporate theories of remix and assemblage into writing instruction, new questions regarding intellectual property arise. Because pedagogies of remix and assemblage depend on the appropriation of extant media, new media theories of writing increasingly intersect with questions about intellectual property, copyright, and fair use.

Andrea Lunsford and Susan West's 1996 CCC article "Intellectual Property and Composition Studies" provides a succinct overview of the construction of authorship from the legal field while also drawing attention to the ways that Western poststructuralist theory deconstructs intellectual properties as shifting, always partially non-attributable, and collaboratively constructed. Relying on the premise that "communicating in an electronic environment is a social activity" (395), Lunsford and West illustrate the ways that gift economies, open source movements, and digital compositional tools challenge extant intellectual property paradigms and connect those copyleft positions to Writing Studies. Arguing that the field has too long perpetuated traditional concepts of authority, authorship, and ownership of intellectual property, Lunsford and West's article points to the ways that the networked information economy brings

62 Kathleen Yancey's CCCC address and eventual CCC article "Made Not Only in Words: Composition in a New Key" is representative in this regard.
new pressures to bear on the teaching of writing in a digital age. The authors close by offering a new vision of intellectual property in composition, asking "Why not alternatively understand the creation of intellectual property as a temporary appropriation of linguistic territory from the cultural commons, an appropriation meant to enrich not only the 'creator/s' but the public domain as well?" (400).

Gurak and Johnson-Eilola's 1998 special issue of *Computers and Composition* extends the work of Lunsford and West and provides the first sustained, multivalent treatment of intellectual property for digital writing in Writing Studies. As an outgrowth of the CCCC-Intellectual Property Caucus, the articles in this special issue offer some of the earliest and most cogent uptakes of legal scholarship in the field. Dominant themes include theoretical and conceptual questions regarding authorship, originality, and intellectual property, questions of fair use in new media pedagogies, and the problematics of "web plagiarism." Highlighting the move from an analog textual environment to one where "our new texts are amazingly reproducible, copyable, and transmittable with a few mouse clicks and keystrokes," the authors of this collection largely adopt a "copyprivilege" perspective on intellectual properties, encouraging fair use defenses of assemblage based composing practices (122).

In 2000 many of the authors who contributed to Gurak and Johnson-Eilola's *Computers and Composition* special issue on intellectual property collaboratively constructed the first CCCC statement on intellectual property. "Use Your Fair Use: Strategies toward Action" outlined the intricacies of media reuse as provisioned by the Copyright Act of 1976 and urged writing teachers to liberally apply the four-factor fair-use test in their own pedagogies. Since the CCCC-Intellectual Property Caucus statement on

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63 Conference on College Composition and Communication's Caucus on Intellectual Property. Interestingly, the creation of this caucus can be directly linked to a special conference that Martha Woodmansee and Peter Jansi hosted some years before on authorship and intellectual property. Attended by Karen Burke LeFevre, Andrea Lunsford and other composition scholars, Woodmansee and Jansi's seminar explains their robust uptake and influence on composition scholarship regarding intellectual property.

64 The four-factor test establishes fair use based on the following criteria:
- the purpose and character of the use, including whether such use is of commercial nature or is for nonprofit educational purposes;
- the nature of the copyrighted work (factual or creative);
- the amount and substantiality of the portion used in relation to the copyrighted work as a whole;
- the effect of the use upon the potential market for or value of the copyrighted work. The fact that a work is unpublished shall not itself bar a finding of fair use if such funding is made upon consideration of all above factors.
fair use in the composition classroom, numerous article length publications that address copyright, fair use, and authorship continue to appear in disciplinary journals; in fact, two recent edited collections highlight how the field continues to engage intellectual property. Steve Westbrook’s *Composition & Copyright: Perspectives on Teaching, Text-Making, and Fair Use* (2009) and Martine Rife, Shaun Slattery, and Danielle Nicole DeVoss’ *Copy)Write: Intellectual Property in the Writing Classroom* (2011) include submissions from an almost identical list of authors. Both collections contain theoretical explorations of authorship, cultural appropriation of media, concepts of originality, and the ways that institutional structures exert authority and power over textual (re)use. A notable difference between the two collections is that selections in Rife, Slattery, and DeVoss’ work are mostly theory pieces that incorporate legal scholarship and jurisprudence whereas Westbrook's book is more practical and pedagogical in orientation. Perhaps because of the increased litigation concerning copyright between 2009 and 2011 and the widespread adoption of new media assignments in writing classes, Writing Studies intellectual property scholars are shifting focus toward a heightened engagement with the law and copyright doctrine from a legal perspective.

The transition toward new media assignments in writing classrooms reveals a murky relation between the oft-contested term *plagiarism* and its nefarious neighbor *piracy*. While textual misappropriation is typically categorized as *moral* transgression that fails to recognize the import of other voices on the formation of one's own voice, almost any appropriation of non-alphabetic sources - be they film, music, performance, etc., - is often characterized as an *economic* transgression. The misplaced equivalency drawn between *moral* and *economic* with respect to reuse of another's material expression often results in new media student compositions being construed not only as *plagiarisms* but also *piracies*. The terminological mix-up between the two terms underscores the tensions and complications

While the first two establish protections for educational use through encouraging the circulation of ideas in educational settings, the final two factors are strictly economic in nature. Like most questions of copyright, establishing fair use is difficult and often results in the answer: "it depends."

that arise as students move beyond composition of the alphabetic and into multimedia creations. While being designated a plagiarist in writing courses is certainly a moral black mark, such accusations don't push students into the economic realm of punitive damages for (mis)using copyrighted materials. To understand the danger in portraying student writers as pirates as well as plagiarists when engaging in new media composition, I'll next explore the historical usage of the term piracy, drawing attention to how it has been deployed over history to connote intentional theft of intellectual properties for economic gain.

Piracy and Intellectual Property Transgression

Writing in the 5th century BCE, Thucydides referred to the uncivilized, sea-faring warlords that regularly raided town across the Aegean as peiratos. According to Adrian Johns in Piracy: The Intellectual Property Wars from Gutenberg to Gates, the Greek people responded to these periodic raids by establishing affiliations among cities for protection. Relying on Thucydides, Johns recounts that, "It was in opposing pirates that 'the Athenians were first laid by their Armour, and growing civill, passed into a more tender kind of life.' Civilization was the antithesis to piracy" (35). This markedly Othered connotation as uncivilized, barbarous, and dangerous continued to characterize theft of physical property - and eventually intellectual property - throughout the course of Western civilization. In fact, the popular conception of the piratical ethos continues to be tied up in this articulation; however, recent scholarship in Writing Studies is challenging some long-held assumptions on what constitutes "piracy" or theft of intellectual properties.

While peiratos continued to pillage merchants, military convoys, and explorers during the intervening period between Ancient Greece and the 16th century, their practice was largely relegated to theft of physical objects. But peiratos weren't simply thieves; rather, as Johns points out multiple times

66 This mixup isn't historical accident. Woodmansee's The Author, Art, and the Market draws attention to the function of capital in the construction of intellectual property doctrine during the 18th century and beyond. A central challenge of writing teachers and scholars will be to tease out this tension between moral and economic reuse, highlighting how fair-use and intellectual property reform encourages the production of culture and advancement of ideas in liberal society.

67 There are exceptions to this rule; most notably, the Roman orator Quintilian's claims of authorial authenticity and proprietarian ideology with respect to his own intellectual creations. Logie explores this topic in detail in "'I Have No Predecessor to Guide My Steps': Quintilian and the Roman Construction of Authorship."
in his work, pirates were a threat to the civilized order. Seventeenth century England saw an explosion in discussions of piracy as guilds, universities, and bourgeoning companies used "pirate" as a metaphor to describe any form of brigandage and theft, even in the new but poorly defined case of "intellectual" properties. As a particularly influential printing guild, the Worshipful Company of Stationers and Newspaper Makers - or Stationers' Company - fought tirelessly in the 17th century against unauthorized publication of manuscripts, securing the first copy right by emphasizing the detrimental effects of piracy on book production. Adapting their argument to concerns for the Commonwealth, the Stationers' Company eventually fell prey to the rise of the author as a legal entity in the 18th century. The Stationers' Company's efforts to link the barbarous nature of sea-roving rogues to theft of intellectual property cemented the metaphor of piracy to describe the unauthorized appropriation of mental creation.

In the intervening period between the Stationers' Company and today, the use of piracy as metaphor to describe appropriation, reuse, or theft of intellectual properties has grown dramatically. While books were once the sole media being pirated, the aegis of intellectual property now extends to musical recordings, film, search algorithms, and even living organisms. Yet, as incidences of piracy continue to increase and as technogensis continues to outpace sociogensis, the notion of the pirate as a threat to civilized culture is being challenged from multiple corners of the globe. Mashup artists like Girl Talk and hip-hop artists like Danger Mouse and 50 Cent have embraced the remix and reuse culture of the open-source movement, challenging charges of piracy by relying on alternative articulations of what constitutes authenticity and authorial voice. Other creative types in public and graffiti art challenge the

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68 While this description might sound edifying, it isn't intended to be read as such. The Stationers' Company - along with other chartered guilds in the same period across a range of trades - operated a state sanctioned monopoly over intellectual property after they secured numerous legislative victories during the 17th century. Economic roots in monopoly and regulation served as the official public justification of intellectual property law and practice during the first two hundred and fifty years of its existence (St. Clair 377).

69 The metaphors deployed by strong intellectual property advocates played an instrumental role in the expansion of copyright throughout the 17th and 18th centuries. In "Metaphors of Intellectual Property" St Clair explores the metaphorical use of commonweal, the body, and gardens to demonstrate the analogical power of rhetorical figures of speech in the genesis of intellectual property policy. Of course, considering the metaphorical power of the commonweal in supporting strong intellectual property rights, it is unsurprising that piracy became its metaphoric opposite. According to St Clair, the property/piracy dialectic no longer offers much explanatory or analytical value because of the non-rivalrous nature of digital goods; however, the dyad retains rhetorical power through its history of use and reuse (394).
entire apparatus of intellectual property, arguing that piratical acts that subvert the trademarks and logos of the capitalist marketing machine are ethical responsibilities of individuals in contemporary consumer culture. Though their platforms tend to be fairly underdeveloped beyond an abiding attention to technological policy and copyright protest, there are even pirate political parties in numerous nations around the world. All of these challenges to the mainstream metaphor of piracy leads one to wonder about the future of intellectual property in an age of distributed social production, intense networked communication, and uneven economic geographies around the globe. Recognizing that universal application of copyright is likely coming to an end, Johns notes in the conclusion of *Piracy* that "Assumptions [about intellectual property] that had seemed secure and unquestionable are all of a sudden doubtful again. As this happens, many are the possible trajectories on offer . . . . There are not many guides to help us choose best" (518). For the remainder of this chapter, I'll explore some of the recent investigations into the notion and practice of piracy from the field of Writing Studies to try and decipher what trajectories are on offer and how the practices of contemporary writers are challenging long-standing characterizations of pirates as uncivilized, barbarous, and ill-intentioned. This scholarship from the field challenges mainstream articulations of the pirate by highlighting creation as a socialized activity shared among many authors across time and space.

Work by Writing Studies scholars on writing as social action, plagiarism and authorship studies, and fair use in new media have made important contributions to a more critical, well-informed disciplinary perspective on intellectual property. By adopting various postmodern conceptions of authorial agency, creativity, originality, and composing practices, Writing Studies scholarship deconstructs the Romantic notion of authorship and attempts to reframe intellectual property in citational - not economic - terms. Yet, as recent battles over proposed legislation like SOPA/PIPA attest, the rhetoric of piracy continues to dominate intellectual property discourse in popular culture. To date, only two book-length studies and a handful of articles from the field have explicitly confronted the putative piracy "epidemic." By drawing heavily on legal scholarship, cultural studies, and discourse analysis, DeVoss and Porter's "Why Napster Matters," John Logie's *Peers, Pirates, and Persuasion*, and Jessica
Reyman's *The Rhetoric of Intellectual Property* provide important studies of piracy in digital environments; however, despite doing a superb job analyzing the public discourse about piracy, no research in Writing Studies to date analyzes acts of piracy from the perspective of individuals engaged in illicit appropriations of intellectual property; further, the extant research also fails to account for systemic activity to explain new forms of digital writing and alternative articulations of intellectual property in the networked era.

DeVoss and Porter's 2006 *Computers and Composition* article "Why Napster Matters to Writing: Filesharing as a New Ethic of Digital Delivery" is the first article in Writing Studies that considers piracy in digital environments from a writing-as-social-action perspective. While the article treads familiar territory by offering critique of the author-as-original-genius argument, it goes on to consider P2P file sharing practices as new methods of research and composition. Returning to the rhetorical canon of delivery, DeVoss and Porter claim that practices of illicit file sharing actually signal shifts in the circulation and uptake of digital creations, offering new ways of thinking about the appropriation of extant media for new media compositions. As the authors note,

Napster should matter to writing teachers because it represents a paradigm shift: from an older view of writing as alphabetic text on paper, intended for print distribution, to an emergent and ill-understood view of writing as weaving digital media for distribution across networked spaces for various audiences engaged in different types of writing.

(179).

Anticipating important work on rhetorical velocity and rhetorical circulation, "Why Napster Matters to Writing" explores the implications of illicit piratical activity for writing pedagogy and urges a stronger interpretation of fair use defense for new media creation.

Shifting away from explicit work on writing instruction, John Logie's *Peers, Pirates, and Persuasion* offers a discourse analysis of the P2P debates and draws out important implications for Writing Studies scholars concerning intellectual property. Relying on a method that includes traditional
rhetorical analysis and "rhetorical historicism," (20) Logie analyzes metaphors employed by the content industry in popular discourse. Making this move allows Logie to provide rhetorical context to legislative measures such as DMCA and the NET Act that are often vilified by Open Access advocates and the broader copyleft. Weaving together many aforementioned positions on the importance of a lax copyright paradigm, Logie contends that the danger of deploying metaphors of property, theft, piracy, and war to file sharing is that it leads to a criminalization of digital media appropriation. Utilizing postmodern theories of authorship, public sphere theory, and technologist arguments about "exposure," Logie explains that by equating file sharing with "piracy" the content industries negate claims that argue:

- Sharing a digital resource isn't depletion but actually exposure (85) and exposure is more important than ownership in the networked information economy

- P2P technologies are fundamentally important the Open Access initiatives in the academy and beyond;

- Sharing of digital intellectual properties leads to a healthier democracy and an expansive digital public domain

- The creative process is inherently a social act, iteratively inflected and reflected by cultural contexts.

As a rhetorical analysis of public discourse surrounding "piracy," Logie's monograph is an important text for demystifying content industry claims about intellectual property infringement and offers a cogent synthesis of the field's contributions to authorship theory, fair use, open access, and textual appropriation.

Jessica Reyman's 2009 monograph The Rhetoric of Intellectual Property: Copyright Law and the Regulation of Digital Culture is the most thorough and well-articulated uptake of intellectual property by a Writing Studies scholar to date. Arguing that writing scholars have an obligation to eschew theories of Romantic authorial originality and corporate personhood, Reyman's book rearticulates copyright as

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70 Logie's argument parallels Barlow and Lessig's arguments that digital intellectual properties are non-rivalrous commodities.
71 Here Logie falls back on the cultural environmentalism position offered by Boyle that argues that access to cultural intellectual properties are a requisite of democratic culture and participation in the public discourse on ideas, policy, and legislation.
copyleft by shifting conversations about intellectual property away from property metaphors and toward resource metaphors. In this regard, she echoes the work of Logie and Boyle by claiming the health of a cultural ecology rests on its access to the digital public domain. Following Logie, Reyman analyzes different aspects of the public copyright discourse as well as legal decisions regarding digital intellectual property control in order to demonstrate 1) how content industry discourse supports "incentivizing exclusivity" in copyright law; 2) how cultural environmentalists have largely failed to prove the value of a digital commons in legal models of cultural production; and 3) how anti-piracy measures on postsecondary educational contexts largely operate on a logic of fear (23). Further, Reyman's work also highlights the danger posed by different technologies of control. In this sense, Reyman's work follows Steigler's arguments about the rate of technogenesis and sociogenesis and attempts to forge a new way forward in digital intellectual property doctrine that accommodates fair use, play, and the development of technologies absent rights management mechanisms.

Logie and Reyman's work are extremely important because they provide useful heuristics to answer the question of "How did we get here?" with respect to intellectual property policies regarding textual artifacts. By calling attention to specific language use through rhetorical and metaphorical analysis, both authors sketch frightening scenarios wherein corporate power in collusion with governmental entities dramatically scale back the structural conditions for human flourishing in digital environments. Yet, both authors neglect to work closely with file sharers in order to understand their motive, desire, and practice in piratical environments; instead investigating the popular discourse surrounding the piracy problem. For that matter, no scholars in Writing Studies have fully explored file sharing practice beyond the Attitudes forwarded in public discourse. As such, it will be necessary to provide a grounded exploration of piratical activity from the perspective of language and mediating technologies to fully understand what is inadequate about the current intellectual property paradigm and where we go next with respect to digital intellectual property policy both inside and outside the university.

Thinking Methodically: Agency and Attitude in Scenes of Distributed Social Production
Agency and Attitude, like all elements of dramatism, are iteratively co-constituted by the other elements that surround them. As such, research utilizing a (hex)pentadic orientation is perspectival, placing the focus of research on one dramatistic component over another. The research methodology I've developed to trace the "How" of distributed social production and the Attitude of users participating in these systems is likewise two-fold. In the following chapter, I'll provide a communicational-mediational research methodology that traces in parallel both Agency and Attitude. To discover Attitude, I'll rely on a grounded-theoretical process of analytic induction to derive quantifications of qualitative data. Considering Agency, I'll turn to Activity Theory as a methodological heuristic for mapping systemic, distributed activity across digital networks. To close, I'll bring both together, offering an Attitudinal-Agenic methodology for capturing the Scene of distributed social production.
2. On Streams of Language and Sociotechnical Ecologies in Writing Research

Introduction

In *Professing Literature*, Gerald Graff presents a history of academic literary studies in the United States from the Yale Report of 1828 through the fading influence of New Criticism in the 1970s and the rise of "theory" in the 1970s and 1980s. Graff claims that the organizing dynamic that shaped literature departments throughout the period was a methodological-epistemological binary: on one side one finds the "official" ideology of Arnoldian humanism, or the conception of literature as a culture-making, critique of lived experience. This perspective ensured that literature departments organized through periodization and expressed faith that a curriculum of themes, periods, and genres would cumulatively develop an appreciation of cultural traditions and humanism in the part of the student. On the other, Graff finds the "unofficial" ideology of positivism, or the world view that conceives of knowledge as a collection of discrete, knowable information that stands firm against criticisms from theories of time, social location, race gender, etc. Graff notes that when "literature" was first formalized in the American university in the late 19th century, the atomized empiricism of philological and historical study dominated research and explication (3). As a reaction against this putatively objective research epistemology, academic literary theorists of the early to mid 20th century turned instead to literature first and scholarship, criticism, and methodology second. In other words, despite lacking the decentering tendencies of poststructuralist theory, theorists and critics of the positivist paradigm in the early 1900s decentered positivism by instead posing close aesthetic readings of the literature itself. Today, we think of this transition as the development of New Criticism. Graff's monograph is interesting because he recognizes a parallel movement in the epistemological disagreement between New Critical and poststructuralists approaches to literature. Noting that "those who blame the problems of the humanities on . . . other post-1960s developments only illustrate their own pet maxim that those who forget the past are condemned to repeat it," Graff underscores the methodological-epistemological cycle that characterizes the dialectic of literary study in the American academy: the disciplinary center oscillates between empirical and theoretical research epistemologies cyclically, resulting in a methodological
bifurcation that organizes schools of thought and the production of scholarship across disciplines over time (4).

Published contemporaneously with Graff's *Professing Literature*, James Berlin's monograph *Rhetoric and Reality: Writing Instruction in American Colleges, 1900-1985* tells another history of the English department. Focusing on the development of composition in English departments in roughly the same period as Graff, Berlin's work recounts a very similar story: the epistemological binary between rhetoric and poetics hinged on the positivist leanings of writing instruction - or what Berlin terms "current-traditional rhetoric" - versus the theoretical-symbolic nature of literary criticism. Moving forward, Berlin offers a tripartite epistemological account of the development of writing instruction to draw attention to the ways that objective-positivist, subjective-theoretical, and transactional-dialogic rhetorics have characterized pedagogy in the field of composition. Though Berlin and Graff are discussing different factions of English studies in the late 18th and early to mid 19th centuries, both of their works point to a key tension in the study of texts, symbols, and meaning-making: the epistemological and methodological schism between hermeneutics and empirics has structured the conduct of scholarly inquiry and the pedagogical practice of English in both the literature and writing classroom.

The most memorable disagreement between scholars conducting empirical, data-driven research and scholars practicing social-epistemic critique occurred in the so-called "science debates" of the 1980s. Essentially pitting the empirically-situated cognitive psychological research of Flowers, Hayes, Bereiter, 72

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72 Interestingly, Graff notes in the preface of the 2007 reissue of *Professing Literature* that he regrets omitting rhetoric and composition from his book-length study.

If I were to write *Professing Literature* today I would give greater attention to the composition and rhetoric domain of English studies. I now see that in excluding composition from the scope of my study, I failed to recognize an important implication in my own argument. Since first-year composition is preeminently the part of the curriculum that has been charged with training students to "engage in intellectual debate at a high level," the logic of my own position should have led me to give composition greater prominence . . . . Even while writing *Professing Literature* I had begun to think that the long-standing split between literature and composition programs in the English department has been disastrous for literary study itself. After all, literary education flourishes only if students can write and speak proficiently about literature. (xvi-xviii)
et al. against schools of "theory" in the discipline at the time, et al. against schools of "theory" in the discipline at the time,73 these disciplinary disagreements played out in the pages of Writing Studies journals throughout the early 1990s and provide a prime example of what happens when oscillations between hermeneutical and empirical inquiry converge. The fundamental disagreement between the cognitivists and the theorists was the location of the writer as an object of research. Hermeneuticists like Berlin argued that the writer is actually the result of a matrix of social, historical, and ideological forces that produce subjectivity. As such, when conducting research it is important to account for the influence of these factors as they play a fundamental role in tracing writerly agency and empowerment. On the other hand, cognitivists like Flower and Hayes located the writer as an active, constructive maker of meaning, endowed with agency and ostensibly outside social location74. This omission of context directed cognitive inquiry toward the internal, goal-directed psychological processes of the writer to discover the most efficient steps students utilize to produce effective writing.

Through a series of interesting and sometimes inflammatory debates, a tenuous disciplinary consensus coalesced around the theoretical position of Berlin et al. and effectively ended the cognitive vs. social-epistemic conflict. In "Science, Theory, and the Politics of Empirical Studies," Shumway finds a

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73 Notable theorists from Rhetoric and Composition during the period included Bruffee, Berlin, and Bizzell. Bruffee's work in social construction draws heavily on Kuhn's understanding of scientific knowledge as constructed and expands to include the general category of knowledge beyond the scientific. According to Bruffee, social constructionist epistemological assumptions assume that the things we know of as knowledge, facts, selves, etc., are created through consensus of like-minded peers. Drawing on Rorty, Bruffee also acknowledged the material realities that construct our experience; however, knowledge in the social constructionist framework isn't the result of "dealing with" those material realities. Rather, knowledge results from the "dealing with" our beliefs about the physical reality that shoves us around and those beliefs are what we use to justify knowledge to the aforementioned group of like-minded peers (777). Berlin's work integrates the social epistemology from social construction and infuses it with Marxist critique borrowed from the Birmingham School of Cultural Studies. Recognizing the power of language in the construction of reality as well as the power of patriarchy and class supremacy in constructing pedagogies that serve the privileged classes, Berlin's historical work in Rhetoric and Reality (1987) and Writing Instruction in 19th Century American Colleges (1984) weaves together the social constructedness of knowledge with material oppressions and the historical function of power. In the collection Academic Discourse and Critical Consciousness (1992), Bizzell's essays from the late 1970s to 1990 rely heavily on Kuhn, Rorty, and Stanley Fish to argue that language is socially constructed and that "language-using practices" of particular discourse communities constitute the basis for effective rhetorical engagements (167). Advocating a strong integration of social and cultural literacies into academic writing pedagogies, Bizzell's work during the period reflects a deeply help belief in the social construction of language as well as a desire to open up academic writing instruction to liberatory aims.

74 This is certainly the story that the hermeneutics claimed; however, the cognitive process model starts with a recognition of the "task environment" or space outside the writer that provides the rhetorical problem and includes the text itself. The problem, claimed Berlin et al., was that the rhetorical problem was an overly facile, often artificial articulation of the rhetorical situation; furthermore, by placing supreme importance on the imagination, art, and goals of the writer, cognitive rhetoric failed to account for the influence of ideology and overarching sociocultural structures that authorize agency in the first place.
middle ground between the two perspectives, arguing that Flower actually rejects pure positivism or "naive positivism" because she advocates "observation-based theory building" that assumes a postpositivism that "acknowledges both the relative nature of knowledge and the social and cognitive process of interpretation of educational research" (154). Focusing on her postpositivist clarifications of cognitive research, Shumway notes that the work of Flower, Hayes, Bereiter, et al., is actually just an elaborated form of literary theory wherein empirical researchers provide rich instances or evidence in support of a particular theory. Deconstructing the empirical/theoretical divide, Shumway claims that "literary theory can have no objection to empirical research on epistemological grounds" because the objective, positivist assumption about having access to the "real world" is absent. Though Shumway eventually recasts cognitive research into rigorously argued, data-driven hermeneutics, he recognizes that the epistemological divide between the theorists and empiricists is damaging to the discipline of Rhetoric and Composition as a whole. He closes by noting, "Each of us must advocate the production of knowledge that best serves our interested ends" (158).

Carol Berkenkotter's article "Paradigm Debates, Turf Wars, and the Conduct of Sociocognitive Inquiry in Composition" predates Shumway's book chapter and provides an important counterpoint from the perspective of an empiricist. Berkenkotter claims that the reason empirical work in composition came under fire in the late 1980s was due to the politicization of English studies vis-a-vis literary theory. Noting that literary theory was at the time the fastest growing sector in English departments, Berkenkotter contends that theory's adherence to hermeneutic methodologies resulted in its lambasting of any methods that even remotely resembled an "ideology of science" or positivism (158). In an attempt to bring together the theoretical and empirical camps, Berkenkotter closes the article by pleading for an "epistemological ecumenicalism" that recognizes a wide range of knowledge constituting systems from across humanistic and social science disciplines. Adopting this methodological orientation allows researchers to "make informed choices, rather than being led to questions and methods socially sanctioned within individual scholarly communities or specific graduate programs" (166). Further, bridging the hermeneutic-empiric divide would allow scholars in an inherently interdisciplinary field to recognize how "empirical research
[can] enrich rather than rival the efforts of those who see the needed work in composition to be done in
the areas of cultural studies, critical theory, and feminist theory" (ibid.).

Despite Berkenkotter's calls for epistemological ecumenicalism, hermeneutics and theory-making
have dominated research and scholarship in Writing Studies in the past twenty years. In his 2005 Written
Communication article "NCTE/CCCCs Recent War on Scholarship" Richard Haswell recognizes as
much, contending that while data-driven studies are being undertaken by folks outside the "center" of
composition studies, the idea of RAD\footnote{Replicable, aggregable, and data-driven. Haswell defines RAD research as "a best effort inquiry into the actualities of a situation, inquiry that is explicitly enough systematized in sampling, execution, and analysis to be replicated; exactly enough circumscribed to be extended; and factually enough supported to be verified" (201).} research is often construed as a "fad" and the tough hermeneutic
work of Writing Studies is where one finds real institutional and disciplinary prestige (217-8). Claiming
that empirical inquiry falls victim to a disciplinary discourse of "scientism, fact mongering,
antihumanism, positivism, and modernism," Haswell reopens the epistemological-methodological
problem in the mid-2000s by signaling a clarion call to scholars in Writing Studies to return to a more
methodologically rigorous research program\footnote{Haswell's article is itself an exercise in RAD methodology. Haswell and another composition researcher independently categorized all 258 articles appearing in CCC from 1981 - 1984 and 1995 - 2005 as either RAD or non-RAD scholarship. Coding reliability matched 93.4% of the time. Haswell repeated this process with respect to non-CCC NCTE publications and the CCC/CompPile bibliographies.} to combat the aggressive and ultimately damaging
publication trends of the discipline's most influential professional organization\footnote{Russell Durst's 2006 article "Research in Writing, Postsecondary Education, 1984 - 2003" supports Haswell's claims with a study whose findings could be characterized as replicable, aggregable, and data-driven. Ultimately Durst's study finds a "sharp decline in empirical studies of writing at the postsecondary level, in favor of more humanistically-grounded theoretical and critical work" (54).}.

Chris Anson's 2006 WPA Conference address "The Intelligent Design of Writing Programs:
Reliance on Belief or a Future of Evidence" extends Haswell's contention that Writing Studies research
must swing back toward the empirical to remain salient in postsecondary academic settings. Reframing
the debate between hermeneutics and empirics as one between epistemologies of belief and
epistemologies of evidence, Anson offers an excoriating critique of research methodologies that have
strong ideological, often political, underpinnings but lack rigor and data-driven claim making. Echoing
Berkenkotter's call for epistemological ecumenicalism and extending Haswell's critique, Anson contends that:

> if we continue to rely on belief in our pedagogies and administrative decisions, whether theorized or not, whether argued from logic or anecdote, experience or conviction, we do no better to support a case for those decisions than what most detractors do to support cases against them. Instead, we need a more robust plan for building on the strong base of existing research into our assumptions about how students best learn to write . . . .

Ultimately, changing the public discourse about writing from belief to evidence, from felt sense to investigation and inquiry, may help to move us all beyond a culture of 'unrelenting contention' (Tannen) and toward some common understandings of what we can know, with some level of certainty, about what we do. (11-2)

Both Haswell and Anson attempt to resituate disciplinary inquiry to deflect institutional pressures that critique the study of writing for its overreliance on non-empirical methodologies. As university administrators increasingly make budgetary funding decisions based on econometric quantifications of educational efficacy, the lack of data-driven studies of qualitative or quantitative nature place the discipline in the same position as many other fields in the Humanities. Haswell says as much explicitly, arguing that "when college composition as a whole treats the data-gathering, data-validating, and data-aggregating part of itself as alien, then the whole may be doomed. Even now, the profession's immune system - its ability to deflect outside criticism with solid and ever-strengthening data - is on shaky pins" (219). As writing program administrators, pedagogues, and Writing Studies scholars, Haswell and Anson recognize that without expanded and renewed interest in empirical research epistemologies, the discipline of Writing Studies faces significant questions about its own saliency in academic environments where funding pressures and administrative "master plans" adopt STEM\textsuperscript{78}-based metrics for assessing departmental relevance.

\textit{Text and Context: A Prolegomenon toward Tracing Writing-Subjects}

\textsuperscript{78} Science, Technology, Engineering, and Mathematics.
Must scholarly inquiry utilize either RAD research from the disciplinary periphery or strict hermeneutics from the center? Some recent work in composition theory suggests that it doesn't; rather, taking into account both text and context, neo-empiricists like Raul Sanchez see a way out of the methodological dialectic between facts and beliefs. Recognizing that the space and time of research has moved beyond the text to incorporate what Derrida calls the "general field of writing," Sanchez's recent 2012 *College English* article "Outside the Text: Retheorizing Empiricism and Identity" attempts to bridge the empirical-hermeneutical schism that characterizes methods work in Writing Studies. Calling for inquiry into the "writing-subject," Sanchez's both/and approach to writing research highlights the role of network and new media technologies in rendering visible the materiality of textuality in digital spaces; in so doing, Sanchez claims that electronically mediated writing research provides the most promising space to reinvigorate empirical inquiry by bringing theory and data together toward uncovering the complex real.

In "Outside the Text" Sanchez reviews the hermeneutic-empiric divide in Writing Studies research, claiming that each method is underpinned by a particular epistemology. For empirical researchers, the "writer" serves as the material object of inquiry and is constructed in realist terms; in other words, empirical researchers of writing recognize that the writer is a unified, solitary entity, "implicated in complex textual relations but who is, in the final analysis, outside of textuality, not caught in the play of difference" (235). In contrast, Sanchez notes that hermeneutical research tends toward an epistemology of diffused subjectivity. As such, studies into the writing process utilizing a theory-based epistemology conceive of the writer as subjectivity - an immaterial, non-Cartesian theoretical construct that dissolves the unified subject and instead posits writing and the writer as relationship between subjects and objects in the field of discourse (ibid.). Sanchez claims that both conceptions of how writing happens

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79 Sanchez claims a return to empiricism in "Outside the Text" via a neo-empirical theory of writing. This theory views writing as an "identity-based cultural activity" (240) that produces identity outside of philosophical concepts and squarely in the domain of rhetorical action. By researching the experience of writing as an identity-making rhetorical act, Sanchez claims that neo-empirical inquiry traces how information vis-a-vis writing is processed, deployed, redeployed, and integrated into the lived, experienced, and material lifeworld. This view is in contradistinction to the notion of identity as philosophical concept abstracted from experience.
are important and proposes a method of uncovering the "writing-subject" or a space of rhetorical identity-making that coordinates activity in the interstitial space between textuality and outside textuality. Tracing both individual writerly agency and the flows and circulations that bear on the production of agency in the composing subjectivity, Sanchez argues that his neo-empirical methodology attempts to sidestep epistemological assumptions by researching the writing-subject as *rhetorical action* - an identity-making cultural activity that emerges from the iterative relation among texts and contexts.

Sanchez's work in "Outside the Text" relies heavily on N. Katherine Hayles' articulation of embodiment from *How We Became Posthuman* and *My Mother Was a Computer*. According to Sanchez, networked and new media composition technologies allow researchers to render studies of diffused subjectivity more tangible than before, moving research beyond ideology toward the materiality of grounded discourse. As such, the subject can now be studied through empirical analysis by tracing embodiment, or the event of becoming that emerges from the complex interplay of *body/materiality, discourse, and difference*. Studying the complex systems that render embodiment, or *identity*, means approaching experience as "raw data," leaving behind the epistemological lenses through which subjectivity is typically deconstructed. By paying close attention to the social and historical relations and interactions that render embodiment-identity as *event*, Sanchez claims that neo-empirical research methodologies make theoretical research on composing subjects an empirical enterprise, afforded by our increasing awareness of mediation via communication technologies and our understanding of identity-making as a mediated rhetorical event.

"Outside the Text" informs the methodology of my dissertation in meaningful ways. First, it brings together the hermeneutical and empirical methodological traditions in Writing Studies so that both writer-as-whole and writer-as-distributed can be approached through investigation of text and context. Second, by shifting hermeneutical inquiry toward the empirical vis-a-vis identity/embodiment as rhetorical action, Sanchez's methodological meditation is a modest attempt to heed the empirical calls of Anson and Haswell in the digital arena. Relying on posthumanism, postpositivism, and postphenomenology, Sanchez's description of researching the empirical subject in technologically
mediated environments provides an important departure point for a dissertation that earnestly hopes to contribute to rigorous qualification of a particular class of writing-subjects: digital pirates. As poorly understood, often vilified members of the Internet community, pirates and their motivations are often framed by the speculations of interest groups, lobbying organizations, and other institutionalized agents. I hope that the work in this research project will amend some of these thin characterizations, creating more nuanced, complex pictures of Internet pirates and their various written and archival activities.

To provide this dissertation with a terminology for instantiating the neo-empirical work that Sanchez explores, I turn to Spinuzzi, Hart-Davidson, and Zachry's 2006 presentation "Chains and Ecologies: Methodological Notes toward a Communicative-Mediational Model of Technologically Mediated Writing." In their piece, the authors claim that "knowledge work" or the kinds of written and oral productions created in and through new media and networked communication require new research approaches that account not only for textual artifacts themselves but also social and technological forces that operate simultaneously with textual/communicational emergence. Prefiguring Sanchez, the authors

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80 Scholars both inside and outside Writing Studies have theorized the transition from manufacturing-based, managerial capitalism to "knowledge work" in the networked information economy. Often relying on economists Zuboff and Maxmin’s germinal studies (1988, 2002), the superstructure of the information economy functions as an organizing paradigm of scholarship in technical communication (Dicks 2009, Spinuzzi 2008, Johnson-Eilola 2005, Sun 2006), composition pedagogy (Hawisher et al. 2004, 2006, Lu 2004), and new media theory (Rice 2006, Gregg 2008, Brooke 2009). Most disciplinary conversations about knowledge work coalesce around strategies for teaching and assessing digital texts. Because students in our classrooms are entering an always-transforming capitalist economy, new rhetorical skills are needed to successfully navigate the workplace terrain of what Johnson-Eilola has called “symbolic-analytic work” (19). While knowledge work has been defined in numerous and sometimes contradictory ways, one central characteristic of the labor of what have called “Capitalism 3.0” is it’s distributed nature. The notion that workplace processes are networked but not physically present represents a new paradigm of work from industrial or managerial capitalism and draws attention to the role of human-technology relations in non-instrumental ways. Writing about the “third industrial revolution” economist and social activist Jeremy Rifkin comments on this new form of work, perhaps all too optimistically, highlighting the convergence of an energy revolution and a communications revolution that will fundamentally transform life in the 21st century for millions of people:

The distributed Internet revolution is coming together with distributed renewable energies, making possible a sustainable, post-carbon economy that is both globally connected and locally managed. . . . The new distributed communication revolution not only organizes distributed renewable energies, but also changes human consciousness. The information communication technologies (ICT) revolution is quickly extending the central nervous system of billions of human beings and connecting the human race across time and space, allowing empathy to flourish on a global scale, for the first time in history. ("The Empathic Civilization": Rethinking Human Nature in the Biosphere Era")

Rifkin’s pronouncements certainly engender a hopeful – perhaps empathic – perception of the ongoing changes created by a softer, more responsive capitalism. Zuboff and Maxmin aren’t quite as celebratory; however, they too see the possibilities created by knowledge work as a positive force.
note that textual artifacts have always already been subject to pressures of the social-technological; however, they claim that communication and textual production in technologically mediated, media-saturated environments make the interrelationship among text and context more visible, and hence, methodologically traceable. To sketch this interrelation, they recommend the deployment of communicational-mediational research methodologies to account for the complexity of textual production in the contemporary age. These research orientations urge analysts to trace the communicational, or symbolic representations of a research site or group while at the same time paying close attention to how spaces, places, and technologies mediate and transform activity streams.

Reading Spinuzzi, Hart-Davidson, and Zachry and Sanchez together, this dissertation employs a neo-empirical, communicative-mediational mixed methodology that explores the writer, subject, and writer-subject. In the sections that follow, I'll first consider how a communicational methodology that traces written what Cheryl Geisler calls "streams of language" yields verifiable quantifications of qualitative data toward the articulation of a piratical ethos. Next, I'll describe how an activity theoretic orientation allows me to trace the mediational nodes of piratical activity systems that circumscribe agency and cultivate identity as piratical ethos. Bringing both the communicational and mediational together, this dissertation offers Writing Studies researchers methods of tracing the iterative relation between human communication and technological mediation in sites of distributed knowledge work.

Communicational Methodology: Tracing "Streams of Language" in Textual Activity

Returning to "NCTE/CCCCs War on Scholarship," this section illustrates how one half of the methodology employed in this dissertation yields systematic descriptions of data acquisition and analysis, producing replicable outputs that can be used in future research. In this section, I'll describe how I'll use a RAD-inspired methodology that draws heavily on the work of Cheryl Geisler in Analyzing Streams of Language and Glaser and Strauss's The Discovery of Grounded Theory; additionally, this section will frame Geisler and Glaser and Strauss with meta-methodological work by Cresswell and Smagorinsky. The explanation of methodology that follows describes the research and analysis process for discovering
the attitude of the "writer" or the apparently autonomous subject who participates in the communication streams of piratical digital spaces.

Drawing on extensive experience as a journal editor for Research in the Teaching of English, Peter Smagorinsky's "The Methods Section as Conceptual Epicenter in Constructing Social Science Research Reports" argues that explicit discussions of methodology are necessary in Writing Studies research. Attention to the methods of data collection, data reduction, and data analysis - or coding - is absolutely necessary to ensure that qualitative work with language and text produces research that is replicable, verifiable, and grounded in data. In the sections that follow, I'll discuss data collection, data reduction, and data analysis explicitly, providing examples of my qualitative method to construct a conceptual epicenter for this dissertation. This discussion of method will not only function as heuristic for framework building, results reporting and the discussion of important interpretations/findings, but will also function as a form of argumentation, offering readers an account of how the communicational methodology of this dissertation produces analytical outputs that aim at being replicable, aggregable, and data-driven.

Data Collection

According to Smagorinsky, data collection is probably the most straightforward part of accounting for any particular methodology (394). Yet, as Cresswell highlights in Qualitative Inquiry and Research Design, data collection is actually an involved system of interrelated activities that emerges at the onset and continues throughout the research process. Furthermore, Cresswell notes that each of these processes of data collection might appear differently based on which theoretical approach one applies in their study. Because the data analyzed in this section consists primarily of forum-based, threaded discussions concerning intellectual property, I adopt a grounded theoretic perspective on research.81

81 The importance of the grounded theoretic perspective will be highlighted in the next section concerning data reduction; however, it is important to note that grounded theory offers an alternative methodological paradigm to the application of extant knowledge to social problems, instead advocating the creation of new knowledges garnered through principled and fine-grained analysis of data. I'll more fully explore the phenomenological aspects of piratical activity systems when discussing the mediational methodology employed in the second half of this dissertation.
Using grounded theory to analyze information is particularly important as one of the primary goals of this dissertation is to allow pirates to define their own practice, showing how they construct their attitudes toward intellectual property in distinction to typical framings in popular discourse. Of course, I must acknowledge that while I employ a grounded theoretic approach to research design, I am unable to completely disassociate my findings from my own interpretive frameworks; however, I've done my best to distance myself from predispositions and report the results in as straight-forward a manner as possible, allowing the data to instruct me on what it holds more than disciplining the data into my own preconceptions. In the following section, I'll discuss: 1) Research Site; 2) Access to Research Site; 3) Procedures for Data Sampling; 4) Procedures for Data Collection; 5) Procedures for Recording Information; and 6) Procedures for Storing Data (Cresswell 117-42). After explaining these activities, I'll move on to illustrate my method of data reduction and analysis.

Cresswell notes that site selection in a grounded theoretic research analytic typically involves multiple individuals or users who have participated in a process about a central phenomenon (120). In the case of my study, I've selected six web communities whose members participate in the construction of large textual archives that violate analog intellectual property paradigms. TheLibrary.org, Question.cd, Pancakes.fm, eLearn.org, Gamers.net, PirateClub.org and BitStuff.org occupy a liminal space on the Internet. Because they are private, invite-only bittorrent sites protected by log-in screens, encrypted passwords, and anonymous user handles, torrent community word of mouth is the only way to procure access via an invitation-based signup procedure. These piracy communities aren't typical of larger, often faceless communities like ThePirateBay or Demonoid; in fact, they are representative of a small subset of bittorrent trackers known as "closed" or "invite-only" trackers. Members of these sites participate in the uploading and downloading of copyrighted content, forming the general archive as well as smaller, customized "collections" of materials based on publisher, label, artist, author, subject, or series. Though primarily composed of digitized media like books and music, these sites also allow users to trade how-to instructional videos, language learning software, and undergraduate educational materials. Because these

82 These are pseudonyms.
sites offer private space for sharing digitized textual intellectual properties, they provide a meaningful site to observe the phenomenon of distributed social production operating with alternative orientations toward intellectual property.

Gaining access to private trackers is sometimes difficult and often requires a vetting process wherein site administrators consider an applicant's piratical reputation and potential contributions before acceptance into the community. Typically, gaining access to private, invite-only bittorrent sites either requires: 1) an invitation from an existing site member; or b) a completion of an application for membership that requires applicants to highlight their contributions on other closed torrent trackers. Obviously, securing an invitation from an existing site member is the easiest method of obtaining access to these digital spaces; however, the inviter is sometimes held accountable for the misdeeds of the invitee. Completing the application is often a more arduous procedure, requiring potential site members to discuss their motivations for membership, their familiarity with site rules and conduct, their philosophy of sharing copyrighted materials, and their ethos as a reliable pirate from other piracy websites. In my case, I gained entry to these communities through the application process. Because this occurred over three years ago, I did not state that I would be conducting research in these spaces.

Discussing "rapport" with research sites and subjects, Cresswell highlights the role of the Institutional Review Board in protecting the interests and identities of researched subjects. Before my initial pilot study of two sites, TheLibrary.org and BitStuff.org in the Summer of 2011, I consulted with the Syracuse University Institutional Review Board concerning my project. After multiple meetings, the

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83 The repercussions for inviting members already banned from a piratical community have severe consequences for the inviter. For example, on TheLibrary.org, the official invitation instructions note that,

Trading and selling invites allows people who have been banned for cheating or other major offenses to sneak back in. As such, it is completely forbidden and will be treated severely. Remember that you are responsible for your invitees' actions, and will be held responsible if they are caught cheating and/or trading or selling invites . . . When in doubt, direct people to our interview process for invitation.

84 Interviews for site membership are conducted over IRC channels. Typically a site administrator charged with vetting potential site users asks a variety of questions regarding acceptable formats for upload, bittorrent technologies, required sharing ratios, and site rules. The interviewer also usually requires a screenshot of a potential user profile from other private bittorrent sites to ensure that the user is a good "sharer" and will be a valuable citizen of the community. Finally, interviewers often ask applicants about the kinds of contributions they can make to the site, i.e., types of texts for upload, participation on site staff as forum moderator or librarian, etc.
Institutional Review Board stated that my research "does not meet the definition of human subjects research" and was exempt from any further action. This determination was made on the basis that my research is purely observational; additionally, any user data (forum threads, user statistics, etc.) used in the study are available to all site users as this information is posted in forums and user profiles. Despite being cleared by the Syracuse University IRB, I initiated a discussion with site administrators at all the trackers included in this study, disclosing the intent of my research, sharing my dissertation prospectus and plans, and discussing how I intended to use information gleaned from the site. Because of my good standing as a member of the community and because of the potential benefits of my research to broader discourses on intellectual property in digital environments, site administrators agreed to allow me full access to posted materials on the sites.

My own standpoint in the piracy communities I study is wrapped up in a knot of participation in peer-to-peer sharing networks, sympathy for attitudes proffered by site members, and non-participation in the data sample. Since some of the earliest file sharing services first appeared via bulletin board systems (BBS) in the 1990s, I've participated in file sharing activities. I moved on to the first distributed peer-to-peer networks like Napster and KaZaa in the early 2000s and am an early adopter of the community-based, invite-only sites I analyze in this research project. While I tend to share many of the attitudes toward the anachronistic application of analog intellectual property policy in digital environments evinced by pirates in this study, I also recognize the legitimacy and importance of copyright to sustain creative production and incentivize art-making. Despite my deep embeddedness in the bittorrent communities analyzed in this study, none of the data collected from forum-posts included my own contributions as I am merely a "lurker" or observer of conversations that occur in these piratical spaces.

Sampling was employed in this study to ensure that the data gathered would purposefully inform the research questions and central phenomena being researched. The grounded-theoretic communicational research methodology I employ uses a criterion-based sampling procedure to find forum discussions concerning intellectual property, copyright, and piracy. This sampling procedure is not at odds with grounded theoretic approaches to research as it doesn't look for specific theoretical perspectives on
intellectual property to sample; rather, using the search function to mine forums, data sampling was only restricted by whether a forum thread contained the necessary criteria. Because I am interested in isolating where conversations concerning intellectual property reveal user attitudes toward the aforementioned terms, a search-based query aggregated and presented all references, allusions, and conversations that contained those key terms. Term-based searches resulted in over 200 forum threads collected for future analysis. On average, each thread contains 8 to 10 individual user posts; as such, the entire data set for the communicational analysis consists of roughly 1500 individual user posts related to intellectual property, copyright, and/or piracy.

After purposefully sampling discussion forum threads on the six piracy communities for the aforementioned terms, I employed a three-step procedure for collecting data and moving it from the research sites to my own computer for future analysis. First, I saved each individual forum thread as a .pdf file. Because the forum threads often go on for multiple pages, these .pdf files range from one to thirty-five pages. Once I completed this process, I used OCR to convert the images to text, and transferred that text to Microsoft Word to store the text in a manner that would be easier to manipulate during the coding process. I then double-checked the original forum posts on the websites with the .doc file to remove any errors or misrecognitions that might have occurred in the OCR process. By going from .html to .pdf to .doc instead of directly from .html to .doc, I was able to preserve user profile icons and any emoticons that were present in thread posts. All of the data collected in the sampling phase was stored on my home computer; additionally, I backed the data up on both an external hard drive and a thumb drive. The external hard drive is also stored at my home while the thumb drive remains at a secure, locked location on the Syracuse University campus.

Data Reduction: Epistemology, Coding, Analysis

Epistemology

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85 This figure isn't representative of the number of communicative items coded in the final analysis; rather, because individual user comments were often chunked into smaller parts, the number coded is actually much larger. In the next section concerning data reduction I'll explain how I chunked this data before performing the analysis.  
86 Optical character recognition.
According to Smagorinsky, data reduction is the process of moving through raw data to identify trends, specific lines of inquiry, codes, and themes. This process is familiar to Writing Studies researchers as it forms the basis for most hermeneutic lines of inquiry; yet, as Smagorinsky notes, most researchers in the Humanities fail to detail their process of data reduction. This unfortunate omission in the methodology section results in research that often "discovers" in the data conclusions researchers seek rather than conclusions that the data actually yields (397). Following Smagorinsky, this section of the methodology chapter will provide a thorough description of how I employ data reduction in this study. First, I'll highlight the epistemology of a grounded theoretic approach to data reduction by relying on the germinal work of Glaser and Strauss in The Discovery of Grounded Theory. Next, I'll explicitly describe the coding process adopted in this work. Finally, I'll briefly explain the analysis.

In The Discovery of Grounded Theory, Glaser and Strauss attack the process of logical deduction that undergirded most mid 20th-century social science inquiry. Noting that the generation of theory from a priori assumptions typically results in verification of existing theories rather than the generation of new theories, Glaser and Strauss instead argue that approaching data from a grounded perspective allows scholarly inquiry to move beyond the "opportunistic use of [existing] theories that have dubious fit and working capacity" (4). Rejecting the notion that "great men" had created a sufficient number of exceptional theories through which social life could be researched, Glaser and Strauss fight against the limited agency of neophyte researchers, claiming that the tried and true theories of the "great men" have "played 'theoretical capitalist' to the mass of 'proletariat' testers . . . training young sociologists to test their teachers' work but not to imitate it" (11). Epistemologically speaking, The Discovery of Grounded Theory

87 Latour describes a similar problem in Sociology research, noting that "sociologists of the social" use various social lenses to explain the very thing that they intend to investigate: society. As such, scholars who rely on social theories a priori discover the phenomena they hope to find in their research. For Latour, this is irresponsible scholarship and the primary impetus behind his developing a sociology of association that approaches society not as a particularist context through which research proceeds but as a network connecting innumerable elements into shifting, but temporarily coherent, wholes. As he notes, the "social is not some glue that could fix everything including what the other glues cannot fix; it is what is glued together by many other types of connectors" (Reassembling the Social 4-5).

88 I say "briefly" here as I will discuss this in much more detail in the data-based chapters that follow.
offers an alternative to the application of extant knowledge to social problems and instead advocates the creation of new knowledges garnered through fine-grained analysis of data.

Glaser and Strauss's methodological epistemology relies on an exploration of the damaging function of verification in research projects. Verification, or the confirmation of existing theoretical insights through new research, reproduces the institutional and disciplinary power relations that structure Social Science of Humanities disciplines. As such, articulating a methodology that proceeds lock-step within proscribed theoretical frames almost always results in the production of scholarship that reifies existing theoretical paradigms rather than generating grounded research that pays special attention to data, history, and context. While Glaser and Strauss concentrate on the detrimental influence of Durkheim, Weber, and Veblen, we see the same sort of methodological circumscribing in the discipline of Writing Studies. The work of Marxist, Feminist, Race, and Gender oriented research renders important readings of the contemporary scene of writing and provide the discipline at large with meaningful theoretical elaborations from which to begin social justice and advocacy efforts; however, by proceeding a priori within predetermined methodological frames, one wonders what is lost and what is gained in these overly prescriptive research epistemologies. Of course, not all researchers are actively engaged in advocacy or social justice, instead wanting to recover and explain particular ways of viewing the world; further, as I noted before, it is impossible to employ methods and methodologies without any theoretical frames and this research acknowledges the important formative roles played by cultural-historical Activity Theory and Rhetorical Genre Studies in its analysis and findings.

To avoid the a priori application of generalizations to raw data in the interest of verification, Glaser and Strauss argue researchers to first deconstruct the binary between qualitative and quantitative data. According to the authors, qualitative research has traditionally functioned as a useful heuristic to initiate research projects. Because qualitative observation and data collection functions effectively in the messy contexts of lived experience, it is an effective methodology for discovering problems. Yet, because qualitative methodologies have trouble generating scientifically reproducible facts, they are sometimes
eschewed after the planning phase in favor of fact-testing quantitative methods\textsuperscript{89}; further, because quantitative methods yield replicable research, they also invite the inclusion of logico-deductive reasoning in the service of verification. To put it another way, Glaser and Strauss argue that the hypothesis-driven nature of quantitative research plans ensures that experimental confirmation of extant theories is the ultimate result of scholarly inquiry.

Glaser and Strauss highlight that the bifurcation between qualitative and quantitative methodologies hinges on theory: in qualitative work theory is \textit{generated}, while in quantitative work theory is \textit{verified}. Noting that "In many instances, both forms of data are necessary . . . used as supplements, as mutual verification and, most important for us, as different forms of data on the same subject, which, when compared, will each generate theory," Glaser and Strauss proceed to focus on qualitative methodologies in the generation of theory because they are the most useful to navigate the difficult work of empirical inquiry (18).

Glaser and Strauss's methodological work is important for this dissertation because my own research brings together qualitative and quantitative data to ascertain user attitudes concerning intellectual property. Refusing to frame this study through popular ideologies of intellectual property defined in public, legal, and institutional discourses, this project generates conceptual categories from the evidence of data and uses these categories to articulate attitudes toward intellectual property and piratical practice. As such, it refuses \textit{a priori} articulations of the piratical perspective from the content industry or copyleft technologists and instead allows the researched to \textit{speak for themselves} through grounded theoretic analyses.

In discovering the conceptual categories for my own data, I practiced a process of what Strauss refers to as "open coding" or the "unrestricted coding of the data" that produces concepts and dimensions that are "entirely provisional" (Strauss qtd. in Teston 326). The purpose of this initial foray into the data was to "open up the inquiry" so that I could find a starting point for my coding schema. After reading

\textsuperscript{89} It must be acknowledged that the field of Writing Studies - and the Humanities generally - recognize the legitimacy of qualitative research and often find it sufficiently rigorous to function as the basis of claim-making and theory development.
over a small sample (5) of forum threads related to "intellectual property," "copyright," and "piracy," and considering the research questions with which I initiated the project, I developed two rather simplistic concepts I wanted to code for: 1) support for intellectual property; and 2) resistance to intellectual property.

Coding

If the methods section serves as the conceptual epicenter of research in the Humanities and Social Sciences, then the explicit discussion of coding functions as the epicenter of the methods section. According to Smagorinsky, the coding process makes the theoretical orientation of research explicit because it establishes particular relationships between data and illuminates them with theory. This theory is instantiated in the coding scheme and allows the researcher to bring together trends and patterns in raw data with theoretical categories to understand those trends. As Smagorinsky notes, the coding scheme is the place where data is rendered theoretical; inversely, it is also the space wherein theory is rendered datarhetical (399).

The first step in developing coding schemes for communicational analysis of verbal data consists of parsing data into chunks that are appropriate for analysis. Using Geisler's work in *Analyzing Streams of Language* as a guide, I again turned to a small sample of data (5 threads) to assess what textual segment size would best allow me to observe the phenomena I hoped to research; namely, resistance or support of intellectual property. After trying out different segment sizes ranging from clauses and t-units to entire thread posts, I eventually settled on the topical chain as my unit of analysis. By using the topical chain I could account for the complexity of a particular argument without being hemmed in by the brevity of individual sentences or clauses; furthermore, by adopting a larger unit of analysis, I was able to steer clear of artificial counts because the phenomena I hoped to observed stretched over multiple clausal or t-unit segments.

Because my research process is guided by a grounded theory approach to theory generation, I developed the dimensions of analysis and individual categories of coding through a process of analytic induction. In other words, I selected an initial data set from the forum posts and discovered a fundamental
contrast\textsuperscript{90} to use as initial dimensions of coding. Next, I developed categories that seemed to be appropriate for explaining different forms of either resistance of support of intellectual property\textsuperscript{91}. I created definitions for each of the categories, and also gleaned cases and examples to illustrate the category definitions. Finally, I coded the data, assessing whether the categories I developed were exclusive or needed redefinition to ensure that each topical chain could only be coded using one category.

As an example, my coding scheme took the following form (Fig. 1)\textsuperscript{92}:

\begin{tikzpicture}
  \node {Schema};
  \node [below=of Schema] {Dimension};
  \node [right=of Dimension] {Coding the Reasoning};
  \node [below=of Coding the Reasoning] {Note: If a sample appears to be codable in two different categories, look at the main verb in the clause and code it in the category most appropriate to that main verb.};
  \node [below=of Note] {Dimension};
  \node [left=of Dimension] {Reputation};
  \node [below=of Dimension] {Unit};
  \node [left=of Unit] {Category};
  \node [below=of Unit] {Definition};
  \node [below=of Definition] {Cases};
  \node [right=of Definition] {Examples};

\begin{itemize}
  \item \textbf{Reputation} \textbf{Definition}: Code as \textit{reputation} any clause in which the speaker refers to status (or lack of status) in the profession. \textit{Reputation} may include instances where the speaker . . .
    \begin{itemize}
      \item (a) refers to someone's overall public profile, e.g., how well known they are, how productive
      \item (b) refers to documentation of overall profile, e.g., resumes, CV's, web pages, applications for grad school, fellowships, etc.
      \item (c) refers to someone's being known within a network, e.g., having connections existing community members, site administrators, etc.
    \end{itemize}
\end{itemize}

Fig. 1. Sample coding scheme.

The coding process employed throughout the dissertation was procedural, not automatic or enumerative. As such, each and every coded segment required the coder to make a decision about the category that best described the segment in question. Because the categories of support or resistance to intellectual property were fairly amorphous, the coding schema underwent at least five major revisions before categorical exclusivity was achieved with the initial sample. After arriving at a viable, categorically exclusive coding scheme for both the support and resistance dimensions, I assessed reliability of the coding schemes by asking two outside coders to code the same initial data sample I used

\textsuperscript{90} The aforementioned contrast between support and resistance to intellectual property.
\textsuperscript{91} While the development of this coding schema adopts a grounded theory perspective on coding method, it also recognizes that as a researcher it is impossible for my work to not be influenced by the knowledge and experience I bring to the analysis.
\textsuperscript{92} Adapted from Geisler's presentation on data selection, segmenting, and coding at the Dartmouth Seminar for Composition Research. July 2011.
to generate the schemes. I provided each coder a brief 10-minute training session before allowing them to begin the coding process.

It is worth noting that in multiple stages throughout this process, I needed to iteratively return to the categorical definitions to shape the coding scheme to achieve inter-rater reliability. By segmenting the raw data into manageable units, developing a coding scheme and double coding the data for reliability, I achieved quantitative counts of qualitative streams of language. These counts provided a numerical representation of particular ideological positions on intellectual property from site users. While I'll explain the schemes in their entirety in Chapter Three, the development of the communicational coding schemes proceeded thusly (Fig. 2):

![Fig. 2. Development process of communicational coding schemes. From Geisler's presentation on data selection, segmenting, and coding at the Dartmouth Seminar for Composition Research. July 2011.](image)

*Analysis*

The payoff of the aforementioned coding method is that it allows the researcher to provide specific procedures for quantifying language in meaningful ways. The procedures, or methodological processes, can be repeated by future researchers working to discover ideological/attitudinal commitments
of particular actors by analyzing streams of their communication. Ultimately, after the iterative development of the coding schema was complete and the initial sample was double coded by volunteers for reliability, I coded the entire data set with the final versions of the coding schema (see Appendix Items I,II,III,IV, and V). After completing the laborious work of coding over 2000 topical chain units, I did counts for each particular category to assess which were the most prominent or common in support or resistance to intellectual property. By counting which categories appeared most frequently, I identified patterns from which I made theoretical claims about the ideological perspectives on intellectual property from piratical bittorrent site users.

The methodology of theory making I've adopted for this portion of my dissertation data emphasizes the generation of theory as process, rather than theory as perfected product (Glaser and Strauss 32). Because the digital-born communities I study are constantly evolving, changing, and becoming something other than what they are at this moment, my analytic envisions theory as discussion rather than theory as proposition; however, because the analytical method is well-elaborated and explicit, the theory generated is ripe for replication and extension - a valuable quality for empirical researchers who adopt postpositivist methodological perspectives.

In summa, the communicational research methodology I employ in this dissertation sketches, in Sanchez's words, the "subject" of piratical bittorrent communities. Emphasizing the values, norms, and ideological underpinnings of autonomous file-sharers, this method provides the reader with an empirically based theory of piratical attitudes, or the piratical ethos. Having a well defined theory of piratical ethos will be essential when exploring the larger contexts of piratical practice later in Chapter Four. As Smagorinsky notes, for all the valuable work of empirical research on the individual writer, the context itself must also be explored in order to render the researched appropriately complex. Sanchez agrees, arguing that "without a way to credibly include the idea of agency and its function amid the flows and circulations [of technology, language, culture, etc.] that increasingly characterize textual activity," studies of individual writers will ignore their own sociohistorical, contextual structuring (239). In the second half of this chapter I'll describe the mediational methodology I employ to explore the constitution of the
piratical subjectivity - a networked, technologically mediated, historical, and material actor whose participation in systems of distributed social production is driven by particular attitudes toward intellectual property but whose agency is authorized and constrained in large part by other actors in the wider piratical ecology.

*Mediational Methodology: Tracing Contexts of Activity*

The communicational analysis I present in Chapter Three attempts to map out attitudes toward intellectual property from the perspective of pirates. The methodological goal in that section is to sketch the piratical "subject," a unified, Cartesian subject whose expressed ideology critiques analog intellectual property. Yet, to assume that the piratical "subject" exists outside of context only tells half the story. Recent work in Writing Studies by Edbauer, Tolar Burton, and Ridolfo and Rife (see Chapter One) make this much clear: the "writer" is not an autonomous figure with absolute agency and fixed identity; rather, writing-subjects are beset by networked exigencies, distributed affectivities, and technologies of mediation. This networked identity is constantly evolving, iteratively constructing itself and being constructed from without, through moments of experience and rhetorical becoming. As Sanchez notes, relying on Ulmer before him, the identity of the writing-subject is a shifting target - an "event" whose subjective materialization is concretized through various technological mediations but whose agency is likewise diffused over those same technological systems ("Outside the Text" 244). To put it another way, Sanchez argues that the contextual exigencies of any particular system bring to bear upon the construction of an identity. Networked and new media technologies render the materiality of diffused identity more visible and provide researchers studying activity in digital-born communities an empirical methodology for tracing agency across humans and technologies in electronic systems.

In what follows I'll present my case for an empirical mediational methodology for tracing writerly-subjectivity. This methodology brings together the findings on alternative intellectual property ideologies from Chapter Three with systems that authorize, and are authorized by, those same ideologies. To unite the text and context, or subject and object, of distributed social production in piratical spaces, I turn to Activity Theory. Originally developed in Soviet psychology, Activity Theory provides a useful
heuristic to follow how technological systems that mediate activity in piratical spaces are both inflected and reflect the alternative intellectual property attitudes of file sharers. This methodology hopes to provide future researchers with a replicable model that can be extended, refined, and redeployed to trace distributed social production in digital environments. First, I'll explain the genesis of Activity Theory from its roots in the early 20th century. Next, I'll provide examples of how Activity Theoretic analysis works. Finally, I'll connect Activity Theory and Rhetorical Genre Studies to highlight how mediational technologies afford agency but also delimit individual action in piratical spaces. With an eye toward the function of technologies as mediations of textual production in distributed environments, this methodology provides the reader with a means of mapping the dynamics of textual and archival activity in digital spaces; or, as Spinuzzi, Hart-Davidson, and Zachry describe it, this kind of method traces how “The camera follows the game” rather than "The camera following the ball."

**Activity Theory: Background, Origin, Key Concepts**

The origins of Activity Theory are found in the work of the early 20th century Soviet psychologist Lev Vygotsky. Vygotsky was keen on developing a cultural-historical framework that could describe how human beings undergo psychological development over extended periods of time; further, he was also centrally concerned with the ways that consciousness operated as the result of interactions between the internal human psyche and the external life world. Finally, he is perhaps best known for his work *Thought and Language* wherein he described the relationship between language acquisition and cognitive awareness. While Vygotsky never fully articulated Activity Theory as such, his students would go on to connect some of the core principles of his work into a coherent whole. Before turning to Activity Theory as a formal method, I'll first sketch some of the Vygotskian concepts that undergird it.

At the core of Vygotsky’s intellectual project was the development of consciousness. While traditional Cartesian articulations of consciousness posited the existence of an *a priori* psyche that interacted with the external world, Vygotsky’s understanding of the term emphasized the transaction between self and other as the constituent factor in the creation of mind. In other words, the activity of interaction between a subject (I) and an object (thou) *is* consciousness – we are conscious because we are
engaged in activity among ourselves and others. The ramifications of this claim are far-reaching and provide a challenge to many of the core tenants of the major European philosophical project from Descartes to Habermas; namely, the sanctity of the liberal humanist subject acting out of an internal will is problematized when consciousness is theorized as the outcome of thought distributed between subject and object.

To study psychological development in an activity-based theorization of consciousness, Vygotsky recognized that he would need to design experiments where the locus of activity was social, shaped out of interactions between subject and society. This method was at odds with the prevailing psychological dogma of the day because it left behind the subjective emphasis of introspective psychology and the objective focus of behaviorism. As a result, Vygotsky designed transactional experiments that hoped to observe development in the process of activity between subject and object.

Vygotsky’s work in transactional, activity-based psychological experimentation produced interesting results. First, Vygotsky claimed that the interaction of individual and culture results in

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93 An example of introspective psychology in action can be found as early as the Platonic dialogues. Socrates’ internal search for truth represents the sort of internal reflection of conscious inner thoughts, desires, and feelings that were the core of this psychological paradigm. We see Socrates engaging in this process at multiple times throughout the dialogues, channeling his daemon to come to an internal apprehension of truth. James Berlin described “subjective rhetoric” as the rhetorical equivalent of introspective psychology in *Rhetoric and Reality*. According to Berlin, this form of rhetoric is characterized by internal reflection toward internal apprehension of truth. Pedagogically, this rhetoric cannot be taught; however, a teacher can putatively create an environment conducive to the internal apprehension of truth. Moreover, subjective theories of rhetoric that operated on introspective psychological principles were the form of rhetorical instruction provided in the expressivist pedagogies of Macrorie and Elbow and served as the dominant epistemology in the development of the 20th century literature-centric English department.

94 The psychological doctrine of behaviorism specifically negates the influence/existence of mind in any action. This means that any action is not the result of an “inner state” of an organism; rather, action is predicated on external, physiological factors. Said differently, psychology is the science of behavior, not the science of mind. Pavlov’s articulation of “classical conditioning” (the salivation experiment) is perhaps the best known behavioral psychologist concept. While not as neatly mapped over the “objective rhetoric” that Berlin discusses in *Rhetoric and Reality*, behaviorism does share many tenants with objective empiricist epistemology; namely, behaviorism and objective rhetoric both perceive the real in terms of the physiological, verifiable realities of environment. As such, the job of language in both behaviorism (via Quine) and objective rhetoric (via the Scottish belletrists) is to talk about the observable stimuli that elicit speech. Obviously, this makes language a transparent medium designed to relay observable realities.

95 The echo of Berlin here completes my (overly convenient) mapping of Berlinian rhetorical epistemologies and psychological research methods. I see a lot of convergence between Berlin’s notion of transactional – and especially epistemic – rhetoric and the activity-centric psychological experiments of Vygotsky. Both theoretical frameworks understand the transaction between “I” and “Thou” as the central action in the creation of meaning, learning, education, and development.
development of “higher psychological functions” or habits of mind that go beyond the simple stimuli-response descriptions of activity theorized and documented by behavioral psychologists. These higher psychological functions resulted in the production of what he called “instrumental acts” or acts wherein psychological tools are used to mediate interactions between the mind and reality. The instruments that mediated activity between mind and lifeworld included physical tools like maps, art, hammers, and blueprints; however, they also included symbolic tools like language and number systems. Most importantly when humans engage in “instrumental acts” they internalize the social-cultural modes of operation that went into (and continue to inform) the tool. This means that the cultural-historical knowledge of social experience embodied in an external tool is internalized through its use, thereby transforming the mind through instrumental acts of mediation. Put plainly, we all develop as products of our interaction with the external environment via a myriad of mediating tools, technologies inflected with the knowledge and experience of cultural history. Vygotsky’s most famous term describes the frame wherein this activity occurs: the “zone of proximal development.” Vygotsky’s activity system looked like this (Fig. 3):

![Vygotsky's activity system](image)

Fig. 3 - Vygotsky's activity system.

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96 When considered symbolically through language it is easy to draw a comparison between the internalization of cultural-historical social tool use and the function of Bakhtin’s notion of dialogism. In both systems the symbolic tool of language is infused with the cultural-historical and social knowledge and experience of the word use; hence, the external residues of the socialization of a word informs the internal apprehension and comprehension of it, thereby transforming the internal mind from the outside.
Vygotsky died of tuberculosis in 1934 at the age of 37; however, his work was deeply influential in many different disciplines; most notably, psychology, education, and computer science. In the decades following his death one of Vygotsky’s students – Alexei Leont’ev – took up the frameworks first advanced in cultural-historical psychological development research and created a formal theory of human activity and consciousness. Today, this method is called Activity Theory.

In his preliminary investigations into the foundations of Activity Theory, Leont’ev realized that the behavioral psychologists did have one thing correct: organisms develop because of their “responsiveness” to their environment. While reworking the original theory of consciousness advanced by Vygotsky’s cultural-historical psychology to incorporate the evolutionary aspects of Behaviorism, Leont’ev posited two kinds of response: 1) responsiveness that is biological in nature; and 2) responsiveness that is sensitive. Sensitive responsiveness includes symbolic responses or non-reflexive responses that carry information that is biologically important to an organism’s survival. Or, to put it another way, sensitive responsiveness is human activity that is conscious. Working from the sensitive responsiveness of human action, Leont’ev went on to develop the following model of activity (Fig. 4):

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97 This is the sort of responsiveness that we often call “involuntary actions” or actions that occur outside of the conscious will. These include actions like digestion of food or the ongoing beat of a heart.

98 Sensitive responsiveness is ubiquitous; however, it might be beneficial to provide an example: Let’s pretend you’re a starving human being that has been trapped in a small cage for a few days. Lying on the ground outside the cage are various kinds of food: fruits, vegetables, blow-pops, etc. For days you merely responded to the presence of that food by reaching through the grates of the cage; however, you can’t reach the food. On the fifth day you realize that the small stick in the corner of the cage could be used to skewer a piece of fruit in order to bring it back inside the bars. Your use of the stick – or tool use – mediates the action you perform. Because the stick is not part of your biological response to the presence of food you are performing a symbolic action. At this moment, according to Leont’ev, you have come into consciousness.
Fig. 4. Leont'ev's activity system.

While Vygotsky’s theorization of human consciousness in activity drew attention to the subject-object interaction via mediating artifacts – or tools, Leont’ev’s model of activity went a couple of steps further by incorporating additional elements: division of labor, rules, and community. Because Leont’ev was working out of a dialectical philosophical tradition he needed to provide a more expansive notion of human activity that drew attention not only to the interaction among subject, object, and mediating artifacts but also the broader context in which this action occurred. While I've briefly sketched the role of the subject, object, and mediating artifacts (tools) of an activity system in Vygotsky’s research, let’s take a minute to consider Leont’ev’s additions in turn.

In Vygotskian activity systems the boundary of researchable activity only extended to a subject (I), and object (a banana), and tools (the stick I use to get the banana). Leont’ev quickly realized the inability of this model to account for the kinds of activity that he saw on a regular basis; namely, the

99 Vygotksy and later Leont’ev were writing theories of psychological development and consciousness in the academic culture of the former Soviet Union. As such, their methods needed to attend to the political exigencies of their own context in addition to the cognitive and psychological principles they drew from their experimentation. As such, Activity Theory provides a methodological heuristic with which to analyze the ways that activity systems could be mapped over Marxist articulations of the “organic” composition of labor and dialectical materialism in order to create a theory that was apolitical, dialectical, and in line with a Soviet politics. Spinuzzi discusses the apolitical nature of Activity Theory in Chapter Two (“What is a Network?”) of his Activity Theory/Actor-Network-Theory driven monograph Network.
functioning of the Soviet bureaucracy and Fordist models of production. Part of his initial challenge was to find a way to expand Vygotsky’s research to accommodate more expansive activity systems like those that characterized life in the mid-20th century. As a way to explain the complexity of human action across larger activity systems, Leont’ev turned to the division of labor.

The division of labor signals an extension of the sensitive (symbolic) response theorized by Leont’ev in his study of human consciousness. When the “object” or desired outcome of a particular activity becomes distributed across human actors a new disassociation between action and motive occurs. This disassociation signals the full-fledged development of symbolic behavior in that human beings acting in systems characterized by a division of labor perform activities that aren’t necessarily observable in the final object. They share a motive, a drive to create an object; however, the fruits of their labors aren’t necessarily synonymous with that object. Let me provide an example:

Your name is Sven and you work at the Ikea factory in Uppsala Sweden. Each day you are responsible for the creation of 500 small wooden pegs that are used as inserts to hold together the Hemnes end table. To create these pegs you use a small machine that carves them from larger pieces of wood. Though you are aware of the other parts of the end table that are created in other sections of the factory, you do not know how every piece of the end table is sawed, sanded, and stained because your central concern is with the production of the 500 pegs per day quota assigned by management. At the end of each workday you see large pallets of boxes that contain the Hemnes end table stacked in the loading area near the exit of the factory. You walk by them on your way out the door, content that your production of pegs has made the creation of the object possible: the Hemnes end table.

Because Sven is not involved in every step of the production of the Hemnes end table from start to finish, his day-to-day work activities are symbolic actions that contribute to a larger activity system charged with creating the Hemnes end table. Sven’s disassociation – the lack of direct connection between his work and the end object of the end table – is internalized in his own psyche: I (Sven) am not responsible for the creation of the entire object because my charge is merely to use tools to carve out the pegs. This disassociation-internalization process is crucial to the creation of social labor because it
enables human beings to direct their actions toward a shared end object even if that end object isn’t visible as the end of their labor. According to Leont’ev it was in this way that human beings first became social creatures whose thinking and actions became distributed across larger systems of activity.

Moving from the division of labor to community, Leont’ev theorized that the community would provide the cultural-historical context wherein all activity develops. As such, community becomes the repository for dominant ideologies, attitudes, knowledges, interests, stakes, and goals. In this way the community, like the subject and the object, is infused with all of the other elements of the activity system. In Sven’s example, the community of his workplace not only includes the individuals he works with each day but also the aggregate knowledge and communal interest of a whole history of preceding activities that occurred in the production of his current moment. The community also includes Sven himself. The aim of the communicational methodology I described in the first half of this chapter is to discover and be able to meaningfully describe the subject and wider community of closed bittorrent communities. Finally, the community, the object, and Sven must all abide by certain rules – laws, codes, conventions, and customs that arise from all of the other elements of the activity system.

Leont’ev’s activity systems provide a situated, cultural-historical method for investigating how and why human beings act in social collectives. Yet, Leont’ev himself realized that all actions that occur in an activity system can’t be conscious and goal-directed. In other words, when Sven operates the machine that creates the pegs his action can’t be the same kind of action as the action of the factory taken in total in the production of capital. As a remedy, Leont’ev introduced a series of scales that characterized doing in systems of activity (Table 1).

Table 1. Leont'ev's Activity Scales.

<table>
<thead>
<tr>
<th>Level</th>
<th>Oriented towards</th>
<th>Carried out by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>---</td>
<td>Object/Motive</td>
</tr>
<tr>
<td></td>
<td>---</td>
<td>Community</td>
</tr>
<tr>
<td>Action</td>
<td>---</td>
<td>Goal</td>
</tr>
<tr>
<td></td>
<td>---</td>
<td>Individual/Group</td>
</tr>
<tr>
<td>Operation</td>
<td>---</td>
<td>Conditions</td>
</tr>
<tr>
<td></td>
<td>---</td>
<td>Routinized Human or Machine</td>
</tr>
</tbody>
</table>

On the highest level is activity or the collection of actions that work toward a shared object or motive by the entire community. Activities typically answer the question of “Why?” Actions are comprised of the
conscious actions of the individual or group. These are usually goal oriented and answer the question of “What?” Finally, operations are composed of routinized or mostly unconscious processes that are often internalized and sometimes automated. Operations answer the question of “How?” So, working Sven’s example, the creation of pegs is his primary action. Since he has been working at the factory for a number of years, he has internalized some of the tasks or operations that he needs to complete the action; namely, he no longer must measure if he has placed a stick of timber on the machine because he can unconsciously tell if it is correct. This is an example of an action that has been internalized and turned into an operation. Finally, all of Sven’s collective actions are in the service of the communal activity: the creation of the object (the end table) and the generation of capital (the motive).

Vygotskian cultural-historical psychology and Leont’ev’s articulation of Activity Theory provide a method that locates consciousness across the interaction between both subject and object. When brought into Writing Studies, Activity Theory provides researchers a methodology for tracing the contextual cultural-historical exigencies that structure textual creation - especially when distributed across technological networks. As such, these theories offer an alternative to subject-centric articulations of agency and provide viable methods for tracing the development of mind. In the next section I’ll consider how Activity Theory has been put to work in the field of Writing Studies by considering its relationship to Rhetorical Genre Studies. The connection between genre/writing-as-mediating-artifact and the rest of the activity system is paramount and will be the focus of the method employed in this study.

*Activity Theory & North American Rhetorical Genre Studies - Overlaps*

Activity Theory first found its way into Writing Studies in the 1980s and early-to-mid 1990s in the scholarship of Charles Bazerman, David Russell, and Carolyn Miller. Miller’s iconic 1984 article “Genre as Social Action” inaugurated a new line of research in the study of writing and speaking by arguing against genre as a static, immutable form toward a definition of genre as action-oriented and ends-driven because it responds to the social context where it functions. Working from Jamieson and

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100 In *Tracing Genres Through Organizations*, Spinuzzi relies on this tripartite division of activity. When describing the scope of activity in any system, Spinuzzi correlates microscopic, mesoscopic, and macroscopic levels of activity to operation, action, and activity (45).
Campbell’s early work on genre\textsuperscript{101}, Miller argued that genres are “typified rhetorical actions based in recurrent situations” and as such are subject to the pragmatic exigencies of the discourse communities in which they are embedded. In numerous works throughout the 1980s and 1990s Charles Bazerman extended this line of investigation by considering the generic function of academic articles on the history of scientific scholarship. What Bazerman found was the generic function of the scientific article actually coordinated the activity of future scientific investigation; in other words, generic textual conventions structured the possibilities of future scientific activity at the same time that it was shaped by said activity. As Bazerman would later note, genres are not formal textual conventions but “forms of life, ways of being, frames for social action. They are environments for learning” (Shaping Written Knowledge 1).

Bazerman went on to describe not only the sociality of genre in the singular but also how interlocking systems of genres operate as complex text-based systems that structure human action.

This expanded conception of genre as dynamic, responsive, and intensely rhetorical chained out across the discipline, developing into a new subfield of Writing Studies research. At its heart, Rhetorical Genre Studies provided a text-centric approach to the coordination of activity across networks of interrelated agents; in other words, it provided scholars and researchers of writing a methodology for sketching distributed social production. At the same time that Rhetorical Genre Studies was coming into its own, Bakhtin’s work on dialogism and speech genres was being rediscovered in Western academic circles\textsuperscript{102}. By situating the communicative act, or utterance, in relation to a system of utterances that both precedes and follows the moment of communication, Bakhtin’s notion of “speech genre,” and more specifically the complex speech genre, located the genre in the social practice of discourse embedded in communities of speakers.

While Bakhtin’s published works took up the intertextual dialogism of speech genres in literary works, the import of his theoretical insights for Rhetorical Genre Studies didn’t go unnoticed. David

\textsuperscript{101} Jamieson and Campbell claim that “Genres are not only dynamic responses to circumstances; each is dynamis – a potential fusion of elements that may be energized or actualized as a strategic response to a situation” (146).

\textsuperscript{102} The first translations of Bakhtin appeared roughly contemporaneous to the development of Rhetorical Genre Studies: The Dialogic Imagination (1981) and Speech Genres and Other Late Essays (1986) provided the most useful discussions of speech as genre codified through dialogic interaction.
Russell’s 1997 *Written Communication* article “Rethinking Genre in School and Society: An Activity Theory Analysis” inaugurated attempts at drawing together Bakhtinian dialogism, Rhetorical Genre Studies and Activity Theory. In this article Russell argues that Bazerman’s genre systems act as socially inflected mediating tools that define the boundaries of possibility in activity systems. In other words, texts become the primary mediating tools in any activity system in that they coordinate the activity of the community by defining rules, structuring the division of labor, and reflecting the will of the community. This in turn mediates the action of the subject and provides stability across the system to ensure the consistency in the intended object of production. To illustrate Russell's argument, let me provide an example:

CCCC is a complex activity system that involves the coordination of a large number of individuals spread across a wide range of spatial and temporal zones; however, by concentrating on the interconnected role of textual genres in this activity system we can understand the ways that genre systems mediate activity. After the close of the CCCC conference, a call for papers will be posted for next year’s conference. This call will generate panel proposals that will be submitted, evaluated, and accepted or rejected. If accepted, the panel proposal will structure the creation of numerous conference presentations. Some of these presentations will later develop into other genres, most notably article-length scholarly publications. Finally, these publications will contribute to the original motive of the CCCC activity system: the manufacture of a disciplinary culture (Fig. 5).
When framed this way, the centrality of texts as generic mediating tools-in-use in any activity system trains activity theoretic inquiry to answer the question, “Why are you doing this?” with the answer “To produce a public text that will direct future action” (Geisler, *Analyzing Streams* 307).

As Bazerman notes in "Speech Acts, Genres, and Activity Systems: How Texts Organize Activity and People," speech acts, or the ways that socialized individuals carry out actions through language, are executed in typical, patterned, and intelligible movements called genres. Focusing in on these genres as mediating tools-in-use inside the larger activity system allows writing researchers to trace how individual writers coordinate their activities to fulfill the needs of particular situations, creating additional texts that are understood by and meet the expectations of the discourse communities where they circulate. The collection of genres utilized by a community characterize the system of activity of an entire group. As such, defining the genre collection utilized by a discourse community allows researchers to identify core components of the larger activity framework that organizes the work, attention, and intended accomplishments of the entire group (319).

*Activity, Genre, Subjectivity: Methodology for Tracing Distributed Social Production*

As noted in Chapter One, genres reflect the epistemological and ideological foundations of a particular discourse community at the same time that they shape the discourse community itself; in other
words, genres function as textual mediators that both facilitate and authorize particular actions while delimiting and constraining others. Because one focus of this dissertation is to trace the distributed dynamics of textual and archival production in a digital-born community that actively contests copyright, a close analysis of the function of genre will reveal important elements about piratical activity systems as a whole. Further, adopting an activity theoretic research methodology will allow me to shift the attitudinal inquiry illustrated in the communicative methodology to also include context - the technical ecology of piratical practice.

The activity theoretic methodology employed to trace the mediational aspects that define the subjectivity of distributed social production in digital-born piratical communities proceeds in an iterative, two-part fashion. The emphases of analysis correspond to two parts of the activity triangle first theorized by Vygotsky: the subject and mediating artifacts. The additional components of the activity triangle - division of labor, rules, and community - will be illumined throughout this analysis but will not receive special emphasis. Let me explain.

Using the conclusions garnered from the analysis of piratical attitudes in Chapter Three, I'll first theorize the "Subjects" of piratical activity through an investigation of their ethos. This thick description will proceed from an aggregate piratical subject\footnote{A subject, not a subjectivity as defined by Sanchez.} - or writer - that intertwines myriad ideological positions in support of and in resistance to intellectual property. Starting from the position of the piratical subject, I'll then analyze the rest of the activity triangle in turn, paying special attention, as most writing researchers do, to the role of mediating textual and technological artifacts.

After describing the piratical "subject," I'll next turn to a close analysis of the mediating artifacts - or, in my analysis, the rhetorical technological genres - that mediate distributed social production in piratical spaces. The focus on genre is particularly important because, as Spinuzzi notes, "genres are not discrete artifacts, but traditions of producing, using, and interpreting artifacts, traditions that make their way into the artifact as a 'form-shaping ideology'" (Morson and Emerson, qtd. in Spinuzzi, Network 41). In other words, analyzing genres as mediating artifacts provides me with yet another rendering of the
dominant ideologies in any particular activity system. Because textual and technological genres mediate
action in this activity system at the level of action, operation, and activity, the analysis of genre in this
dissertation will consider automated actions, subject-initiated and directed actions, and communally
structured actions to provide a tripartite analysis of enabling and constraining textual and technological
mediation. Proceeding from these units of analysis, this research provides numerous examples of genres
as mediations. At the level of operation, for example, operationalized rules constrain site activity but also
enable the creation of particular kinds of archives by site users. Genres such as plug-ins and web scripts
mediate the activity of site users at the level of action, allowing specific, goal-oriented behaviors to
produce tangible results. Genres at the level of activity are harder to trace as they've been shaped by the
larger sociocultural milieu of the broader discourse community; however, this analysis focuses on the
function of content management systems and source code as genres operating at the broadest level of
scope, embodying the attitudes of the piratical community while being invisible, unconscious actors that
dictate the possibility and impossibility of the entire piratical activity system.

Having conducted a thorough review of the subject and mediating artifacts that facilitate activity
in these spaces, I turn to the concepts of rules, division of labor, and community. Like the rest of the
components of the activity system, these concepts are iteratively constituted formations, inflected by the
attitudes of subjects and constellations of mediating technologies at varying levels of activity. It is here
that the activity theoretic analysis becomes intensely recursive, reflecting back upon itself the very
components that compose it. By providing a thick description of the attitude of site users and genres of
textual and technological mediation, I've pinpointed two of the components activity systems that structure
consciousness, produce culture, embody history, and facilitate various means of distributed social
production.

Conclusion: The Communicational-Mediational Methodology for Tracing Writing-Subjects

The methodology employed in this dissertation attempts to map the contours of distributed social
production by employing both subject-centric and ecology-centric research methodologies. Using a series
of statements collected by individual site users, the communicational methodology attempts to uncover
the guiding attitudinal and ideological assumptions of piratical site users on intellectual property in digital environments. The methods at work in this section provide a structured analysis of qualitative data that yields quantifiable results used to make claims concerning the motivation, values, and assumptions of actors whose digital-born scene adopts alternative intellectual property regimes. At the broadest level, the communicational methodology sketches the subject of distributed social production in piratical environments by paying special attention to the attitudes that guide their practice. In contrast, mediational research methods locate the pirate in larger systems of distributed social production by conducting an activity-theoretic/rhetorical genre analysis. Incorporating insights about the subject from the communicational analysis, the mediational methodology sketches ecologies of action, placing special emphasis on the role of mediating technologies in the creation and curation of participatory piratical archives. Taken together, the communicational-mediational research methods employed in this dissertation offer a methodology of theorizing what Sanchez calls the "writing-subject," a figure that reveals the complex relationships between text and context, agency and textuality ("Outside the Text" 236). Being attentive to the ways that technologically mediated piratical activity is constituted at the level of actor and agency, this dissertation's methodology provides an important analytic for future studies of distributed social production in digital-born communities.

I began this chapter with a review of the long-standing epistemological bifurcation between empiricism and hermeneutics that has characterized methodological differences in English Studies, and Writing Studies, and continues to structure research in both fields today. In the communicational-mediational research methodology I develop and implement in this research project, I employ an empirical set of methods for quantifying streams of language to provide a grounded description of the values, attitudes, and ideology of the actors I'm researching. Further, I also utilize rhetorical genre studies to sketch the distribution of agency across the entire scene or ecology of piratical action. These methods are a provisional attempt at conducting neo-empirical research - research that shifts identity construction away from essentialisms and philosophical concepts and toward identity as a rhetorical act conditioned by inclusion in wider networks of activity among human and non-human agents. The identity created by and
through rhetorical actions in systems of distributed social production in digital-born communities is one of the moving targets of this dissertation and, once illustrated, will provide important contributions to understanding the interrelationship between the creations of natively digital communities and intellectual property.
3. Piracy Ahoy! The Piratical Ethos in Streams of Language

Introduction

Tracing out the complex dynamics of activity in digital networks is a challenge. The inherent difficulty lies in attempting to track how individual user attitudes, technologies of mediation, and the broader social disposition of communities iteratively structure digital activity. Taken together, these three elements constitute the agenic base of digital-born sites of social coordination and must be accounted for in any study of digital activity. To date, scholars from across the humanities and social sciences have articulated numerous methodologies to qualify and quantify material-metaphysical or hermeneutic-empirical data. Drawing parallels between Raul Sanchez's recent exploration of the "writing-subject" and cultural-historical Activity Theory, Chapter Two provided methodological steps for sketching distributed production in piratical spaces. Both Sanchez's "writing-subject" and Activity theoretic methods attempt to capture the complexity of networked action, offering methodological guidance that correlates posthuman subjectivity and identity as rhetorical emergence. Accounting for text, subjectivity, and identity by considering contexts and ecologies, Activity Theory and Sanchez's work in "Outside the Text" account for textual emergence by expanding the scope of research beyond the individual actor. Because Activity Theory and Sanchez's theory of the "writing-subject" locate communication and textual creation inside object-oriented collective activity, both methodological programs demand an attention to text and context.

Relying on Activity Theory and Sanchez as a guide, this chapter will map out the Attitude or ideology of writing subjects in piratical spaces (Fig. 6). In effect, this will be an analysis designed to reveal motivations that produce the archives of this study. These motivations are best described as the Attitudes or underlying ideologies that structure the subject and guide individual and collective action in the piratical activity system.
Ideology, or the externally derived collection of ideas that motivate individuals toward particular actions and goals, are analogous to Kenneth Burke's notion of Attitude, or the social relation through which an individual learns to be aware of himself in terms of them (Grammar 237). Attitudes "modify [an individual's] ways of action" from the outside, but coalesce around the atomistic individual. As Burke notes, "This complexity of social attitudes comprises the 'self'" (ibid.). Yet, much like ideology, individuals have a difficult time conceiving of Attitude as an external social relation due to long-enduring Cartesian and classical liberalist theories of self. Recognizing that Attitudes are externally derived but internally performed, Chapter Three will turn to opinions and positions evinced by individuals to uncover ways of thinking about intellectual property in piratical spaces. Close attention to piratical ideologies toward intellectual property reveals the motivations and guiding assumptions file sharing subjects exercise when participating in social production over digital networks and also reveals a great deal about the subject of pirates themselves. Because subjective Attitudes are externally derived, this chapter will also pay close attention to the role of community in the construction of piratical ideologies.

To begin, I'll first introduce the research site, describing in detail the temporal and spatial characteristics of bittorrent communities. Next, I'll discuss my methodology, highlighting the importance
of asynchronous forums as research sites before explaining the sequence of data sampling, segmenting, and coding. Before jumping into the analysis, I'll provide some background on investigating online communities, drawing heavily on cyberanthropology to locate this dissertation in a tradition of studying online community formation and activity. Finally, I'll close this chapter with a report on my analyses, highlighting the influence of the social and technology in the constitution of the piratical subject via the development of piratical user attitudes concerning intellectual property.

The Research Site

In this study I collect data from six different bittorrent sites. Sometimes referred to as file sharing collectives or digital communes, private bittorrent communities exhibit the characteristics of other file-sharing services only inasmuch as they provide links to downloadable content from other users. Fundamental differences between the private bittorrent communities in this study and publicly accessible bittorrent websites like ThePirateBay.org or Demonoid.org include sustained user engagement over time, community-imposed quality control of archives, and coordinated group activity from various site user classes - as opposed to just site administrators - to complete site-wide projects. In this sense, the ties created by community membership tend toward the strong, yielding a fairly cohesive unit that uses latitudinal organization and consensus-building to make decisions about site development, rules, and structure\textsuperscript{104}. The intentionality observed in the six sites of research is likewise strong as site users are typically committed to the filesharing aspects of the site, the cultivation of a clean, consistent archive, and the enforcement of site rules by all users.

Temporal Tracings

File sharing is as old as the Internet itself. ARPANET (Advanced Research Projects Agency Network), the first interconnected computer network, was created in 1969 to facilitate the sharing of academic resources and data. Utilizing rudimentary packet switching systems, ARPANET and the NPL (National Physical Laboratory) network allowed researchers in the US to share their findings as well as

\textsuperscript{104} This isn't to say that the sites remain egalitarian digitopias that lack any form of hierarchical organization; rather, it simply means that decisions about technological projects, archival curation, and community rules are reached in an open forum through deliberation among all site user classes.
collaborate on research projects across geographical distance. At their core, ARPANET and other early computer networks sent and received small amounts of information; in other words, they share\textsuperscript{105}. As computer networks grew and expanded throughout the 1970s and early 1980s, so did information and file sharing. With the advent of bulletin board systems (BBS) and Usenet in the late 1970s, users outside of postsecondary research institutions communicated asynchronously, forming some of the earliest virtual communities. In addition to facilitating discussion among users, BBS and Usenet also facilitated the sharing of software, texts, graphics, and early games. FTP (file transfer protocol) servers were developed in the mid-1980s explicitly to assist the sharing of files across digital networks and the development of Internet Relay Chat (IRC) shortly thereafter allowed connected users to synchronously "chat" while also providing a point of contact for file exchange.

While filesharing has been common practice on the Internet since its inception, trade in digitized media did not become mainstream until the development and deployment of the P2P application known as Napster. As DeVoss and Porter observe,

\begin{quote}
Napster is something more than something that students just happen to use ‘outside of class.’ . . . Napster represents a profound cultural shift [and] matters because it signals a new ‘digital ethic’ of text use and file distribution that runs counter to the usual expectations that have governed the sharing and use of print texts. (179)
\end{quote}

Developed by Northeastern University dropout Shawn Fanning in 1998, Napster allowed direct connection between peers over Internet networks. Until 1998 file sharing was often managed through recombination tools that assembled chained Usenet postings; however, by using a sophisticated GUI (graphical user interface) Napster allowed users with relatively little technical know-how to discover other peers with files to share. Napster’s method of connection between sharing computers was called

\textsuperscript{105} Licklider and Taylor (1968) highlight the potential of early computer mediated communication in not only sharing information but actually increasing cooperation and coordination of individuals across geographical spaces. Forecasting the development of on-line communities, densely networked telecommunication workplaces, and a "supercommunity" of authors and thinkers, Licklider and Taylor's article notes that electronic communication over computer networks will result in interest-based Internet communities wherein people enjoy communication with one another over responsive networks toward the completion of shared projects and goals.
direct peer-to-peer\textsuperscript{106}. While Fanning’s Napster encountered serious resistance and eventually litigation from the RIAA, MPAA and other media regulatory organizations and was eventually co-opted and legitimated by the likes of Sony-BMG, Roxio, and Best Buy, the program provided the first instance of P2P sharing widely accessed\textsuperscript{107} by the general populace.

In 2001, two years after Napster’s official demise as an unregulated P2P filesharing network, San Francisco based programmer Brahm Cohen released the BitTorrent protocol under GNU General Public License\textsuperscript{108}. Like Napster, bittorrent protocol facilitates file sharing over computer networks; however, unlike Fanning’s direct peer-to-peer network, bittorrent protocol allows connections to multiple peers across multiple networks simultaneously. If we think of Napster as an analog to Deleuze and Guattari’s arboescent, hierarchical network, bittorrent utilizes the multiplicity and rhizomaticity of multiple simultaneous networks and peers to facilitate file sharing. Early bittorrent sites were accessible by all Internet users without account creation or site membership. The largest bittorrent trackers continue to operate on the publicly accessible model. ThePirateBay.org and KickAssTorrents.com are representative of public trackers. Yet, as pressure from piracy watchdogs like the RIAA and MPAA escalated in the early to mid 2000s, some bittorrent users decided to move toward concealing file-sharing operations in more secure environments. The creation of private bittorrent trackers in the mid-2000s provided a safe haven for file sharers. Requiring invitation or application for membership, password security, and the https protocol, private bittorrent sites like Oink.me allowed users to participate in the file sharing experience with a trusted, quasi-vetted group of like-minded file sharers.

\textsuperscript{106} Direct peer-to-peer technology requires files to be hosted on single computers. This means that if, as a user, you find a .mp3 you would like to download on my computer via the Napster GUI, I would need to have my computer turned on and connected to the Internet to create a transfer. You would then download the entire file from my computer, creating a perfect copy of the file I am "hosting." This direct user-to-user connection system is characteristic of first-generation P2P sharing technologies.

\textsuperscript{107} The widespread adoption of Napster was likely a result of its easily manipulated graphical user interface (GUI). BBS systems and other intranets required technical know-how that many casual Internet users simply didn’t have the time or patience to learn. The Napster interface streamlined the media discovery process, allowing users to quickly and efficiently find the content they desired with relatively little technical expertise.

\textsuperscript{108} GNU General Public Licenses are copyleft licenses that not only release source code of each program to the end-user, but also create copyleft generations whereby all modifications to the code – and subsequent program redistributions based on code – are also licensed under the GNU General Public License. This licensing scheme prevents private enterprise from co-opting open-source code for the marketplace.
Besides creating more secure P2P sharing environments, the move toward private bittorrent sites also inaugurated a new form of virtual community. While public bittorrent trackers and direct P2P systems like KaZaa and Morpheus did facilitate small amounts of asynchronous user interaction through comment functions or direct messaging systems, they often lacked any real meaningful space for individuals to virtually congregate. In this sense, you might consider them communities of interest or sites where individuals casually drop in and out of in order to quickly acquire information. Because of the lack of community, public trackers and direct P2P file sharing systems never cultivated strong ties and sustained user participation from a large percentage of site users. On the other hand, private bittorrent trackers incorporated many synchronous and asynchronous forms of communication to facilitate the exchange of opinions and information related to site purpose and development. Utilizing live chat/IRC as well as discussion board forums, private bittorrent tracker administrators opened up discussions to the wider site population. As a result, individuals became more entrenched in the purpose and goals of the website and concomitantly devoted more of their intellectual, creative, and financial efforts toward enhancing the system to facilitate stronger community bonds.

As of 2013, the most famous private bittorrent tracker was Oink's Pink Palace. Founded in 2004 by British citizen Allan Ellis, at its peak in 2007 over 180,000 users considered themselves part of the Oink community. Housing an index of over 200,000 torrent files, Oink contained huge archives of mainstream and hard-to-find music, ebooks, computer software, and e-learning materials. During the time of Oink's operation, many other private bittorrent communities cropped up, catering to specific Internet user interests. Sites dedicated strictly to ebooks, manga, educational materials, and, of course, pornography appeared across the Internet. When Oink's Pink Palace was shut down by Interpol and joint British-Dutch police services in 2007, many feared that the era of private bittorrent communities would come to an end; however, the 2010 acquittal of site administrator Allan Ellis by the Teesside Crown Court emboldened many site administrators and led to an explosion of new private bittorrent sites.

The bittorrent communities in this study range in age from seven years to three years. Over their lifetimes, each of the bittorrent communities have transferred their "home" or hosting servers at least
once; in fact, Pancakes.fm has moved three times in 2012 alone. Moves are typically precipitated by fear of becoming targets of state authorities in hosting countries. As of 2013, the majority of the communities in this study are either hosted in the Netherlands or Sweden - countries with historically lax intellectual property enforcement for digital media.

Over time, digital pirate collectives have taken on various projects to improve site cohesiveness, usability, and sense of community. Pancakes.fm and Question.cd often hold charitable donation drives that encourage users to contribute to their local community or worldwide organizations like the Red Cross. Most of the communities are constantly involved in processes to develop plugins, browser add-ons, and additional site functionalities to improve user experience and to more densely draw together the network of users and media. Question.cd is even involved in the development of its own server-side software. Entitled "Ocelot," this rewrite of the TBsource code that runs most private bittorrent trackers makes vast improvements in site speed and server load, generating a cleaner, more responsive user experience. After realizing the server-side strain created by a 150,000+ user base and over 1.4 million unique torrents was diminishing site responsiveness, a team comprised of site users and administrators rewrote the base code and released Ocelot under a CreativeCommons license. To date, many other private bittorrent communities have moved to Ocelot to power their own backends.

As a data transfer and exchange service, ARPANET performed a similar service to Question.cd: they both function to send and receive small amounts of information across networked systems. As advances in network technologies allowed the public to gain access to information transfer, a correlative rise in Internet communication technologies as social tools also occurred. The private bittorrent communities considered in this study represent a higher order of information exchange as a social act in that they are goal-directed and community driven. Viewed from the framework of what Lave and Wenger called "communities of practice," the private bittorrent community exists at the end of a long line of

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109 I'll discuss this in much greater detail when considering mediation in piratical activity systems in Chapter Four.

110 In Situated Learning (1991) Lave and Wenger posit that learning itself is "participation in the social world" (43). This expanded view of learning reverses the traditional conception of education as activity that occurs against the background of culture, instead arguing that social practice itself entails learning as an integral element (35). As Lave
increasingly social forms of data sharing; its users are goal-directed, highly intentional, and active community members over a long span of time. In the next section I'll consider the spatial aspects of private bittorrent communities. Offering demographic information about users and media, this section will illustrate - to the degree possible - who participates in these sites; further, by explaining the technical aspects of the bittorrent protocol, I hope to draw attention to the materio-technological processes that structure the activity of piratical spaces.

Spatial Tracings

Technical

Bittorrent only requires a direct connection at the point of originary upload. In this act, a single user uploads a file to a “tracker\textsuperscript{111}.” Once the file is uploaded, other users can download the .torrent file\textsuperscript{112} hosted at the tracker to begin the download. After the completion of the first download, there are now two users – called seeders - who can provide the file to new downloaders – called leechers. For leechers who wish to eschew the legal ramifications of piracy, bittorrent provides an additional layer of protection that direct peer-to-peer sharing does not. With the exception of the original seeder who provides a complete 1:1 copy of the media uploaded, subsequent seeders only provide small pieces of media for upload\textsuperscript{113}. Though the transfer of unlicensed slices of media is still illegal, bittorrent protocol

\textsuperscript{111} Trackers are ostensibly indexes of files available for download. Trackers do not host downloadable content; rather, they provide a roadmap to all files available for download. Trackers can range from the very large – ThePirateBay.com boasts over 4 million registered users – to very small – The Library.org claims just over 21,000 registered users.

\textsuperscript{112} The .torrent file acts as a node in the network. Each tracker indexes all downloads of .torrent files in order to provide a collection of nodes to which each new downloader can connect. This prevents many of the pitfalls of conventional direct peer-to-peer file transfer; most notably, the lack of a seeder (uploader) or slow download speeds because of slow upload connections. This method of file transfer is referred to as “distributed peer-to-peer”.

\textsuperscript{113} The distribution of “packets” of information across multiple seeders and networks is a logistical boon for file transfer. Because leechers aren’t reliant on only one seeder – a quick search on ThePirateBay.com listed over 10,000 seeders for the most popular .torrent files - information can be dispersed across space and time much more efficiently with a diminished drain on resources for individual users and web servers. Quick and efficient
sends such small\textsuperscript{114}, non-sequential pieces of data that no one user is said to upload a “playable” piece of content. For added protection, many of the downloaded packets of information found on .torrent trackers are often compressed into .rar files. These archives provide anonymity of content to protect users from packet sniffing ISPs and other non-governmental regulatory organizations like the RIAA and MPAA.

Early torrent trackers like ThePirateBay.org, Mininova.org, and KickAssTorrents.com are considered “public” trackers because their content is readily available to anyone with an Internet connection, a bittorrent client, and some free time on their hands. Content on public trackers is typically unregulated by tracker administrators and site users. Further, ratio requirements\textsuperscript{115} are also not imposed on public trackers. In their study of bittorrent as a gifting technology Ripeanu et.al. note that this lack of ratio requirements on public trackers often results in “freeriding” whereby users leech torrents but rarely seed them back to the broader sharing community. Finally, public trackers are open to public scrutiny. Because sites like ThePirateBay.org do not require user registration, anyone – including authorities, law enforcement officials, and media conglomerate snoops – are capable of viewing what is being uploaded, how many times media objects are downloaded, and who is seeding content via IP address traces\textsuperscript{116}.

Due to excessive freeriding, malware-infected content, and the visible illegality of sharing on public trackers, some pirates capable of integrating code of the bittorrent protocol with open source content management systems (CMSs) developed private digital spaces where users could share higher quality content with less fear of reprisal from authorities. These “private” trackers operated on invite-

\footnote{Most “packets” shared over bittorrent protocol are between 64k and 4mb in size. The average .Xvid movie file is roughly 700mb.}

\footnote{A sharing ratio is a calculation of the amount of information sent (uploaded) vs. the amount of information received (downloaded). So, if a user downloads 1 GB of information and uploads 250 mb of information, they will have a ratio of .25.}

\footnote{For piracy tracking organizations like the MPAA and RIAA, attaining an IP address doesn’t guarantee persecution. Anti-piracy groups typically trace IPs to ISPs and send DMCA (Digital Millenium Copyright Act) notices to traced ISPs. It is the responsibility of ISPs to provide notices or punishments for copyright infringing users. Punishments beyond denial of service are few and far between. ISPs can avoid prosecution by copyright holders if they claim refuge under the DMCA Safe Harbor provision. This DMCA clause states that ISPs are exempt from liability for copyright infringement if they 1) have no knowledge of, or financial benefit from, infringing activity on its network; 2) have a copyright policy and provide property notification of that policy to its subscribers; and 3) list an agent to deal with copyright complaints.}
only systems whereby site users only invite other individuals they know into the space for sharing. Protecte
software, user accounts were capped at 200,000. As the originator of the Ocelot code, Question.cd unsurprisingly maintains 200,000 user accounts. Despite also utilizing Ocelot, Pancakes.fm and TheLibrary.org had 112,000 and 21,000 site members, respectively. eLearn.org, Gamers.net, and PirateClub.org all utilize an older server side tracker software and cap their user base at far smaller numbers to cope with large server loads (Table 2).

Table 2. Information on Number of Users and Media.

<table>
<thead>
<tr>
<th>Site Demographics</th>
<th>Question.cd</th>
<th>Pancakes.fm</th>
<th>eLearn.org</th>
<th>TheLibrary.org</th>
<th>Gamers.net</th>
<th>PirateClub.org</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Users</td>
<td>200,000</td>
<td>112,000</td>
<td>19,000</td>
<td>21,000</td>
<td>57,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Torrents (#)</td>
<td>1.4 million</td>
<td>336,000</td>
<td>16,500</td>
<td>55,000</td>
<td>16,500</td>
<td>None</td>
</tr>
<tr>
<td>Media Types</td>
<td>eBooks</td>
<td>eBooks</td>
<td>eBooks</td>
<td>eBooks</td>
<td>eBooks</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Music</td>
<td>Music</td>
<td>Media</td>
<td>Games</td>
<td>Games</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Software</td>
<td>Software</td>
<td>Stock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>applications</td>
<td>(applications)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>eLearning</td>
<td>Videos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Much like the variation in user populations, different sites create different kinds of media archives. Generalist sites like Question.cd and Pancakes.fm house vast archives that range over a variety of media. Question.cd's archive of over 1.4 million unique torrents includes eBooks, software applications, eLearning videos and, especially, music. Contrastingly, TheLibrary.org only indexes ~55,000 torrents; however, they are exclusively composed of eBooks and .mp3 audio books (see Table 2). This variation in archived media draws attention to the intentionality of different private bittorrent populations. Users at Question.cd collectively curate one of the most extensive digital music archives on the net; yet, because the archive includes other forms of media, site users only tangentially work toward developing eBooks or eLearning archives. On the contrary, sites like Gamers.net and eLearn.org provide archives that house specialty content for niche audiences. Echoing the "long tail" discussed by Anderson and Shirky, smaller private bittorrent trackers provide more limited archives devoted to specific kinds of media and in the process create some of the most expansive curated collections of hard to find cultural content on the net.
Without server side permissions to access user IP addresses, it is impossible to provide substantive information about user distribution. This is especially unfortunate when considering the geographic spread of users in niche sites as this information might provide insights into the kinds of media appropriation carried out by users in developing economies. Luckily, members of a code development team at Question.cd provide some community demographics. Utilizing a combination of server side user statistics reports and GoogleCharts, dev team beta produced several interesting infographics on user distribution.

Based on the information available, Question.cd users are overwhelmingly from North America (Fig. 7). Further, citizens of developed economies constitute the vast majority of site users. Yet, users from a variety of developing and non-English speaking countries also frequent the site. Perhaps unsurprisingly, users from countries that have relatively lax intellectual property paradigms comprise the largest non-U.S. user base. Canadians, Swedes, Russians, Dutch, and Norwegians are represented in six of the top eight countries of origin.

![Fig 7. Geographical distribution of Question.cd user IP addresses.](image)
Fig. 8 provides a global picture of user distribution. As mentioned before, site users on Question.cd are comprised mostly of individuals from developed economies and countries with little to no histories of prosecuting digital intellectual property infringement. A lack of users from Africa suggests that access creates barriers to site participation; however, a quick glance at Fig. 8 also suggests that users from developing economies in China and India access the site frequently. After Africa, users from the Middle East constitute the smallest number of site users. Specific numbers aside, the statistics concerning geographic user spread suggest that Question.cd is an inherently transnational space. This isn't to suggest parity between site users from different nation states in the digital public sphere - undoubtedly the interests of US and Canadian users are the most visible and vocal. Instead, what we should glean from the map in Fig. 8 is the notion that these are transnational activity systems, accessed by a wide-ranging group of users from most parts of the globe. Unbounded by geographic demarcations and centered around an organized community of practice, communities like Question.cd provide new models of distributed collaboration outside and create strong ties among members from vastly different economic and political scenes.

Methodology

Online Forums as Sites of Research
Because site activity and user coordination in the six communities I study coalesce around the sharing of media outside the control of authorized channels of distribution, piratical subjectivity is constituted by attitudes toward digitized intellectual properties. The easiest means of tracing the shifting and sometimes contradictory attitudes toward intellectual property in digital communities is to pay close attention to the written contributions of users in site forums. Threaded, asynchronous conversations dedicated to the function of intellectual property in piratical environments provide keen insights into user attitudes; further, they also create unique sites of argumentation, allowing researchers to observe how credibility, dependability, and confirmability in forum postings produce studies that are generalizable beyond the specific sites of research.

In "An Online Forum as a Qualitative Research Method," Im and Chee note that asynchronous, threaded forum postings are valuable for qualitative studies because they provide observable, easy to use archives of user statements that could otherwise not be gathered using face to face research methods. Especially in the case of geographically distributed research subjects, online forums create observable records of individual perspectives from disparate socioeconomic and political contexts. Relying on multiple sociological and anthropological qualitative studies in online forums, Im and Chee argue that forum data is valid and valuable for researchers hoping to observe specific phenomena because it is:

- Credible - Credibility in online research studies is achieved through prolonged engagement, persistent observation, and truth of data. Using forums as a site of study allows researchers to trace conversational development over time; further, because user contributions are written and threaded, online forums are truthful records that provide perfect copies of conversational development.

- Dependable - Qualitative studies often face the difficult problem of ensuring adequate participation by research participants. As Im and Chee note, qualitative studies deemed unsuccessful often fall victim to flighty study participants whose absence results in lack of meaningful data. Because of the "truth of data" permitted by static copies of user
contributions in written form, online forums create a durable site to harvest data for analysis over time.

- Confirmable - Im and Chee note that conformability of data is achieved when "two or more independent people can reach an agreement about the data's relevance or meaning."

  Typically, this agreement is achieved through testing the inter-rater reliability of a coding schema that accounts for what Glaser and Strauss refer to as theoretical saturation\(^{122}\). Theoretical saturation can be achieved in online forum researcher when the variation of user attitudes and opinions occurs across a wide range of users and posts.

- Transferable - Transferability is the goal of any qualitative study. The generalizability of a research study is inherently related to theoretical saturation of collected data as well as the range of contexts from which the data arises.

  In this research study of piratical attitudes, requirements for credibility and dependability are fulfilled. The data gathered and analyzed in the sections that follow are automatic transcripts of forum conversations, preserved in their original format. The data was gathered in three separate harvests that occurred in four month intervals between May of 2011 and May of 2012. After initially identifying forum threads related to the topic of "intellectual property" in May 2011, I revisited each thread two additional times to collect any postings not included in the initial harvest. While the credibility and dependability of postings are a direct result of the technologies that structure participation in online forums, the confirmability and transferability of data is much more difficult to achieve as they rely on researcher interpretation. In the section "Coding Schema" that follows, I'll discuss the four coding schema used in this study in detail, providing evidence of the credibility of each while also highlighting that their transferability is limited to other research sites that share particular contextual factors.

Sampling and Segmenting

\(^{122}\) Theoretical saturation is the situation when no additional qualitative data are needed for the researcher to develop the properties of a category for coding.
Selection of the full data set in this study utilized a method of criterion-based sampling (Geisler, *Analyzing Streams* 18). After identifying attitudes toward intellectual property as the central structuring agent of piratical community members, I began searching for spaces and technologies on the research sites that demonstrated differing attitudes toward intellectual property. While numerous extratextual forces enabled and encouraged such attitudes123, I limited my data to textual fragments produced by site members themselves. Because all of the research sites contained vibrant forums, I decided to look for written statements by site members there; further, utilizing the forum search function, I was able to quickly narrow the corpus of appropriate data. The criterion I used to search the forums for relevant threads included the search operators "intellectual property," "copyright," and "piracy". The results of this search produced 63 threads whose topics ranged from explicit engagement with intellectual property to tangential allusions to piracy or copyright when discussing Wikileaks. Because I am concerned with revealing attitudes toward intellectual property by individuals participating in digital born sites of social production, I narrowed the initial corpus of 63, identifying 18 threads that intimately considered the philosophy, application, or ethics of intellectual property in digital environments.

After collecting raw data and winnowing the initial corpus based on the aforementioned criteria, I began segmenting the data. This process is particularly important because it allows the researcher to break apart the data into units of analysis wherein the phenomenon occurs (Geisler, *Analyzing Streams* 29). If an improper unit of analysis is selected, the likelihood of generating coding schemas with exclusive categories is low and the process of quantifying qualitative data falls apart. In the case of my own data, I went through multiple segmenting sizes before settling on the topical chain.

I first segmented data in the way that it naturally occurred in the forum posts: by speaker. Initially this segmenting technique made good sense as it provided the full text of a user's post and also lent itself to easy transcription in a spreadsheet. Segmenting the data in this manner resulted in the following (Fig. 9):

---

123In Chapter Four I will perform a complete analysis of these mediating technologies, rules, and practices using Activity Theory and Rhetorical Genre Studies as guiding methodologies.
Yet, after I segmented a three thread sample using this method, I realized the difficulty of relying on the speaker as segment size. Because I was interested in isolating the multiple attitudes toward intellectual property exhibited in forum posts, I wanted to assign a unique category to each. In Fig. 9, Speaker 4 presents at least two distinct attitudes toward intellectual property: first, she argues that copyright is a good thing when done in the public interest, not the interests of corporations; second, she claims that material creations such as chemicals should receive protection but immaterial productions such as software shouldn't. In a coding scheme developed for coding resistance to intellectual property, this segment could be coded both as "anti-corporate" as well as "technological" because the user provides two different attitudes on intellectual property. Leaving the segment by speaker method behind, I decided to try segmenting in smaller units in order to capture the target phenomena.
Geisler notes that, "Syntactically, the stream of language is structured as a set of *t-units*, the smallest group of words that can make a move in language" (*Analyzing Streams* 31). T-unites are comprised of a principle clause and any subordinate clauses or nonclausal structures that are attached or embedded inside it. Using the t-unit segment as a guide, I resegmented the same sample threads (Fig. 10):

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Thread Title</th>
<th>Speaker</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is IP Neces</td>
<td>4</td>
<td>Copyright is ok as long as it is done in the public interest, not the interests of copyright holders.</td>
</tr>
<tr>
<td>2</td>
<td>Is IP Neces</td>
<td>4</td>
<td>In the US copyright law has become ludicrous, with terms extended well beyond the lifetime of a single author.</td>
</tr>
<tr>
<td>3</td>
<td>Is IP Neces</td>
<td>4</td>
<td>The Sonny Bono copyright act had a negative effect for public good, only Disney benefited.</td>
</tr>
<tr>
<td>4</td>
<td>Is IP Neces</td>
<td>4</td>
<td>Today I’m of the mind that I’d rather scrap copyright than try to fix the mess that it has become.</td>
</tr>
</tbody>
</table>

Fig. 10. Sample data segmented by t-unit.

The t-unit was certainly useful for breaking up the data into smaller segments codable as exclusive categories at fine-grain level; however, whereas the segment by speaker produced large chunks of data that contained multiple categories, segmenting by t-unit produced tiny snippets that failed to capture attitudes in their completeness. In the example above, Speaker 1 is illustrating a complex, anti-corporate attitude in segments 1-3. If coded using the t-unit as a segment, segment 1 could be coded as "public interest," segment two as a variety of codes (ex., "public interest" or "anti-legislative"), and segment 3 as "anti-corporate." Yet, all three segments are actually subordinated to the speaker's larger concern for the overreaching power of corporate interests in the legislation of copyright law. The granularity of the t-unit as segment was also inappropriate for my data as it broke observable phenomena into segments too small to be coherently understood as related. This process led me to discover that while the t-unit is useful
because it provides the researcher with segments appropriate for coding metalinguistic moves (e.g., proposals, questions, illustrations, etc.), it isn't particularly useful for observing topical content.

The process of discovering the correct segment size in this study was roughly analogous to the fairy tale *Goldilocks and the Three Bears*. After experimenting with segmentation that produced both too large and too small analytical units, I searched for something in the middle. Finally, I turned to the *topical chain* as codable segment that fully captured the phenomena I hoped to observe. According to Geisler, the topical chain is a segment that allows participants in the discourse to understand that conversation is *about* something. In other words, the topical chain provides readers/listeners with t-unit clusters that coalesce around a particular idea or object in the world. In this way, complex ideas and situations are rendered observable and data is made segmentable into coherent, independent units. While the t-unit provided segments that highlight the *doing of* language-in-use, the topical chain provided analytical units that contain wholly formed *contents* of discourse.

After deciding to test the topical chain as segment I returned to the aforementioned sample (Fig. 11).

<table>
<thead>
<tr>
<th>Segment</th>
<th>Thread Title</th>
<th>Speaker</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is Intellectual Property Necessary?</td>
<td>4</td>
<td>Copyright is ok as long as it is done in the public interest, not the interests of copyright holders.</td>
</tr>
<tr>
<td>2</td>
<td>Is Intellectual Property Necessary?</td>
<td>4</td>
<td>In the US copyright law has become ludicrous, with terms extended well beyond the lifetime of a single author. The Sonny Bono copyright act had a negative effect for public good, only Disney benefited. Today I'm of the mind that I'd rather scrap copyright than try to fix the mess that it has become.</td>
</tr>
<tr>
<td>3</td>
<td>Is Intellectual Property Necessary?</td>
<td>4</td>
<td>I don't know much about patents for physical things (like how to synthesis chemicals etc.) but they seem to be reasonable.</td>
</tr>
<tr>
<td>4</td>
<td>Is Intellectual Property Necessary?</td>
<td>4</td>
<td>Software patents, on the other hand, are completely stupid and should not be allowed.</td>
</tr>
</tbody>
</table>

Fig 11. Data segmented by topical chain.
Dividing the data up into segments arranged by topical chain produced four codable units for Speaker 4. In the first segment, the author is supporting copyright on the basis that it produces tangible benefits for the public at large. In the second segment, the author resists intellectual property on the basis of anti-corporatist sentiment. In the third segment, Speaker 4 again supports intellectual property, arguing that it is necessary to protect material creations. In the fourth and final segment she again resists, asserting that intellectual properties that protect immaterial, digitized productions should not receive protection. Each of these shifts in attitude reflects something different about Speaker 4's view of intellectual property. Like many of the speakers included in this analysis, her attitude wasn't wholly in favor of copyright or completely in resistance; rather, her piratical practice is informed by a complex, multi-faceted view of the appropriateness of intellectual property that depends on its relation to corporate power and (im)materiality. In the sections that follow, I'll describe how I utilized selective and multi-dimensional coding schema to provide quantifications of complex qualitative statements like those of Speaker 4. This analysis, when viewed from a distance, provides a rich and nuanced explanation of the attitudes that comprise the piratical ethos.

Coding

In "The Method Section as Conceptual Epicenter in Constructing Social Science Reports," Smagorinsky argues that the process of coding brings together theory and data in powerful and important ways. Noting that "coding makes evident the theoretical approach used to analyze the data by applying code names to segments of text," Smagorinsky goes on to claim that coding allows data to be made theoretical (399). The process of coding in this research study progressed in the following manner: 1) sample selection and identification of marked contrasts; 2) selective coding to identify support and resistance to intellectual property; 3) creation of nested coding scheme for fine-grained analysis of differing attitudes toward intellectual property resistance; and 4) development of four coding schema to address the research questions of the study.

Initially, this chapter set out to answer the research question, "What attitudes do pirates have toward intellectual property?" To produce reliable and exclusive categorizations of piratical attitudes, I
needed to create a coding schema that was flexible enough to accommodate the range of perspectives evinced by the data. First, I selected a fifty segment sample from across the different forum threads. In this process, I attempted to isolate user contributions that captured the broad range of possible attitudes toward intellectual property. By casting my net widely, I hoped to avoid the process of continually returning and revising my coding schema to make room for newly discovered attitudes. This initial sample yielded a spectrum of opinions on intellectual property (Table 3):

Table 3. Excerpt of First Segmented Data Demonstrating Varying Attitudes toward Intellectual Property.

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Site</th>
<th>Thread</th>
<th>Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Question.cd</td>
<td>Fed Up?</td>
<td>Piracy is basically theft. You can argue semantics, in that a download =/= a lost sale, but you cannot argue that we're thieves.</td>
</tr>
<tr>
<td>11</td>
<td>Question.cd</td>
<td>Fed Up?</td>
<td>I can pay for music or I can keep my money. Obviously, I'd rather just keep my money. It's simply a financial decision.</td>
</tr>
<tr>
<td>34</td>
<td>Pancakes.fm</td>
<td>IP Necessary?</td>
<td>Science is co-operative. The idea that one person invents something all on their own isn't that valid very often. Even art I suppose could be argued is never original, it builds on influences from before and is created with other people.</td>
</tr>
<tr>
<td>2</td>
<td>TheLibrary.org</td>
<td>Why IP?</td>
<td>I tend, myself, to see overly constrictive IP law as a hindrance, a chokehold on real creativity.</td>
</tr>
<tr>
<td>5</td>
<td>eLearn.org</td>
<td>Knowledge Free?</td>
<td>Copyright is evil because I cannot think of any other option than Knowledge must be free - it is necessary for the good of our fellow man.</td>
</tr>
<tr>
<td>7</td>
<td>Pancakes.fm</td>
<td>IP Necessary?</td>
<td>Major built-out electronic medical record systems, for example, cost hundreds of thousands of dollars to develop and scale - why shouldn't companies that innovate things like that be legally allowed to protect them?</td>
</tr>
</tbody>
</table>

The wide range of attitudes toward intellectual property in the initial sample changed my original plan in important ways. First, I realized that my interest in "support" or "resistance" to intellectual property went deeper than the surface level. In fact, I was really interested in discovering what kinds of support and what kinds of resistance individuals offered. I realized that the first tier of my coding process needed to code each segment for Support/Resistance/Neither. This initial coding produced isolated segments that would be coded again based on arguments provided in support or in resistance of intellectual property. After coding all of the topical chains for Support/Resistance/Neither, I discovered, perhaps unsurprisingly, that a disproportionately larger number of segments were coded as "Resistance." I next turned to developing coding schema to qualify the kinds of resistance presented in the data.
To generate the particular categories for the resistance scheme, I turned to the data itself to ground my analytic; furthermore, because I was unable to disassociate myself from previous readings on intellectual property, I followed a process of induction whereby I coordinated instances when the data echoed arguments I traced in the literature review, and vice-versa. Unfortunately, I soon realized that I was giving too much weight to the categories derived from my previous knowledge and not enough attention to the data itself. When calculated for inter rater reliability, I only achieved 64% with the initial scheme. After reviewing where myself and my secondary coder disagreed, I realized that I failed to pay attention to large portions of the data that claimed apathy as a reason to resist intellectual property. After multiple revisions that pushed the coding scheme further and further away from the literature review and closer to the data itself, I finally settled on categories that were exclusive yet flexible, able to accommodate the range of resistances that appeared in the data (Table 4).
Table 4. Comparison of Categories of Resistance between Scheme Versions One and Four.

<table>
<thead>
<tr>
<th>Scheme 1 Categories: Resistance</th>
<th>Definition</th>
<th>Scheme 4 Categories: Resistance</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Hindrance</td>
<td>Code as <em>creative hindrance</em> (CH) any t-unit that references the human production as constrained/hindered by intellectual property.</td>
<td>Public Good</td>
<td>Code as <em>public good</em> (P) any topical chain that resists IP(^{124}) on the grounds that it damages the public interest.</td>
</tr>
<tr>
<td>Imbalance</td>
<td>Code as <em>imbalance</em> (I) any t-unit that claims that the current copyright regime is out of balance in favor of content owners, not authors/creators or the public interest.</td>
<td>Economic</td>
<td>Code as <em>economic</em> (E) any topical chain that references financials as the justification for resistance to IP.</td>
</tr>
<tr>
<td>Anti-Capitalist</td>
<td>Code as <em>anti-capitalist</em> (AC) any t-unit that contains a reference to how IP supports economic interests instead of altruistic human motives or claims information and knowledge shouldn't be property</td>
<td>Apathy</td>
<td>Code as <em>apathy</em> (A) any topical chain that references theft or &quot;just because&quot; as justification for resistance to IP.</td>
</tr>
<tr>
<td>Technological Change</td>
<td>Code as <em>technological change</em> (TC) any t-unit that contains a reference to how changes in technology have transformed intellectual property.</td>
<td>Technological</td>
<td>Code as <em>technological</em> (T) any topical chain that references technologies as the justification for resistance to IP.</td>
</tr>
<tr>
<td>Other</td>
<td>Code as <em>other</em> (O) any t-unit that does not contain any of the aforementioned codes.</td>
<td>Other</td>
<td>Code as <em>other</em> (O) any topical chain that does not contain any of the aforementioned codes.</td>
</tr>
</tbody>
</table>

After developing a successful coding scheme for the varieties of resistance to intellectual property, I returned to my overall coding plan to see what other dimensions I needed to code for to discover the attitudes toward intellectual property that I hoped to observe. Eventually, I developed a nested coding plan that coded for the attitudes that appeared most frequently in the data (Fig. 12, Fig. 13).

\(^{124}\) IP = intellectual properties (copyrights, trademarks, patents)
This resulted in four coding schema: 1) Attitudes of Support Scheme; 2) Attitudes of Resistance Scheme; 3) Attitudes of Economic Resistance Scheme; and 4) Attitudes of Technological Resistance Scheme.

**Coding Schema**
Though explicit support for intellectual property comprised only 10.58% of the total codable segments, the number remains surprising considering the data was harvested from websites with an explicit disregard for intellectual property. The different attitudes that supported intellectual property coordinated most closely with the theory and philosophy of intellectual property from the liberal humanist tradition. The codes that I developed to categorize support of intellectual property included: 1) Lockean Sweat of the Brow defense; 2) Piracy as Theft; 3) Artist Rights defense; and 4) Protection as Incentive (Appendix Item 1).

Comprising 82.23% of the codable segments, resistance to intellectual property was by far and away the most common attitude across the research sites. In fact, because resistance was so common, it was quite difficult to develop a coding scheme that took into account the complexity and variation among site user's claims of resistance. Attitudes that resisted intellectual property ranged from claims about its deleterious effects on the public domain to anti-corporate sentiment to the failings of analog intellectual property paradigms for the digital sphere. Though they composed only 7.67% of the overall resistance segments, attitudes classified as "Apathy" confirm many of the content industry suspicions about individuals participating in acts of piracy because they just plain don't care. The codes developed to categorize resistance of intellectual property included: 1) Public Good; 2) Economic; 3) Technological; and 4) Apathy (Appendix Item 2).

Of the 1379 segments coded in this analysis, attitudes of economic and technological resistance made up 30.53% and 26.98% of the total. Together, they comprised over half of the attitudes toward both resistance and support of intellectual property. This could be a signal that the scheme used for coding resistance during second tier analysis wasn't adequately developed to consider all possible attitudes; however, it achieved a concordance rate of .88, well within the range of acceptable reliability. Going forward, I realized that both the economic and technological resistances categories needed to be expanded and recoded because they comprised such a large portion of the entire data set and because the relationship between intellectual property and digitized artifacts were most prominently on display in these categories. The codes developed to categorize economic attitudes of resistance included: 1) Anti-
Corporate; 2) Preview; 3) Direct Contribution; and 4) Funds. Likewise, for technological attitudes of resistance categories included: 1) Convenience; 2) Definition; 3) Social; 4) Quality (Appendix Items 3 & 4).

Before jumping into the findings and conclusions of this chapter, I'd like to spend a bit of time highlighting the social aspects of digital community. Because many of the attitudes that circulate in filesharing spaces are inflected by communal values and shared site-wide objectives, the influence and power of the social can't be overstated in the construction of piratical user attitudes. As what Lave and Wenger call "communities of practice," the piratical spaces that provide the data for this research project are densely networked centers of production and exchange in information products and knowledge. Recognizing the intentionality and purpose of such virtual communities will be essential to understanding the attitudes and ideologies site members use to justify their practice and understand their position in the wilds of distributed production.

On Virtual Community

The idea of a virtual community existed in various forms before the advent of MOOs, MUDs, MMORPGs, and digital social networks. Thomas Hobbes pointed to the existence of a disparate population who recognize the import of their collective endeavors while not knowing each other individually in *Leviathan*. Decrying the "state of nature" wherein individuals living without government would be perpetually engaged in *bellum omnium contra omnes*125, Hobbes instead posited that individuals live in a political community that assents to be governed by social contract. In *Second Treatise of Government*, Locke argued similarly, noting that while individuals were inherently good, they needed to collectively consent to governance by authority to secure their rights and live without fear. Rousseau's *Du contrat social* pushed the virtuality of community to its limits, arguing that the "general will" of the community ultimately makes civil life possible. Rousseau writes, "Each of us puts his person and all his power in common under the supreme direction of the general will; and in a body we receive each member as an indivisible part of the whole" (24).

125 War of all against all.
Outside of the European Enlightenment, contemporary scholars like Benedict Anderson have argued for the existence of "imagined communities" or virtual collectives that share ideologies and habits of mind but often don't - or because of sheer size, can't - know one another individually. Anderson characterizes contemporary nationalisms in this way, arguing that a nation is an imagined political community - and imagined as both inherently limited as sovereign. It is imagined because the members of even the smallest nations will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives an image of their community. (6)

The widespread adoption of the Internet in the 1990s produced new sites for investigating communities of individuals that lack geographical proximity but share attitudes and ideologies that guide their daily lives. In *The Virtual Community*, Howard Rheingold provides one of the earliest investigations into forms of human social life coordinated over computer networks. Arguing that virtual communities like the WELL illustrate activity that resembles the Habermasian public sphere, Rheingold's work is important because it introduces its readers not only to multiple online subcultures but also the ideologies that govern their activity and existence. Similarly, Wellman and Gulia's "Virtual Communities as Communities: Net Surfers Don't Ride Alone" provides rich details on the constitution of online communities as well as the motivations for participating in them. Recognizing that online relationships often coalesce around niche, information-specific topics, Wellman and Gulia sketch relational dynamics, arguing that weak ties often characterize virtual communities. Yet, despite often lacking intimate ties, virtual communities still effect the attitude and behaviors of individuals in "real-life" as users sometimes modify their offline behaviors to conform to the ideology of their online lives (181-2).

Laura Gurak's *Persuasion and Privacy in Cyberspace* is an empirical investigation of life on the Internet that reveals how ideology/attitude of particular communities shapes protest and dissent in digital and physical spaces. Gurak argues that individuals involved in the Lotus MarketPlace and Clipper Chip protests coalesced around a online "interpretive community" who shared what Joseph Harris calls "habits of mind." Claiming that these protests were the result of "communities whose use of language was
focused around social action, or what rhetorician Kenneth Burke would call the 'use of language as a symbolic means of inducing cooperation'," Gurak notes that a virtual community ethos and novel modes of digital delivery sustained these online collectives and their rhetorical actions (5). Gurak's work in *Persuasion and Privacy* is particularly useful for my own study as it provides the first intimate treatment of the motivations, intent, and purposeful actions of a virtual community from a rhetorical perspective. Recognizing the inherent differences between digital born protest and analog protest, Gurak draws attention to the ways that user attitude is shaped from without but performed individually from within.

Henri and Pudelko's "Understanding and Analyzing Activity and Learning in Virtual Communities" presents a preliminary framework to observe, analyze, and evaluate the activity of virtual communities (474). Working from Wenger's social learning theory (1998), Henri and Pudelko claim that virtual communities - like physical communities - are sites of learning and socialization. Echoing Sanchez's contention that identity is rhetorical action created through sociotechnical engagement, "Understanding and Analyzing Activity and Learning in Virtual Communities" offers a four-tiered classificatory schema that coordinates the creation, goals, and temporal evolution of digital collectives in terms of intentionality and strength of ties. Henri and Pudelko offer the following four classifications of virtual communities (Fig. 14):

- **Communities of Interest** - Communities of interest are virtual collectives that exchange information to answer personal questions, improve understandings of particular info-subjects, share commonly shared passions, and create spaces of play. Typically, members of a virtual community of interest don't collectively produce new information objects, exhibit fairly weak ties and lack sustained participation from site users. A typical example of a community of interest would be the forums on WebMD where users briefly dip in and out of the communication stream to answer personal questions about medical ailments.

- **Goal-Directed Communities of Interest** - Communities of interest that are goal-directed are often composed of "expert" individuals who coordinate activity in order to achieve particular institutional goals related to their field of expertise. Often these communities are workplace
related, project oriented, and managed in a top-down fashion. Because of the project-based nature of goal-directed activity, these communities of interest have demarcated life-spans that exist only as long as funding sources continue to provide incentives to participate. Henri and Pudelko use the Learn-Nett project as an example of a goal-directed community of interest. Financed by the European Union, Learn-Nett brings together researchers from a variety of educational fields to develop and implement distance education for future teachers living in EU countries.

- Learning Communities - Virtual communities whose primary aim is facilitating formal educational experiences constitute learning communities. Often the ties in these communities are fairly strong; however, due to the temporal limitations of semester or quarter based courses of instruction, learning communities exist only insofar as they are required to facilitate term-based instruction. Activity is often framed as knowledge construction in the service of learning and evaluation. Supervision by an instructor ensures the hierarchical nature of learning communities and often limits the bounds of participation. As writing instructors, Writing Studies scholars often coordinate learning communities when they teach online courses or supplement their instruction with virtual interaction on course management systems like Blackboard and Moodle.

- Communities of Practice - Exhibiting the strongest ties, sustained participation by community members, and the production of specific information objects, communities of practice emerge from collective activity and represent the most organic example of virtual communities that exist for prolonged periods of time outside institutionalized settings. Activities in communities of practice are typically non-institutionalized, characterized by expertise and the pooling of collective knowledge toward the production of objects. These activities require collaborative relationships and common practices that individuals perform to meet collectively recognized and shared needs and desires. Henri and Pudelko note that participants in communities of practice often develop a collective identity that attempts to answer the questions, "who are we" and "who are we not?" (483). As such, identities, attitudes, and ideologies of participants in communities of practice are more intensely shaped by group membership than in any other form of virtual
community. *H-francais*, a French virtual community with an interest in history and education is an example of a community of practice. Established in 1996, this virtual community includes teachers, administrators, parents, and students who coordinate virtual activity toward the production of educational innovation. The activity of *H-francais* community members has resulted in curricular development and public actions for educational reform.

![Diagram of Henri & Pudelko's classification of virtual communities](image)


Henri and Pudelko's four-tiered classification of virtual community is important for this study for numerous reasons. First, it provides a method of organizing digital collectives in terms of longevity and object creation. Second, it characterizes levels of individual participation at multiple levels, allowing the researcher to differentiate between occasional and sustained group engagement. Finally, it offers a matrix to evaluate how various intensities of participation in virtual communities create identity formation through submission to social attitudes and underlying communal ideologies.

Considering Henri and Pudelko's classifications of virtual communities, all six of the bittorrent communities observed exhibit characteristics of communities of practice. The explicit goal of media sharing creates group-wide identification among members and allows distributed users to work collectively toward realizing communal aims. While resembling organizations in their complexity and organizational structure, sites like TheLibrary.org and Question.cd exist outside of any formal
institutionalized setting; further, despite being a key resource for the dissemination of knowledge and information, site users don't merely consume content but produce various kinds of sociotechnical artifacts - from massive media archives to Internet browser plugins to server-side software. In this sense, site users are collectively engaged in the construction of objects that meet their needs and desires. Interestingly, the questions of "Who are we?" and "Who are we not?" in these communities yields a wide range of possible identities. Considering that these communities' explicit purpose is to exchange digital artifacts over communication networks, the obvious answer to the first question is, "We are file sharers" or, perhaps, it is "We are pirates." It could be "We are thieves who break the law" or possibly, "We are information advocates that represent the future of digital life." In the sections that follow, I'll explore these shifting ideologies and attitudes concerning the collective activity of private bittorrent sites to yield a complex picture of piratical subjectivity. I call this multi-motivational, often contradictory identity the "piratical ethos"; an atomistic subject engaged in digital born distributed production.

Part V: Findings and Implications

The three tiered coding method employed in this study reveal complex and often contradictory user attitudes toward intellectual property (Fig. 15).
While resistance toward intellectual property overwhelmingly comprised the majority of codable segments (82%), attitudes of support also play an integral role in understanding piratical ideologies. Further, the economic and technological attitudes of resistance warrant further inspection as they comprise a majority of codable resistance segments (69%). In the sections that follow, I'll report findings of this analysis and correlate coded categories with prominent themes from the literature review; in particular, I'll highlight the influence of community and technology on user attitudes toward intellectual property. These two facets of resistance reflect the broader goals of piratical communities of practice and are inscribed in the design of mediating technologies that are the focus of Chapter Four.

**Resistance to Intellectual Property**
The vast majority of segments considered in first tier coding were categorized as "Resistance" (82%). Because this number represented roughly 4/5 of the overall data set, I developed multiple coding schema to attend to differing attitudes of resistance. I'll first consider attitudes of technological resistance. Despite compromising the second largest contingent of data coded, attitudes of technological resistance reveal some of the most salient aspects of the piratical ethos. Notably, user responses in this section highlight the important role of community and sociality in sustaining the bittorrent ecosystem. Focusing on the role of sharing technologies as instruments of exposure and discovery, technological attitudes highlight the anachronistic application of analog intellectual property paradigms in the face of deep integration between technology and community in digital spaces. Second, I'll focus on attitudes of economic resistance. Strongly characterized by anti-corporate sentiment and disenchantment with the current distribution model, attitudes of economic resistance highlight the desire for the production and circulation of media on an affordable local scale. I'll close the section on resistance to intellectual property by exploring the idealist and realist attitudes of "public good" and "apathy." Occupying opposite ends of the resistance spectrum, these attitudes highlight high-minded resistances of cultural ecologists and indefensible positions of digital thieves.

Technological Resistance

I'm going to begin this section by looking at one of the two categories of resistance coded in the third round of analysis: technological resistance. Notably, the attitudes conveyed in this category sync fairly seamlessly with broader theories concerning digital communities as communities of practice; further, they also underscore how technological advances are transforming the production and consumption model that sustains analog intellectual property paradigms. Many of the segments draw attention to work by technologists, information advocates, and digital humanists on the future of media production, distribution, and circulation in the networked information economy. By and large, segments coded as technological draw attention to the incapacity of analog intellectual property paradigms to apply to digital media creation; further, individuals offering technological justifications for piracy view file sharing as an intensely social act that generates wealth and provides alternative avenues of exposure for
creators. Some technological defenses against intellectual property are explicitly related to digital rights management technologies and standards of media quality; these positions suggest that media consumers wish to control when, where, and how they consume their content. More commonly though, segments coded as "technological" draw attention to the role of community in the construction of the piratical ethos. In Chapter Four, I provide an analysis of the ways that community and technology mediate activity in digital born file sharing collectives. The following analysis highlights the ideological and attitudinal points-of-view that result from participation in those systems and draws attention to the fascinating tensions that occur when social technologies challenge the Big Media ecosystem.

*Technological Resistance - Social*

Writing before the explosion of Facebook in the late 2000s, Benkler argues in *The Wealth of Networks* that arguments from the virtual digerati and digital dystopians concerning the function, influence, and effects of social relations in the networked world tended toward the hyperbolic. While the kinds of social participation enabled by the Internet do have meaningful and interesting influence on individual experience, they don't result in the complete breakdown of face-to-face society, and neither do they create transcendent virtual communities. Benkler suggests instead that the effects of virtual social networks are twofold: first, a "thickening" of social relations with preexisting friends, neighbors, and family are facilitated through social networking. Second, and more importantly for this study, virtual community creates what Benkler calls "limited-purpose, loose relationships," or virtual links between individuals engaged in group-based active collaboration with shared purpose toward shared goals (359).

In the years since the publication of Benkler's work, social networks have exploded in accessibility, usability, and popularity, highlighting the complex intertwining that occurs between individual users, communities of practice, and technologies that facilitate social exchange. All of these components result in the production of social relations that redirect agency and attitude, forming alternative subjectivities and providing individuals new modes of connection and expression that direct their online activity. Comprising 39% of the overall technology segments, data coded "Social" make up the largest percentage of technology segments; however, the influence of the "social" in piratical communities is undoubtedly
stronger than the 10.60% of the entire dataset conveys. Inherently, these sites are social spaces and activities that occur therein must be understood as community-driven. Because "community" plays a part in constructing the piratical ethos, all of the categories reviewed in this analysis have a social element. In the following section, I'll explore those segments that make explicit reference to the social, reserving for Chapter Four an exploration of how mediating technologies, users, and systems interface to create community and challenge analog intellectual property.

The fundamental difference between piratical bittorrent communities and other file-sharing technologies like digital file lockers, direct peer-2-peer transfers, and Usenet newsgroup binaries, is the community-oriented nature of the sites. Obviously, this analysis has proceeded by investigating forum postings - themselves social spaces wherein users dialogue on a variety of different topics. Beyond forums, sites like TheLibrary.org and Question.cd facilitate social exchange through a range of technological tools and mediating technologies that I'll explore in much greater detail in the following chapter; however, suffice it to say that the "Social" aspects of piratical practice are extremely important to understanding piratical motivation. Many segments coded as social make reference to the use of piracy as a form of social media - an alternative press that creates buzz and interest around bands that aren't a part of the Big Media ecosystem. These segments also spotlight the sociality of digital circulation and rhetorical velocity, revealing how taste is manufactured in digital media ecologies. Other segments explicitly reference the influence and importance of the community itself, revealing how site participation with other users motivates piratical acts as much, if not more, than acquiring media. Still others highlight the role of social technologies that create moments of discovery wherein users move through networks of metadata to find new media.

_More listeners - more music. Period._ - User X, Pancakes.fm

_A truly talented artists [sic] no longer needs the push of a major label in order to sell records - if their music is good enough, the word of mouth of millions of people on the Internet will do it for them._ - User X, Question.cd

Many of the segments coded "Social" in this analysis justified the piracy of media on the grounds that any monetary loss by the artist or author would be more than compensated through exposure in
social media. Users adopting this attitude often offered a two-fold defense that first presented a
definitional argument about the difference between copying and theft. After justifying their practice as
sharing, not stealing, the users then noted that the sociality of media sharing would result in greater
exposure and potentially more sales for the creator. In these two segments, Respondent 3 in the
Question.cd thread "Music Piracy" argues:

First, copying isn't stealing. I'm not depriving anyone of a physical thing. It might be morally
debatable, but it's not theft. And besides by sharing music we're helping people get into bands
they wouldn't have the opportunity to get into otherwise which means more t-shirts, stickers,
concert tickets and CDs get sold that wouldn't have been sold otherwise.

In effect, segments following this two-step defense draw attention to the importance of circulation and
velocity in networked information ecologies. Users like Respondent 3 first recognize the non-rivalrous
nature of digital media, defending their piratical practice by shifting the scene of infringement from
economic to moral terms. Second, Respondent 3 foregrounds the importance of circulation and velocity
for digital commodities by noting that without exposure, there is little opportunity for sales. Implicitly,
Respondent 3 is arguing that the non-rivalrous nature of electronic media, circulation and
velocity is only impeded by intellectual property control mechanisms. Circumventing the sanctioned
systems of distribution to generate interest by other community members and the networks they are
attached to outside the piratical space is actually a beneficent action that helps creators become more
successful. Case studies of artists who employ piratical bittorrent communities to drive interest and sales
appear to bear this claim out. The Flashbulb and Anamanaguchi both officially released their music on
private bittorrent trackers and both have testified to increased visibility as a result

While the majority of segments coded "Social" make the increased visibility argument, others
simply draw attention to site membership and community participation as the main motivator for sharing
protected content. Pancakes.fm user X states simply, "It's all about the community, eh?". In a more

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126 In his recent study "Profit Leak? Pre-Release File Sharing and the Music Industry", North Carolina State
researcher Robert Hammond provides empirical evidence supporting the piratical folk wisdom of increased
visibility and sales as a result of file sharing. Using a prominent bittorrent community analyzed in this study,
Hammond concluded that file sharing results in a marked increase in actual music sales for established musicians;
however, Hammond also finds that newer and smaller artists benefit only marginally from piracy.
elaborated post, Respondent 105 in the thread "How Do You Justify Piracy?" argues that:

Imagine whole community of people with people who have immense expertise in every genres (except for Jungle) - that's what we have here. and if I even have a fleeting interest in a genre I haven't heard, all I have to do is head to these forums and start a thread asking for an introduction to it or post in an existing one, the people here are happy to give help as long as you're going to listen to it. I can't just walk into a record store and hope the clerk knows something about Norwegian [sic] roots Black Metal or Early twenties blues, they may well be an expert but it's awfully optimistic. our community is the future of music sharing and music is a communal experience, right?

Highlighting the community's role in exposing users to long-tail, niche media, Respondent 105 exhibits a common attitude of users in piratical communities: organization and site activity is coordinated by social acts of sharing and communication. Without these elements it is unlikely that many individuals would participate in such communities.

Last but not least, a sizeable portion of the "Social" segments make direct reference to the role of sharing technologies. Most activities in piratical communities are mediated by different technological interfaces: browser plugins provide network graphs of related genres and artists, specialized code provides users the opportunity to curate personal collections of downloadable content, and core tracker functionalities allow users to view the most shared, and hence most popular, downloads at any given time. These technologies allow users to make the downloading experience a social event, enabled by the time and effort invested by site users to upload, share, tag, and download content. Respondent 54 on the Question.cd thread "The Ethics of Piracy" exhibits just such an attitude, noting that "The other benefit is the discovery of new band/artists through other users and the linking functions of plugins like Oink+." Users like Respondent 54 highlight the important role that mediating technologies play in making piracy a social experience and draw attention to the complex ways that human users and code-based tools both exhibit agency to coordinate piratical site activity.

Technological Resistance - Definition

IP laws are derived from economic models based on scarcity rather than abundance. Our society is structured around the Malthusian delusion that there aren't enough resources for everyone;

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127 Oink+ is a browser plugin that links different uploads via user-generated tagging systems and metadata housed at social music sites like Last.fm. I'll explore such tools in detail in the following chapter.
that life is a zero-sum game where there MUST be winners and losers. In the case of physical commodities, this might be true (emphasis on the might), but this clearly is not the case with IP and digital commodities. - User X

Every time music is pirated, a copy of it is made. Music has worth only because people value it; this goes for anything. Music, however, is DATA. It can be COPIED instead of TAKEN. Every time it is copied, wealth is created. Every time I leave my laptop on to seed music, I'm doing a good deed letting other people enjoy music that they don't have a copy of yet. - User X

Topical chains arguing against intellectual property because of fundamental definitional agreements comprise 16% of technological resistance; however, the distinctions between analog and digital media offered in these segments undergird numerous other attitudes in this study, notably "Technological - Convenience," "Technological-Social," "Technological-Quality," and "Economic-Preview". Because of this, the low number of "Definition" coded segments belies the true influence of this attitude.

At its heart, the "Definition" code posits a categorical difference between copying digital content and stealing physical commodities. As Barlow and Lessig point out, the transition to digitized media broadens the opportunities for individuals to produce new forms of culture as the resources required to copy and distribute digitized information are reduced to almost zero. The circulation of digital artifacts is relatively unbounded\(^\text{128}\) by geographical space\(^\text{129}\); further, temporality is altered for similar reasons: it takes a negligible amount of time to transfer information across the digital sphere. Because of these advances in communication and media production technologies, many individuals argue that the application of analog intellectual property paradigms to digital scenes is anachronistic and flawed. Often highlighting the non-rivalrous nature of digital artifacts, segments coded as "Definition" embody the spirit

\(^{128}\) This is almost universally true. China's "Great Firewall" challenges this technoutopian logic, highlighting the role of the state in managing some Internet user's content.

\(^{129}\) The unbounded nature of electronic communication is discussed at length in Gurak's 2001 monograph *Cyberliteracy*. She notes that speed and reach are fundamentally reconfigured by Internet communication. The speed of communication technologies such as email allow us to "compress time" (30), reconfiguring our temporal sense to erase the labor required to traverse great distances. Our "reach" is also remarkably expanded by our communication technologies. Gurak notes that as digital artifacts circulate over wider and wider networks, discourse can reach thousands or millions of individuals in compressed amounts of time. This expansion in reach creates moments of multiplicity wherein communications directed to global audiences, circulate and replicate at speeds unfathomable in the age of analog media. The multiple uptakes of these communication result in a wide variety of expected and not-so-expected actions.
of digital cultural ecologists like Lessig and Barlow and tap into many of the academic conversations about copyright in the digital era reviewed in Chapter One.

Respondent 78 in the thread, "How Do You Justify Piracy?" on Pancakes.fm succinctly captures the non-rivalrous digital goods argument and links it to ethics. As he notes,

*Copying is not piracy. Think of it this way. A machine is invented that you can just push a button and make anything you want, food, cars, houses etc. Would it be ethical to not let people have food or a house if such a machine existed? Of course this machine is just fantasy... but is it? I can press a button a "create" a copy of a piece of music for myself. Is it ethical to deprive me of this music (or software, or any digital thing)? How is this anything like piracy?!*

Multiple attitudes of definition drew attention to acts of digital reproduction and ethics, tapping into utilitarian arguments to claim that acts of piracy weren't illegal but were actually productive, resulting in the creation of a more informed citizenry and a healthier public sphere. Other users noted that the tensions between analog and digital intellectual property paradigms are manufactured by a generational difference. Seeing themselves as the future of creation and production in non-rivalrous digital environments, respondents like X on Gamers.net highlight that the natural response of many Internet users who refuse to accept analog intellectual property in digital scenes of production and consumption. X argues:

*I think it's a generational thing; we are being raised and developing in an awkward time for mankind. For thousands of years information has been finite and limited. Now, however, it can be infinite and everywhere at once at any given time. Society still clings to their thoughts of the analog, but we see things differently and piracy is an alternative we don't really think twice about. It is inevitable and the future. Deal.*

Though definition segments only represent 16% of the overall technological resistance data, the underlying notion that piracy ≠ stealing permeates most of the segments in the coded "technological" in the second tier coding. The view that non-rivalrous goods and communication technologies transform the marketplace is palpable and challenges tried-and-true market logics of industrial capitalism, instead positing new forms of information age production, consumption, and circulation.

**Technological Resistance - Convenience**

Circulation, or the movement of media among users in multiple contexts, calls attention to the transforming channels of textual distribution and consumption enabled by recently developed communications technologies. Scholarly work in communication and rhetorical studies explores the
differences between print-based and electronic circulation, often highlighting the ways that digital
circulation allows artifacts to cross geopolitical boundaries, engendering new social relations and
alternative subjectivities in ways that analog media could not (Eyeman 2007). Segments coded
"convenience" in this study rely on capabilities created in the shift from analog to digital. Sometimes
convenience attitudes are directly related to media availability in the physical world. This data suggests
that many pirates with niche tastes aren't being adequately served by corporate-controlled media
distribution systems. Other times, segments coded as convenience relay archival desire, demonstrating
how digital media ecosystems provide stable access to media artifacts that can't be acquired due to
geographic or temporal scarcity. Still other convenience data suggests that alternative modes of media
consumption are driving piratical acts, highlighting the failure of the market to adequately meet consumer
demand for specific kinds of digitized media130.

Many convenience segments highlight how transformations in the technologies of consumption
drive individuals to seek alternative methods of securing media. User X at Question.cd adopts this
position, stating that

I have very, very few opportunities to listen to CDs. I have a netbook, so no CD drive, and I
hardly drive anymore (used to be my biggest reason to buy CDs -- to listen to in the car). I don't
have any kind of CD player. I do have an old laptop, but it's all out of whack. My boyfriend's
laptop plays CDs, but I don't want to turn on his laptop just so I can listen to some music. I guess
I could pop it in the PS2, but that's in the bedroom...in short, digital copies of music are
considerably more convenient.

User X doesn't provide an adequate justification for ignoring intellectual property as many outlets such as
iTunes and Amazon.com offer digital media downloads. But, as Pancakes.fm user X notes, "on
Pancakes.fm I have access to basically any album (sic) I want. The average Best Buy only carries top 40
crap and iTunes doesn't cover a lot of independent bands. What do you think I'm going to do?"
This
attitude is typical and reveals a frustration that many members of piratical communities share: corporate

130 In The Anarchist in the Library (2005), Vaidhyanathan briefly traces how peer-to-peer networks provide
alternative networks for the distribution and circulation of information. As a response, information "controllers" like
entertainment conglomerates, multinational corporations, and legislators have developed digital rights management
technologies to try and stem the proliferation of illegally traded intellectual properties. The stricter imposition of
control, according to Vaidhyanathan, is short-sighted and only generates additional ill will on the part of
"information anarchists" the world over.
media distribution channels - both physical and digital - often fail to offer content outside of the major labels. Users with niche tastes often turn to illicit file sharing networks wherein they find individuals with similar tastes willing to share their digital collections.

Often the lack of choice from legal media outlets is compounded by the geographic isolation of some users. Segment 221 in a Question.cd thread entitled "The Ethics of Piracy" supports this assertion: "I live out in the midwest USA. Grew up in a town of 500. Before the Internet my only access to music was the radio and MTV. Once I got Internet access I slowly developed a taste for dubstep, black metal, and jambands. I download all the time because I can finally access music." Like the respondent in segment 221, a user on PirateClub.org observes, "it's [piracy] much easier and faster. the closest store selling cds is an 3 hour train ride away in Gothenberg and they only carry crap." Niche tastes combined with geographic isolation make piracy one of the few viable options for these individuals to access the media they enjoy. In this sense, piracy offers convenience through increased circulation and access, providing community members digital items they seek while also connecting them to digital-born groups who share the same or similar affinities.

Because user-generated archives on file-sharing communities are some of the largest collections of media on the net (recall, Question.cd has over 1.2 million unique torrents), many pirate community members highlight the convenience of accessing hard-to-find or out of print media as their primary motivation for site participation. A user on Gamers.net notes that "I am drawn to piracy because of the chance of finding rare games. I was ecstatic when somebody uploaded Heart of Osiris here because I can't get it in the USA" and X agrees: "I pirate games because most of the games I download are for older systems that you can't even find used". TheLibrary.net user X provides a similar argument for the media of ebooks, arguing that, "I am often looking for hard to find books in the philosophic vein. My local library doesn't even have a copy of Marx's Capital, much less anything by the postmoderns." All of these sentiments draw attention to the ways that user generated archives - a topic I'll consider in depth in

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131 I'll discuss this point in more detail when analyzing segments coded "Technological-Social".
Chapter Four - create new forms of digital circulation, allowing file sharing community users new opportunities to access finite resources infinitely.

Composing 33% of the technological resistance data set and 9% of the overall segments, arguments utilizing "convenience" as the guiding attitude toward justifying piratical acts make apparent the failings in the current analog-digital media ecosystem. Though it is unsurprising that physical outlets like rural libraries and big-box chain stores don't carry a lot of niche media, there is little reason why digital distribution streams run by companies like iTunes and Amazon are unable to include digital-born artifacts that exist at the far end of media's long tail. The absence of niche media on these sites is often the result of an all-too-close relationship between big media and big distribution, a bond that deprives consumers of access to many forms of culture and, as a result, creates anti-corporate sentiment.

Technological Resistance - Quality

Segments coded as "Quality" (9%) almost exclusively made reference to ideological disagreement with the intent of digital rights management (DRM) technologies. Developed to fight putative acts of piracy and provide publishers control over their content even after being sold to individual consumers, DRM is vilified by many technophiles, information advocates, and file sharing communities. Opponents of DRM claim that it severely limits the capacity for digital circulation, stunting the growth of networked information ecologies in much the same way that terminator seeds and genetically modified plants disrupt traditional farming practices. Advocates of DRM, typically large media organizations, claim that these sort of protection measures are necessary to ensure that their digital commodities aren't infringed upon by unauthorized users. To address the shift from analog to digital intellectual properties, DRM supporters shift the discourse away from "owning" an artifact to buying a license for its use. This effectively dodges the rivalrous/non-rivalrous binary reviewed in "Technological- Definition" segments by reframing consumption as an issue of permissions, not ownerships. In addition to arguments against DRM, segments coded as "Quality" often made reference to the availability of file formats and higher bitrates as a justification for infringement. Audiophiles hoping to secure lossless format copies of music claim they are
underserved by the extant market and instead turn to piracy to procure perfect quality digital media. In this analysis, it is rare to find an argument against DRM without a concomitant desire for high bitrate media. This twinning suggests that piratical justifications based on quality come from users who want to control perfect copies of their own media in the manner they see fit.

Respondent 24 in the Question.cd thread "Music Piracy" illustrates the two-fold attitude of quality succinctly, observing that, "When publishers put out bands I like online that meet my standards (no DRM bullshit, lossless/FLAC quality ~320kbps MP#) I'll buy them legally online. Until then, piracy ahoy!" A little later in the thread another user echoes Respondent 24, using a clever analogy to illustrate her point. She notes:

FACT: There is no one-stop location on the Internet where you can pay $10 and download a 192+ kbps DRM-free MP3 of any album you want - which you can do on Question.cd for free. Essentially, the music industry is asking consumers to ignore the gentleman in the street handing out fresh Hebrew National hot dogs (delicious, amirite?!) and pretending that the gross chunks of meat that've been simmering in 7-Eleven all week are just as good! Why should anyone pay for an inferior product when what they actually want is just sitting there?

Other segments coded as quality exhibit a vitriol for industries utilizing DRM to protect their digital intellectual properties. One Pancakes.fm user argued that, "I'm STRONGLY opposed to legally downloading music from the Internet, as it is usually DRM'd and I am really, really, really anti-DRM. That's my justification for not doing it legally - I'm downloading just to screw DRM" and another on Gamers.net agrees, noting "I suppose another reason for piracy is for protest. When Spore came out, and was laden with DRM, I went ahead and downloaded it (never played it because reviews of gameplay looked mediocre) to say FU to the developer by uploading as much as I could." The aforementioned segments are typical and represent the "Quality" attitude to a tee: no DRM, high quality, preferably lossless, digital media or, in the words of Respondent 24, "Piracy, ahoy!"

Economic Resistance

Comprising 30.53% of the total segments coded, economic resistance to intellectual property constitutes the largest percentage of any category in this study. This is perhaps
unsurprising considering the conventional logic that file sharers are simply circumventing the pay-for-media model in order to obtain digitized goods for free. While this contingent does comprise 1/5 of the overall segments coded as economic resistance, another 4/5 provide other arguments against intellectual property. The majority of segments in this dimension (41%) are anti-corporate in nature, citing the damaging influence of the "industry" on the economics of media creation. Segments coded as "Funds" support the conventional logic that many individuals file share because they simply don't have capital to purchase all the media they desire; yet, most of these segments aren't simple theft. In fact, the vast majority of these segments reveal that pirates who lack money would pay for content if they had the means to do so - or at least that's what they claim. Attitudes of direct contribution (17%) and preview (16%) provide fascinating insight into alternative economic models that piratical users would like to see implemented to address current inadequacies in the broader media ecosystem.

**Economic Resistance - Anti-Corporate**

It's no surprise that pirates aren't particularly keen on corporations; in fact, there's something to the notion that pirates consider themselves digital Robin Hoods, pilfering from the excesses of Hollywood elite and redistributing cultural wealth among the general populace. Anti-corporate sentiment in the media industries is common among pirates and can be categorized as strong reaction to the prosecution of file sharers. Individuals in the anti-corporate camp hope to deal economic damage to the content industry based on the belief that continued prosecution of file-sharers by the RIAA, MPAA, and others equates to the old adage "cut off your nose to spite your face." Highlighting that putative piracy could be a boon to the content industries, these users wonder why the major labels and production studios continue to persecute the very individuals who consume their product. Typically, anti-corporatists of this ilk also bemoan the collusion between the content industry and legislators, activating wider global sentiments fed up with the close relationship between industry and government and unethical practices of transnational corporations with respect to labor and human rights.
Without a doubt, the most prominent attitude coded in this entire analysis used the RIAA and MPAA as anti-corporate justifications for infringing on intellectual property. Respondent 31 in the thread "How do you justify piracy?" on Pancakes.fm argued, "I disapprove of the RIAA and its tactics. I made a pledge to never buy a CD from RIAA labels. I either pirate it or buy it used so that they won't get my money." Respondent 191 shares these consumption habits and disdain for anti-piracy organizations. She justifies resisting intellectual property on the basis that:

I refuse to support companies and organizations like the MPAA and RIAA. At this point every action I've seen taken to protect media rights appears as a poorly veiled refusal to lose a single precious cent. Even if that cent is earned at the cost of suing, harassing, and really hurting people I believe are innocent. The media moguls have become entirely too greedy and willing to take advantage of both their consumers and artists.

As Jessica Reyman notes in The Rhetoric of Intellectual Property, content industry campaigns to combat piracy utilize rhetorics of fear and intimidation instead of engaging users on the ethics of file sharing. Patry's Moral Panics and the Copyright Wars underscores this claim, highlighting how "moral panics" are perpetuated by content industry watchdogs to whip up public opinion against piracy to secure overreaching legislative victories that serve Big Media. Recognizing that the ultimate goal of anti-piracy campaigns is to move citizens from "criminal to consumer," the media and discourse of major studios and organizations like the RIAA assume a priori that file sharers are criminals. Ignoring the multiple motivations being sketched in this analysis generates remarkable ire among file sharers, creating a rhetorical moment wherein both interlocutors are suspicious of the other's motives. Both sides end up levying charges of corruption and the anti-corporate sentiment expressed in the segments of this category become concretized attitudes that continue to structure file sharer perception of the content industry. Respondent 213 in the thread "How do you justify piracy?" adopts this exact attitude toward anti file sharing campaigns, noting that piracy becomes a form of civil disobedience against hegemonic corporate and media interests. She claims:

I justify it [piracy] by reading the news and seeing the media mirroring bs the RIAA/MPAA/etc say and regard it as truth. I see myself pirating as an act against this kind of fallacy/lies/deceit that the corporations try to put forward to the typical citizen.
The anti-corporate form of resistance discovered in this analysis reveals some important details about piratical attitudes. First and foremost, anti-piracy rhetoric almost never has the intended effect; rather, it often consolidates and solidifies latent anti-corporate sentiments and provides media consumers an easy, relatively anonymous means of circumventing industry control over distribution and circulation of their digitized products. Second, because resisting corporate control through acts of file sharing becomes a liberatory act of rejecting power, many individuals contesting intellectual property on these grounds become invested in their piratical acts because they carry political implications. This investment sustains participation in piratical practice and actually grows the file-sharing movement. The major studios and other content industry players would do wise to heed the advice of Respondent 134, "The more the RIAA keeps pushing against file sharing, the more I'll download." To reclaim a sizeable portion of their market and redeem industry image, record labels, movie studios, and book publishers will need to work against the anti-corporate attitude by addressing the concerns raised in this section.

Economic Resistance - Funds

Segments coded as "Funds" (22% of economic resistance) in this study might appear much like the "Apathy" category discussed later; however, there is a marked difference between the two. While segments coded "Apathy" represent an attitude that blatantly disregards intellectual property in acts of theft, segments coded "Funds" exhibit a willingness to pay for intellectual properties but a material inability to do so. In this sense, the "Funds" attitude isn't actually a resistance to the philosophic...
articulation of intellectual property; rather, fund-based justifications for piracy indicate a pragmatic response to the price of protected intellectual properties, often from transnational perspectives.

In the Question.cd thread titled "Music Piracy," Respondent 12 notes that "People ought to buy what they can afford and download the rest (and preferably buy what they've already downloaded). That's how I do it, at least." Similarly, Respondent 62 in the Question.cd thread "The Ethics of Piracy" states that, "I can't afford to purchase every album I listen to, but I would if I had the income. I do purchase vinyl as often as I can." Both segments represent the overwhelming majority of responses in this category. Some segments coded "Funds" draw attention to the global nature of the digital media market, highlighting how Western culture industries often provide their commodities at prices far too high for individuals in developing economies to access. In the Pancakes.fm thread "How do you justify piracy?" Respondent 117 reveals this price imbalance, noting that "My country has a minimum wage of $160 a month. I don't even make that minimum wage, and I'm a music junkie. If prices were lower, I would buy more music". Users like Respondent 117 draw attention to the geographic spread of individuals participating in piracy communities. United in the belief that digitized media simply costs too much, users evincing a funds-based attitude author a sizeable portion of the resistance segments and highlight how much mainstream media is out of the price range of the poor, be they in developed or developing economies.

Economic Resistance - Direct Contribution

I don't like the idea that someone other than the artist could benefit monetarily from their work, so if I like an artist, after I've seen what they can do, I buy their merchandise, vinyl records, etc. directly from their website. I also look for tickets to their show when they're in town. (Pancakes.fm, Segment 115)

Segments coded as "direct contribution" could be considered anti-corporate in that they often implicitly reject the traditional model of media production and distribution; however, this is very different from the kind of anti-corporatism observed in the early section. In fact, segments coded as "direct contribution" are more akin to the segments coded as "Sweat of the Brow" in the support corpus. Direct contribution segments utilize Sweat of the Brow doctrine to argue against intellectual property
protections, claiming that while artists are entitled to compensation for their work, the current system of creation and distribution strips creators of that ability and rewards corporations instead. Subordinating technological advance to economics, direct contributionists recognize that current media ecosystems could be replaced by more organic, localized, and artist controlled alternatives.

Examples of direct contribution were often invoked to provide substantive evidence that this new model of direct artist-to-consumer model is a viable alternative. Considering the ethics of piracy, a Question.cd member cited multiple instances of direct-to-consumer music distribution, noting that

_I believe a pay what you will model of business would be better. In the case of radiohead, nine inch nails, and girl talk, they all had systems set up like this. Same with The Flashbulb and many other artists. You pay what you believe the work of art is worth, and you get a high quality download of the product. The artist receives all of the Proceeds and corporate fatcats get thinner._

A Pancakes.fm user agrees, citing the same bands as representative examples of the direct contribution movement. Respondent 67 notes,

_IF more artists move 'off the plantation' a la Radiohead, NIN, and The Flashbulb, I will continue to support them with my wallet. I got an In Rainbows discbox. I paid for the CD version of Ghosts. I gave The Flashbulb five bucks. Why? Because I want to support the artists, not an old, dying system._

Embedded in both responses is a recognition that the changing nature of technology fundamentally alters the way media production and distribution gets done. Further, both segments make it apparent that attitudes of direct contribution don't disagree with intellectual property in theory; in fact, just the opposite. Both the Pancakes.fm and Question.cd statements reflect a desire to provide monetary compensation, directly rewarding creators for their intellectual property.

Artists themselves have also long supported the idea of direct contribution. Writing in Salon in 2000, Courtney Love of Hole noted that "Recording artists have essentially been giving their music away for free under the old system, so new technology that exposes music to a larger audience can only be a good thing" ("Courtney Love does the Math"). She goes on to note that musicians have new options now that the digital economy creates alternative pathways for the distribution and marketing of music. Other artists like Radiohead have taken the direct-to-consumer approach quite seriously, self-releasing digital downloads and physical copies of releases like In Rainbows (2007) and The King of Limbs (2011). Still
others have embraced the exposure-via-piracy model, highlighting how "gifting" their music increases visibility and direct contributions. Nine Inch Nails frontman Trent Reznor admitted to having an account at Oink's Pink Palace and simultaneously pre-released his multi-album *Ghosts I-IV* on multiple piracy networks to increase visibility, incite buzz, and direct individuals to his website where they could order physical copies of the release.

The problem for both fans and artists lies more in the practical application of intellectual property in the changing scene between analog and digital life. Both of these segments convey that Respondents have no intention of paying for intellectual properties in digitized or physical forms if the profits produced go on to prop up a system seen as superfluous in the face of self-publishing and self-hosting technologies. Likewise, artists have little interest in signing over their rights to intermediaries when they can use new technologies to appeal directly to their prospective fan bases for exposure and financial contribution.

All-in-all, attitudes of direct contribution are disgruntled with the way current media production and distribution systems are organized. Using multiple examples, direct contributionists advocate the kinds of "support" relationships that Zuboff and Maxmin first explored in *The Support Economy*. In that book, the authors claim that success in networked information economies largely depends on the creation of deep, individual relationships between producers and consumers - relationships that are often mediated by technology. Perhaps the best example of this direct support relationship is found on Kickstarter. Founded in 2009, this website provides artists the opportunity to "crowdfund" their projects by soliciting donations to produce a piece of music, film, performance, object, or experience. As a reward for their contributions, Kickstarter pledge makers receive personalized rewards, tickets to performances, or small-run mementos of the campaign they support. As of early 2013, Kickstarter campaigns like "The Veronica Mars Movie Project" and "Amanda Palmer: The new RECORD, ART BOOK, and TOUR" have solicited donations of over one million dollars each\(^{134}\). Attitudes of direct contribution draw attention to the kinds of relationship economics Kickstarter facilitates, all the while helping consumers fulfill the common desire to reward the worker with his keep.

\(^{134}\) Amazingly, "The Veronica Mars Movie Project" raised 5.7 million dollars in only three months!
Economic Resistance - Preview

Segments coded as "Preview" constitute the same percentage of the resistance dataset as "Direct Contribution." Typically, preview segments adopt the "try before you buy" logic, highlighting past experiences where individuals felt cheated by media companies when they purchased a product only to find that, on the whole, they were highly unsatisfied with the book, album, or game. Segments coded as "Preview" almost always convey another interesting factor: pirates wishing to preview material before purchasing often make reference to their appreciation for physical media. While recognizing that digital media ecosystems comprise larger and larger portions of the market, preview segments highlight how most media consumers will purchase physical media if they really enjoy a product. Respondent 2 in the Question.cd thread, "The Ethics of Piracy" is typical in this regard. She notes,

[M]ost of the time, i will download an album from here to sample it. If i really enjoy it, i will go out and buy the cd, because i really like having the liner notes and a physical copy of the album. a 30 second sample from itunes really does not give me a full idea what the album is like.

Likewise, Respondent 12 in the "How Do You Justify Piracy?" thread on Pancakes also draws attention to previewing as justification for piracy before acknowledging that digital media will never replace vinyl. She observes, "If I like something I've downloaded, then I buy it anyway. I love owning the physical copy of music that I adore. With new people pressing vinyl all the time, I'm buying more music now than ever."

While Respondent 12's response is actually two topical chains, coded as "Preview" and "Other" respectively, it's important to recognize how commonly preview segments were tethered to claims of "vinyl love." This finding suggests that while digital media is a quick and efficient way to preview and purchase recordings, many music lovers would prefer to purchase vinyl if given the opportunity.

Other segments proffering the preview attitude claim that downloading and test driving a digital artifact isn't so different from the kinds of preview activities people have enjoyed for quite some time. On eLearn.org, Respondent 6 in the "Why Knowledge Must be Free" thread acknowledges that the widespread proliferation of information and knowledge are important to the development of culture (coded as Public Good). The user then notes that "by all means, try before you buy. like browsing a book at a Borders. BUT, if you find it of value, consider buying it. I do." This sentiment is common and, like
"Direct Contribution" segments, suggests that individuals expressing "Preview" attitudes aren't in disagreement with intellectual property as much as they are frustrated with the current system of producing and distributing media.

**Resistance - Public Good**

While protectionists invoke the incentive portion of the US Constitutional Copyright clause in arguments supporting intellectual property, many pirates rely on the utilitarian portion of the same clause to claim an attitude of resistance. Article I, Section 8, Clause 8 of the US Constitution notes that copyright functions, "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries" (my emphasis). Drawing on the utilitarian philosophy of Jeremy Bentham and John Stuart Mill, attitudes invoking the public good argument claim that the current copyright regime stifles creativity and culture-making by locking down intellectual properties and assigning too much control to the original creator. In the thread "How do you justify piracy?," Pancakes.fm Respondent 96 notes that "I don't agree with the whole idea of intellectual property. I can't agree with artificially making culture rare". In the same thread, Respondent 2 argues that "I am of the opinion that art should be free, in the sense that museums should be open to everyone at no charge, like the MET in NYC. People need art to make art". Responding to the same query, another participant noted that, "The idea that just because you made something you can control it even after it has become a part of culture is a very new idea in the history of mankind." Respondent 178 succinctly sums up this position, arguing against intellectual property as a function of hypercapitalist society. She observes:

> The common ground we reached was that the ideal society would distribute all its intellectual property freely. This would allow for much more rapid growth and development, and people would create without having money as their primary motivation. Now this may seem obvious to others, but being the beneficiary of a capitalist society, this always seemed like an impossible goal to me. Culture begets culture - locking it down hurts culture on the whole.

Individuals expressing the public good attitude share much in common with the cultural ecologists discussed in the literature review.
Lessig, Barlow, Doctorow and others argue that while intellectual property protections might be useful in theory, they are often quite damaging in practice. Pointing to the mass proliferation of user generated digital content on the web, individuals adopting the utilitarian attitude toward intellectual property note that without the ability of the general populace to use and reuse ideas and expressions, the creation of culture becomes stunted, outsourced to the corporate culture industries that Adorno and Horkheimer highlight in "The Culture Industry: Enlightenment as Mass Deception." In that essay Adorno and Horkheimer don't point to intellectual property per se; rather, they highlight how powerful content industries are responsible for making culture in processes akin to Fordist production. Because individuals become dupes of cultural goods found in prominent media outlets, they develop what the authors deem "false needs" that can only be fulfilled by mass produced commodities such as radio, film, and print. Predating McLuhan's dictum "the medium is the message," "The Culture Industry: Enlightenment as Mass Deception" paints a dreary picture of corporate controlled culture-as-superstructure and provides relatively few avenues of escape.

Cultural ecologists like Barlow and Lessig highlight how constrictive intellectual property regimes in the analog era effectively supported Adorno and Horkheimer's argument in "The Culture Industry" by providing relatively few avenues for the average citizen to produce culture in meaningful ways. Yet, the transition toward a networked information age reintroduced the tools of production to the average culture producer and consumer. Relying on the "public good" attitude, cultural ecologists and pirates attempt to reclaim the privatized realm of media and culture production by resisting intellectual property as a means of enhancing the public domain.

Resistance - Apathy

According to the RIAA, MPAA, and other media sponsored anti-piracy organizations, most acts of file-sharing could be considered acts of theft, rooted in an apathy toward the intellectual property of creators. Typically, discourse by these organizations adopts the notion that file sharing constitutes...
theft and will lead to the dissolution of media production due to lost revenues. As the RIAA website claims, "It's commonly known as "piracy," but that's too benign of a term to adequately describe the toll that music theft takes on the enormous cast of industry players working behind the scenes to bring music to your ears" ("Who Music Theft Hurts"). In Peers, Pirates, and Persuasion, John Logie challenges the characterization of piracy as theft, noting that the tools of digital media reproduction create problems for this rhetorical framing. Yet, definitional arguments aside, 7.67% of segments coded in this study suggests that a small group of pirates do conceptualize file sharing as theft but continue to do so anyway. In the thread "Fed up with the anti-piracy hype?," Respondent 42 captures this attitude succinctly, arguing: "My 2 cents: We are all stealing. Whenever you take that which is not legally given you are stealing. I just don't care though. I'm not going to try and justify this to soothe [sic] my conscience and make it seem like I'm doing something noble here. I'm a proud asshole. . . hehe". Echoing Respondent 42, a site user on Pancakes.fm describes how he manipulates new digital ecosystems: "I steal all kinds of shit I'm not entitled to via the Internet, and that's just how it is. There's no justifying it, morally it's wrong and there's no doubt about it being illegal. I never understand how people feel the need to defend themselves though." Despite the complex and nuanced attitudes that resist intellectual property on moral, ethical, or material grounds, a small subset of file sharers do fit the mold sculpted by anti-piracy organizations. The fundamental difference between the industry story and the findings of this analysis is in the numbers. While the RIAA and sister organizations rhetorically construct 100% of file sharers as criminals, this small-n study suggests that the number is closer to around 8%.

Support for Intellectual Property

Despite claims by the content industry and anti-piracy organizations like the RIAA, MPAA, and BRIEN, a sizeable portion of pirates support the idea of intellectual property - in theory if not in practice. Coding in this study suggests that many pirates justify intellectual property based on liberal organizations like the RIAA and MPAA. Similarly, Logie's chapters on "The Positioning of Peer-to-Peer Transfers as Theft" and "Peer-to-Peer Technologies as Piracy" in Peers, Pirates, and Persuasion reviews such portrayals to highlight the dangerous analogy perpetuated by big players in the content industry that piracy is a violent crime. This is a debatable claim. See the aforementioned analysis of "Technology-Definition" for more details.
humanist theories whose roots lie in Locke and the Romantics; furthermore, other attitudes of support
draw heavily upon ideals of protection and incentive instantiated in the original US Constitutional
Copyright clause. Defenders of intellectual property are also quick to point out the differences between
patents, trademarks, and copyrights. These defenses typically support protections for patents and
trademarks while remaining ambivalent or skeptical about copyright.

Comprising the largest percentage of support, segments coded as "Sweat of the Brow" argue
that creators are entitled to the fruits of their labor. Relying on Locke's theory of "labor-mixing"\textsuperscript{137},
supporters typically couch their arguments in economic terms, noting that while changes in technology
have precipitated new modes of media distribution, these transformations aren't justification for ignoring
intellectual property wholesale. Responding to the question, "How do you justify piracy?" on
Pancakes.fm, Responder 104 argues:

\begin{quote}
I have been making music for ten years or so .. both my own electronic music (some is up here)
and also in playing bass and drums in bands that have had commercial albums released. I have
never got into a habit of downloading much music in digital formats as it never seemed
appropriate - and also if by chance I have discovered something that I find myself REALLY liking
and putting on repeat - I will 100% track it down and buy it. I think the point of emphasis here
should be that I work hard and devote alot of time to music - shouldn't I be repaid in some small
way for this time and effort? Surely at least *some* people should want to give something back to
the artist if they consume and experience the music that they have spent time developing - and
also all the tools / equipment and secondary expenses that have gone into this music's creation.
\end{quote}

Responder 104 evinces a common pattern in "Sweat of the Brow" defenses; namely, she feels as though
pirating media is an ethical problem. Without reverting to legal defenses of intellectual property, this user
acknowledges that illegal file sharing "never seemed that appropriate." She also places hope in the
audience of her music, noting that hopefully "*some* people should want to give something back to the
artist" for the pleasurable experience created by their intellectual production.

\textsuperscript{137} In Chapter Five of the Second Treatise of Civil Government Locke defines labor-mixing thusly:

\begin{quote}
Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own
person: this no body has any right but to himself. The labour of his body, and the work of his hands, we
may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it
in, he has mixed his labour with, and joined to it something that is his own, and thereby makes it his
property. It being by him removed from the common state nature hath placed it in, it hath by this labour
something annexed to it, that excludes the common right of other men: for this labour being the
unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at
least where there is enough, and as good, left in common for others. (19)
\end{quote}
Later in the same thread, Responder 141 notes that "Artists need and deserve our remuneration. Shows and merch are not enough...especially for authors. How do they come to your town or print on a t-shirt if they don't have any money?" Recognizing that direct contribution to artists is basically impossible if they fail to have the capital to tour and secure merchandise, Responder 141 draws attention to what some characterize as the "vicious circle" of piracy: without initial purchases of media in physical or electronic forms, most artists are unable to fund publicity tours or produce items to sell to the consumer directly at events. Because of this circle, the reasoning goes, emerging artists need intellectual property protections to ensure the ability to capitalize on their creations.

Considering the question, "Is intellectual property necessary?" Responder 2 on Question.cd provides a complex answer that relies on the "Sweat of the Brow" defense while at the same time criticizing the entire system of intellectual property. She observes:

*I'm thoroughly 'anticapitalist' in most regards, but considering the entire system is catered to the faceless supply-side of creators, i.e. rightholders, it stands to reason that when the opportunity for Joe Schmoe to benefit from his creation as opposed to someone else, he should have the legal means to ensure his place among the other capitalists, who would want nothing more than to profit off the backs of others doing the work.*

Responder 2 highlights a prominent pattern observed throughout claims of support; namely, she understands and justifies intellectual property protections pragmatically, considering the way that the current system is organized; however, philosophically she opposed the entire system wherein art and culture are rendered commodities to be bought and sold in the marketplace.

Forum participants that support intellectual property using the "protection" defense composed the second largest number of coded attitudes in support of intellectual property. Interestingly, respondents claiming the protectionist position consistently demonstrated a deeper, more nuanced understanding of the juridical foundations of intellectual property. This is evidenced by the strict attention by most protectionists to the differences between the three domains of intellectual property: patents, trademarks, and copyrights. Locating justifications inside the contemporary capitalist marketplace, responders in this category almost unequivocally relied on the spirit of protection in the US Constitutional Copyright
Clause, tethering research, development, and advance in technology and science to incentives created by a "monopoly for limited time" of the intellectual property holder.

The original poster in the thread "Why Knowledge Should be Free" on eLearn.org\textsuperscript{138} recounted an experience wherein she argued on another site forum that books should be digitized as all individuals had a right to knowledge. Responding to this claim, Respondent 3 countered, noting that, "It's also important that there is an incentive for the production of knowledge. If inventions didn't have any protection for a period of time to be commercialized, no one would do any R&D into new inventions". Similarly, in the thread "Is intellectual property necessary?" on Pancakes.fm, Responder 17 reorients a question about copyright and artists to the function of patents in the capitalist marketplace and elaborates Respondent 3's position. He argues:

\textit{Wow how many of you anti-IP people will continue to ignore the very core of IP law in this country? It's money that drives the innovations behind patents, and without IP law, there is no defensible way to make money in this market. If I have to spend ten million dollars to develop a stand-alone holographic device, why the shit should I not have the ability to have the law stand behind me when I stake a claim to it being exclusively my own since I designed it and spent the massive amount of capital to nurture the thing from concept to reality? Yeah, maybe some engineers would continue to innovate, yet many of you neglect the fact that the vast majority of businesses in America - particularly larger ones that hire many engineers and keep our job market from collapsing - rely on investors for capital. These investors make these capital injections because they have assurances that the fruits of their invested company's labor are defensible on an open market. If this did not exist, rich people would never take risks to invest in technological advancements, start-ups would never attempt to pioneer innovations, and R&D departments would be a moot point.}

In the same thread, Responder 24 comes supports Responder 17's position, arguing that the majority of intellectual property consumed in the United States isn't "\textit{the sort that some guy in a garage can make himself}" but instead is the product of "\textit{an army of people, making use of costly tools and facilities, and often skillsets that are in short supply}".

Rhetorically speaking, protectionists recorded in this study often reorient the discourse away from conversations about copyright and instead posit the necessity of intellectual property from the perspective of patents; further, recognizing that the production of patentable products in the contemporary networked

\textsuperscript{138}Interestingly, the phrase, "Because Knowledge Must be Free" is the tagline embedded on the masthead of all eLearn.org site pages.
information economy requires coordination of large numbers of humans, technologies, and knowledges, protectionist attitudes directly oppose arguments from open-source advocates who claim that intellectual property stunts the creation and sustained development of distributed technoscientific projects like SETI, FLOSS, and Wikipedia.

Composing 18.49% of the coded segments in support, roughly 1/5 of segments claim that infringement of intellectual property is theft in the legal sense. This is a surprising finding of the support categories as it poses a fundamental contradiction between attitude and practice. Because the scenes of this study are file sharing communities, one would expect to find relatively few individuals arguing that file sharing constitutes piratical theft; yet, many users do hold this position. Providing a rather candid answer to the question "How do you justify piracy?," Respondent 120 claims that file sharing "walk[s] all over corporations' rights to control property they have purchased, thus it is stealing in the traditional sense. Same way that using someone's plans for an invention is theft." Likewise, in two separate segments from the same thread, Respondent 206 rejects the eye for an eye logic that some pirates use to justify their practice. Arguing that "People put time and effort to create a digital product. Yes, maybe it's pricey, but that doesn't justify stealing it," Respondent 206 then notes that "Stealing it because certain people/organizations etc. are corrupt still won't make it right. It is wrong in the eyes of the law. Two wrongs don't make one right." Despite many anti-corporate sentiments expressed as justification for pirating media (see Anti-Corporate resistances above), Respondent 206 is representative of supporters of intellectual property who see file sharing as theft, plain and simple.

The percentage utilizing the "Artist Rights" argument constituted roughly 9% of the support data. This finding is particularly surprising considering how much weight this attitude carries in the realm of intellectual property policy. The European system of copyright protections is predicated on Artist Rights - or Moral Rights - and ensures that the rights to usage and reproduction of any authorial creation remain in the control of the individual who made them, regardless of whether they've transferred the rights for economic compensation to another entity. As Chapter One pointed out, the Artist Rights argument arises from Romantic conceptions of genius first found in the 18th century writings of Edward Young and
Johann Gottlieb Fichte. Relatively few segments demonstrated this attitude toward intellectual property protections, suggesting a discrepancy between how legal theorists and governments view copyright and how the general populace approaches the subject. Responding to a query concerning the necessity of intellectual property protections, Question.cd Respondent 2 argues that "As awful as IP law can be, it's a benefit for the those that have created said work; namely in deciding where and how the work is used, and to make sure no one makes a penny off of it if the creator didn't approve of it". Respondent 1 in the Gamers.net thread "Piracy: A Philosophical Engagement" exhibits the same attitude, claiming that "All you are doing is copying someone's work. It's not new, it's not original, and it certainly isn't owned by the original creator. Developers, authors, and artists should control how their content is used".

Despite only representing 10.5% of the overall codable data, supporters of intellectual property are an important contingent of the piracy community. Overwhelmingly, attitudes in this category support the biblical dictum "The workman is worthy of his wages" (Luke 10:7, Matthew 10:10). This logical argument tends to undergird much of the intellectual property policy discussions debated today. Confronting the transformation of media into infinitely replicable, transferrable forms, creators and rights owners large and small have had difficulty discovering how to monetize digitized media; however, most individuals don't argue with the idea that a creator should be rewarded for the sweat of her brow. Protectionists tend to fall back on the concept of short-term monopolies to safeguard innovation and reward creativity for limited amounts of time. Keenly aware of the nuanced distinctions in intellectual property, individuals who exhibit the protection attitude shift the discourse away from copyright and synecdochally substitute patents for the whole of intellectual property. Perhaps the most surprising finding from analyzing support arises from the disjunct between the influence of Artist/Moral Rights in public vs. policy discourse. While much policy discussion proceeds on the idea that creators are entitled to determining how their work is used, relatively few responders in this study share the same attitude.

Conclusion

The analyses of Chapter Three present a modest attempt at tracing the "subject" of piratical spaces by paying special attention to discussions regarding intellectual property. Following the "social
turn" in the Humanities, this chapter recognizes that an individual's subjectivity is a socialized product of cultural and historical development, constructed from the outside through the myriad connectivities that constitute experience inside community. The import of outside influence is deeply embedded in an individual's attitudes and ideologies, allowing the attitudinal arrangement of cords and knots that compete within our psyches to appear whole and given. Unwinding these competing attitudes from the knot of the self, Chapter Three attempted to answer the question, "Who are the subjects of piratical activity" with the answer, "Attitudes X, Y, and Z are the most important and prevalent attitudes that construct Subject-Identity in piratical spaces."

As spaces characterized by strong ties, sustained communal participation, and information object production, the communities analyzed in Chapter Three represent what Henri and Pudelko call "communities of practice." Sites like Question.cd and TheLibrary.org require collaborative relationships among site users, common practices in archival supplementation, and collectively recognized desires to function, inviting users to participate in sustained ecologies of learning and sharing and provide fascinating research sites for investigation into what I call the piratical ethos. Broadly characterized by opposition to analog-based intellectual property paradigms, user attitudes in the six research sites fell into a broad array of resistances; most notably, users rebuffed intellectual property on technological and economic grounds.

By count, data conveying technological resistance placed behind economic resistance; however, these attitudes convey a fascinating synergy among communication sharing technologies and the communities who organize their activities around them. Users adopting "Social" technological opposition to intellectual property foreground the essential role networks and mediating technologies play in artist discovery, exposure, and community development. Despite not using the terms, attitudes of social resistance recognize the potential of heightened digital circulation and increased rhetorical velocity, frequently referring to the role that social technologies and social media play in the sharing of media. Other technological resistances hinged on the non-rivalrous nature of digital artifacts, the inadequacy of
formalized distribution networks, and the inferior quality provided under current media consumption outlets.

Attitudes of economic resistance characterize the majority of segments coded in this study and overwhelmingly convey a deep distrust with corporate control of the content industries. Advocating a return to localized media and circumvention of the intermediary role entertainment conglomerates play in the production process, users evincing attitudes of economic resistance look to alternative models such as crowdfunding to directly reward creatives for their labor. Attitudes of economic resistance to intellectual property also highlight unreasonably high pricing systems and the inability to "try-before-you-buy" when making media purchases. If media companies, both big and small, hope to recuperate their image and meet future consumer demand, they would be wise to listen to the attitudes of economic resistance revealed in this study.

Attitudes of resistance also include a small but vocal portion of users who argue against intellectual property because of its constriction of the public domain. Relying on a host of utilitarian and cultural ecologist arguments, these users most closely align with academic and legal contestations of copyright, providing articulate arguments against the expansion and control of copyright to the detriment of the citizenry and culture-at-large. Finally, users claiming attitudes of apathy are also represented in the data. Though only comprising less than eight percent of the data set, these users provide fuel for the copyrightist fire, functioning metonymically for all pirates in the eyes of legislators and industry.

Attitudes of support for intellectual property are also present in piratical spaces, albeit in smaller number. Those in support of copyright often provided articulate explanations for their positions, relying heavily on Lockean Sweat of the Brow doctrine as well as the incentive portion of the original U.S. Constitutional Copyright Clause to argue for the sanctity of copyright protections. Others leaned on the European tradition of Artists Moral Rights, arguing that artists should control how, when, where, and why their materials are used or reused.

The findings of Chapter Three have important implications for policy makers, artists, entertainment companies, and media distributors; however, perhaps most importantly, the analyses in
Chapter Three reveal a fundamental connection between community membership, sharing technologies, and individual action. As numerous respondents in this chapter point out, technologies connect individuals to communities, facilitate new means of discovery and exploration, and provide structural support for virtual community development. In the next chapter I'll explore how technological objects that mediate activity in digital communities are inscribed with the attitudes of intellectual property resistance discovered in the preceding pages; further, I'll also highlight how the attitudinal orientations revealed in Chapter Three play a fundamental role in the design of digital objects that facilitate archival creation, exploration, navigation, and consumption.
4. Piratical Activity Systems: Technological Mediation and Rhetorical Genres

Introduction: The Participatory Archive and Mediating Technologies

As of October 2012, the number of registered contributors to the English version of Wikipedia numbered roughly 780,000. This number includes the entire English Wikipedia user population - from extremely active users to individuals that only ever made a solitary edit. Further, this number accounts for the total number of users registered since the inception of Wikipedia in 2001. During that time, the English Wikipedia user community contributed ~4.1 million unique articles and in October 2012, those articles were being created at a rate of 856 per day. When the English version of Wikipedia quit tracking word statistics in January 2010, the site contained 1,798 million (1,798,000,000) words - one of the largest ever peer produced, collaboratively curated electronic text resources the world has ever known.

For comparison, the Internet Archive claims 1.3 million users. Archive.org houses a staggering 3.4 million digital artifacts, the majority of which (over 2.8 million) are digitizations of texts whose copyright status has fallen into the public domain. Working together with libraries and government agencies at 23 scanning centers in five different countries, Archive.org workers digitize 1,000 books per day for inclusion in the collection. Since its launch in 2001, the Internet Archive has collected roughly 10 petabytes (100 million megabytes) of cultural materials under the CreativeCommons license, providing a rich storehouse of moving images, static images, and texts for future research, leisure, and cultural production.

Both Wikipedia and the Internet Archive represent the promise and potential of collaboratively produced commons-based archives. These vast digitized collections house an electronic record of the world's cultural commons, providing access for future generations to not only great works of music or literature but also birth records, military service information, classified government documents, and church attendance registers. Unfortunately, many of the cultural resources produced in the last 75 years have yet to make it into the collections of Archive.org and Wikipedia cannot supplement its encyclopedia entries with media that could potentially revolutionize its content. U.S. copyright expansions provisioned

139 http://archive.org
in the 1998 Sonny Bono Copyright Extension Act\textsuperscript{140} and enforced through terms of the DMCA\textsuperscript{141} have hamstrung these commons-based archives, ensuring that no content produced after 1923 will fall into the public domain until 2019 or afterward (depending on the date of publication). As these examples suggest, there is a divergent attitude toward cultural properties and commons preservation in Western nations\textsuperscript{142}, a schism that often pits corporate owners of intellectual property on one side and the collaborative digitization efforts of public domain advocates on the other. As digital reproduction technologies continue to advance, copyright term extensions remain a lobbying point for culture industries\textsuperscript{143}, making the resolution of this issue unlikely in the near future.

Outside of the legal parameters of copyright, piratical communities also engage in the collaborative act of archive making. Napster, the first widespread peer-to-peer sharing network dedicated to indexing a distributed archive of media content, contained links to over 80 million songs at the time of its demise; however, many of these artifacts were inaccessible as Napster's distributed archive wasn't actively curated and substantial portions of the information contained therein were bogus or inaccessible. KaZaa's P2P network suffered similar problems as individual users were unable to curate networked data, leading to a preponderance of fraudulent media objects and the proliferation of malware across the site's network. After the death of first-generation P2P file sharing networks in the early 2000s, new networks of distributed archival production addressed the shortcomings of Napster, KaZaa and others. Adopting many principles and techniques of archival curation incorporated in legal alternatives like Wikipedia and Archive.org, private bittorrent communities offered new sites of distributed social production whose content was not commons-based. At first, these communities remained fairly small, drawing members into niche communities dedicated to preserving and sharing obscure cultural productions; however, as time wore on, these communities exploded in size and volume, attracting users interested in curating

\textsuperscript{140} Pub. L. 105-298.
\textsuperscript{141} Digital Millennium Copyright Act, Pub. L. 105-304.
\textsuperscript{142} The copyright legislation of the European Union have mirrored lawmaking in the U.S. See c.f., Directive 2006/116/EC and Directive 2001/29/EC.
\textsuperscript{143} See the Stop Online Piracy Act (SOPA, H.R. 3261), the Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property (PIPA, Senate Bill 968) and the Cyber Intelligence Sharing and Protection Act (CISPA, H.R. 3523).
massive generalist archives. The community of Question.cd is just such a community and will provide the
data used in this chapter to analyze distributed acts of social production in digital writing environments.

In the wake of anti-piracy legislation and prosecutions in the first decade of the 2000s, one might
expect that an illegal file sharing community wouldn't have the capacity to create archives on the order of
Wikipedia or the Internet Archive; yet, the numbers don't lie. As of May 2012, Question.cd boasted
323,969 users - roughly half the number of individuals registered on the English version of Wikipedia. In
the first five years of its existence, Question.cd members uploaded 1,457,817 torrents\(^{144}\) at a rate of over
1,000 torrents per day. This pace exceeds the article creation rate of Wikipedia in 2010, 2011, and 2012
and equals the current text digitization rate of Archive.org. Perhaps even more remarkably, the
community of Question.cd is the archive. While sites of commons based peer production like Wikipedia
and the Internet Archive house their downloadable/accessible material on centrally located dedicated
servers, the contents of the archive of Question.cd are distributed, residing on the personal computers of
its 300,000 plus members. This means that users aren't only users on Question.cd, they're also relied upon
to maintain the stability and accessibility of the archive\(^{145}\). To ease navigation through the nearly 1.5
million digital artifacts accessible through Question.cd's tracker, users have developed sophisticated
systems of folksonomic tagging and associative linking, relying on structured, user-generated metadata to
facilitate content exploration.

While the motives of users on communities like Question.cd may differ from the exigencies that
increase user activity on the Internet Archive or Wikipedia, all three could be considered participatory
archives: communally generated collections whose creation and administration is user controlled and
whose design is user oriented (Huvila 35). As a knowledge object, Question.cd's archive grows and is

\(^{144}\) This number isn't indicative of the total pieces of media included in the Question.cd archive as each individual
torrent often includes multiple individual media files. For example, the .pdf ebook of William Shakespeare's *Hamlet*
contains only one file, the .pdf; however, the torrent for Neutral Milk Hotel's 2012 EP *Ferris Wheel on Fire* contains
eight individual song files.

\(^{145}\) Of the ~1.4 million torrents on Question.cd, 75% are "seeded" or made available by multiple users. This means
that if one user disconnects their computer from the shared network, access to the files will be made available by
another user. The redundant and distributed nature of archives utilizing the bittorrent protocol is the single most
important technological advance in P2P sharing over first generation direct peer-to-peer platforms like KaZaa or
Napster.
managed through processes of decentralized curation. The archive prosumers share responsibility for extending and cleaning the archive, relying on their own subject expertise and experience to make decisions concerning artifact inclusion/exclusion and categorization. Further, because findability of artifacts trumps preservation of materials in collaborative digital archives, usability of the archive is radically user-oriented, ensuring that as the archive grows and transforms over time, its navigability reflects user choices about categorization and metadata structure.

Processes such as radical user orientation and decentralized curation are crucial for the production of participatory distributed knowledge objects like digital piratical archives or collaborative encyclopedias. Yet, these processes of networked collaboration are made possible through human engagement with various mediating technologies such as editing interfaces, folksonomic tagging systems, optimized searching algorithms, and commons-based open software. To understand the role that technological tools play in mediating user activity in collaborative digital archives, let's have a look at a couple of examples from Question.cd.

- Tools that facilitate multiuser editing, maintenance, and flexibility of description: Participatory archives rely on the wisdom of crowds to ensure their structure, format, and navigability reflect the mental geographies of their users. In analog archives like you might find at university libraries, subject experts make curatorial decisions based on what kinds of materials to acquire for particular subjects. In the participatory archive this duty is outsourced to the entire crowd, allowing archive users to become archive builders and curators. In the Question.cd screenshot from the archive record for Brian Eno's 2012 release *Lux* (Fig.16), the "Edit Description" ability (Arrow 1) allows users to edit the extant album description, correcting perceived mistakes and providing links, reviews, or videos related to the album. The "Edit Description" tool functions much like the Wikipedia editing interface in that it is open to all users and directs users to a WYSIWYG editor that allows users to perform maintenance on the archive record description. The "Edit Description" ability is one tool among many that facilitates multiuser archival curation, empowering *all* Question.cd members to become active creators and curators rather than only
consumers; furthermore, it also allows archive records to be described in any manner that users consider applicable.

- Tools that enhance flexibility of data and data structure: To instantiate the wisdom of crowds into navigational structures, participatory archives use folksonomic metadata to structure site navigability and content associationality. In Fig. 16, the "Add tag" functionality (Arrow 2) allows users to add "tags" or small bits of XML metadata to each archive record. As archive records are continuously tagged by users over time, new archival structures arise from the categorical schema of site users. The "Add artist" tool (Arrow 3) functions as a more nuanced version of the "Add tag" tool, allowing users to notate the archive record by drawing connections to other artists whose music is similar in genre or might have collaborated with Eno during the making of this release. The metadata generated from Question.cd archive user tags serves information to other navigational tools such as the "Oink+" plug-in that renders visual representations of associations among different artists. By relying on the shared concepts and categorizations, tools that enhance flexibility of data ensure that participatory archives mediate site user activity each and every time they traverse the Question.cd archive.

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146 This tool will be explored at length in the section "Mesoscopic Tool Use" later in this chapter.
Fig. 16. Examples of mediating tools on Question.cd artist page.

- Tools that utilize standardized inexpensive or free software: While there are a multitude of individual tools that mediate site user activity on Question.cd, the entire participatory archive ecosystem is buoyed up by open-source codebases for both the torrent tracker and the Question.cd content management system. Ocelot, the open source code that locates peers and facilitates file transfers among multiple distributed users was developed specifically for the Question.cd community; however, it has since been GNU public licensed and released to the world for free. The content management system that incorporates user profiles, mediating tools, discussion forums, the site wiki, and everything else the typical user encounters in the Question.cd interface is also open source code that has been distributed to the wider Internet since its development and implementation. Open source code development for participatory archive creation is essential for broader proliferation of community based archives; further, these tools
function at the macro-level, allowing and denying particular kinds of site activity for all Question.cd members.

The tools I've just described aren't the only mediating technologies that encourage the expansion and curation of Question.cd's participatory archive; in fact, they're only representative of the kinds of objects that facilitate user activity, allowing them to expand the archive, updating it at a vastly accelerated pace in comparison to its analog predecessors. Further, these tools encourage rhetorical negotiation among site members, providing textual spaces where archive producers hash out differences concerning artifactual description or appropriate tagging. Taken collectively, mediating tools like these and countless others at Question.cd or Wikipedia.org facilitate the production of massive participatory archives. These simple tools do more than allow humans to carry out instrumentalized activities; they're transformational technologies that reshape the contours of distributed action in online environments. As Johnson-Eilola notes in *Datacloud*, increasingly immersive data environments where human beings are immersed in textual landscapes, these kinds of tools allow users to spend time on the surface, via interfaces, of large corpus texts like archives rather than dwelling deeply within them. This interfacial engagement has profound implications for subjectivity. In the next section I'll explore the ontological status of objects and their relation to subjectivity, highlighting how mediating technologies like those discussed above are fundamental to understanding subject agency and identity in sites of distributed social production.

*Objects, Subjectivity, and Agency in Sites of Distributed Social Production*

The Question.cd ecosystem is characterized by an interesting tension between the individual and the community: the technologies of participation render the archive an object that everyone can access and tinker with on an individual basis; yet, the archive is a universal system for all community members. Further, the archive is always already unfinished, fragmented, partial and in process but manages to do useful work for its users, providing access to a temporarily complete collection of media objects. The archive is product and project, distributed and unified, providing users the opportunity to come together to create a technological object in the wilds of distributed activity outside the bounds of formal work and
capital. Working out of a tradition of Activity Theory research and scholarship, Yrgo Engestrom would characterize the piratical archive as a "runaway object" or an object that has

[T]he potential to escalate and expand up to a global scale of influence. They are objects that are poorly under anybody's control and have far-reaching, unexpected effects. Such objects are often monsters: They seem to have a life of their own that threatens our security and safety in many ways . . . . [but] They can also be powerfully emancipatory objects that open up radically new possibilities of development and well-being. (3)

Like Frankenstein's creation, runaway objects are technology-human hybrids - monstrosities in the words of Actor-Network-Theorists - that scale to dizzying levels of influence, creating crisis for well-established systems of law, economics, and knowledge production. The actors, or actants in ANT terminology, that create and sustain runaway objects are human and non-human alike, their associations often straddle institutionalized and wild scenes of activity, and they almost always produce boundary objects whose existence limns the bounds between work and leisure, legitimate and illegitimate, technology and art (Engestrom 309). While some runaway objects like global warming are almost too massive to say anything meaningful about, other human-technology hybrids like organic farming, the Linux operating system, and piratical archives offer novel sites to study the complex intertwining of human/non-human motives and processes of technological mediation; further, the actants and activities of such sites force us to reconsider agency and subjectivity in ways that draw attention to the iterative constitution of both subject and object in worlds of material and symbolic activity.

As their participatory nature suggests, piratical archives like that of Question.cd are digital spaces that require user agency. Question.cd community members choose what artifacts to make available to

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147 Actor-Network-Theory. Latour uses the term "actants" instead of "actors" to highlight the role of individual entities in the construction of networks. In *The Politics of Nature*, Latour notes that actants are anything that "... modif[ies] other actors through a series of ..." actions (75). Recognition of non-humans as actants doesn't suggest that objects such as rocks or interstellar comets *really* have conscious, sentient desire; rather, this kind of anthropomorphic language merely draws attention to the important role that objects such as rocks or interstellar comets actually have on our lives and the world around us.

148 Kennedy's work on bot-written texts (2010) utilizes a different methodology than the communicational-mediational methodology used here for tracing agency in sites of distributed social production; however, her research into the intersection of human and non-human motives provides an important progenitor to this research.
other archive curators, decide to categorize media objects in particular ways, and coordinate with one another to ensure that the archive remains navigable and readily accessible by other community members. Yet, just because Question.cd community members desire to create, curate, and extend the archive doesn't make that activity so; rather, as Burke highlights in *Grammar of Motives*, Agency or instrumental cause is necessary to carry out an Act (284). Burke argued that Actants rely on instruments or tools to mediate their desire, executing Acts by relying on objects that function as intermediaries between human and lifeworld. Of course, Activity Theorists like Engestrom and Leont'ev as well as Actor-Network-Theorists like Law, Mol, and Latour would agree: material objects mediate human desire and are enabled from outside the subject itself; in fact, tool-use actually transforms Actants all along the way, reshaping desire and the entire system, assemblage, or in Burke's words "Scene," where Acts occur\(^\text{149}\). AT and ANT supplement Burke's notion of agency, drawing explicit attention to agency as distributed across both human and non-human Actants alike. The distribution of Agency blurs Burke's 1:1 Agent-Agency ratio, inviting us to instead see Agent and Agency as a fluid but coupled relation or process. By recognizing the agenic capacity of non-human mediating technologies, or instrumental causes, AT and ANT flatten anthropocentric ontologies whose epistemologies rely on Enlightenment theorizations of the subject\(^\text{150}\), shifting instead to focus on the development of subjectivity in activity systems that produce runaway objects like the piratical archive of Question.cd. These subjectivities are multiple, undergoing what Johnson-Eilola noted are continuous and dynamic processes of construction and reconstruction in distributed environments of symbolic-analytic exchange. The overlapping of human desire and instrumental cause results in the fragmentation and distribution of subjectivity. As Johnson-Eilola notes in *Datacloud*, the Enlightenment subject is challenged because "There is no core, dispassionate self, but only a network of social and technical forces constructing the I as an ongoing, contingent process" (18).

\(^\text{149}\)Early ANT scholarship emphasized the distributed nature of agency by drawing attention to mythic notions of "heroic agency" in the history of science. C.f., Callon 1986, Latour 1987 and Law 1987.

In light of the complex activity that occurs among human and non-human actants in communities like that of Question.cd, researchers hoping to capture writerly subjectivity and distributed agency in digital contexts must make methodological shifts to accommodate ontological perspectives that move beyond the human. Digital writing research of this ilk attempts to produce an object-oriented account of subjectivity and electronic identity, tracing the ways that writing, writers, and tools that mediate writing all function as agenic objects in the broader field of discursive production.\footnote{See c.f., Miller 2007, 2004, Geisler 2004, Kennedy 2009 (diss) and in progress.} The Activity Theoretic methodology employed for the remainder of this chapter will produce an account of distributed agency and writerly subjectivity in the context of runaway objects like the Question.cd archive, asking the following questions:

- How do technologies function as \textit{instrumental causes} or agenic tools that delimit and enhance user agency in systems of distributed social production;
- How might the technologies that mediate activity in systems of distributed social production function as rhetorical genres or stabilized-for-now digital tools that address recurring rhetorical exigencies;
- How is piratical subjectivity or digital pirate identity produced through the iterative relation between writing subjects and agenic objects in systems of distributed social production?

\textit{Methodology: Activity Theory, Rhetorical Genre Studies, and Tool-Use}

Chapter Three produced an account of the varying ideologies toward intellectual property that guide writing-subjects in spaces of distributed social production. In Activity Theory parlance, this section investigated the "Subject" of the piratical activity system by conducting a close analysis of the language pirates used to justify and critique their practice. Chapter Four zooms out from this close account of the Subject, connecting the ideological underpinnings of pirates to the tools, communities, division of labor, and rules that structure the broader activity systems of participatory archives like Question.cd. The challenge of conducting this sort of analysis lies in the iterability of the different components of any activity system. Much akin to Derrida's description of the trace as iterable or Bakhtin's heteroglossic
dialogism, an Activity Theory analysis draws attention to the structural nodes that facilitate systemic activity while at the same time acknowledging that agency is the aggregate output of the system's parts. Paying attention to the singular and the system, an Activity Theory analysis considers all activity as the iterable outcome of webs of cultural-historical action. Agency is distributed across multiple nodes in activity systems, drawing attention to the roles that objects - both human and non-human alike - play in the constitution of common worlds.

Because tool development and use in the Question.cd archive is well documented and mediates all user activity, the focus of Chapter Four will be the mediating technologies that facilitate distributed social production. Though the other elements of the piratical activity system will be referenced and elaborated throughout Chapter Four, a close analysis of community, rules, and division of labor is outside the scope of the present study and will only be discussed as extensions of tool-use in the Question.cd community. Like Bakhtinian utterances, tools function as internalizations of a society's cultural and historical tool use; because of this internalization, a close investigation of the cultural-historical use of tools used for participatory archive creation and curation will reveal the implicit rules that govern site activity, the contours of communal inclusion, and the lateral division of labor instantiated in radically user-centered participatory archives\(^\text{152}\). Further, because multiple researchers in Writing Studies have employed Activity Theory to research texts that function as tools or mediating artifacts, the general contours of a study that takes tools as its central focus are already well established. In the sections that follow, I'll sketch the connections between Activity Theory research on writing technology tool use and Rhetorical Genre Studies before turning to the explicit methods I employ to investigate tool use in the Question.cd community.

*The Roots of Activity Theoretic Analysis in Writing Studies*

\(^{152}\) Terms like "community," "division of labor," and "rules" are Activity Theory parlance; however, Johnson-Eilola's exploration of Stuart Hall's articulation theory in *Datacloud* provide nice analogs to the Activity Theory frame I'm using in this research project. According to articulation theory, people are constructed as subjects in particular ways by particular ideological imperatives such as the norms of a community; however, individuals actively contest that construction by implementing tools to bypass community norms or challenging rules to form new community boundaries. The tensions that arise as a result of the various tensions between humans, other humans, and non-humans results in articulations of multiple subject positions, or multiple subjectivities.
As the name of the discipline suggests, Writing Studies is primarily concerned with the function of written documents and artifacts in organizational development and social action. Drawing on the notion of social typification\textsuperscript{153} found in Schutz and Luckmann's multivolume \textit{Structures of the Life World}, Carolyn Miller's 1984 article "Genre as Social Action" connected the cultural and historical genesis of written documents to their structuring capacities as genres that influence social action and embody social motives. Noting that genres are "typified rhetorical actions based in recurrent situations," Miller's method of rhetorical analysis rejects genre as diachronically static, instead positing that genres mutate and transform as the needs of human users change over time. Schryer's work in the early 1990s echoes Miller, noting that genres are routinized, "stabilized-for-now" responses that prove productive in systems of cultural-historical activity ("Records as Genre" 208-9). As other researchers have shown, the elasticity of rhetorical genres is remarkable, as they provide important methods of mediating human activity that vary a great degree in scale. As Witte demonstrates, textual genres might be as simple as typified responses to the recurring situation of grocery shopping or as Bazerman documents, as complex as the output of an entire constellation of scientific research communities ("Context, Text, Intertext: Toward a Constructivist Semiotic of Writing," \textit{Shaping Written Knowledge}). Other researchers extend genre theory to encompass the constitution of particular experiences, highlighting how generic texts force individuals to experience the world through the lens of generic possibility (Spinuzzi, \textit{Tracing Genres} 42).

What is important to note about all of the aforementioned theorizations of rhetorical genre is the role of texts as mediating tools or alphabetic technologies that internalize social motives and direct future human and non-human activity. As structuring agents, genres enact social intentions by providing the tools necessary to make real the collective ends of collaborative action. As Russell points out, "Genres

\textsuperscript{153} In \textit{A Constructing Experience} Charles Bazerman recognizes the import of Schultz's theory of social typification on the development of rhetorical genre theory. Schutz and Luckmann argue that everyday human experience is an ongoing exercise in habitualization and institutionalization that narrows choice and normalizes small-scale human activity. The role of texts in habitualization and institutionalization is ubiquitous as texts mediate the vast majority of activity in information societies. The stabilization of particular kinds of texts, or genres, respond to the rhetorical demands of institutionalization and function as mediating objects that internalize social motives and make navigation of complex realities more manageable by human actants. C.f., Shultz and Luckmann 1980 (229-33), Bazerman 1994, Russell 2011.
are, in a sense, classifications of artifacts-plus-intentions” and could be investigated to uncover the culturally bound, historically circumscribed motives of the individuals using them to carry out their work ("Activity Theory in Written Communication Research" 45). In addition to the internalization of social motives, rhetorical genres are agenic objects that make possible certain kinds of Acts while making others more difficult. As Bazerman notes, genres function as ways of seeing what acts are available that are appropriate to the moment as you see it - what you can do, what you might want to do. For example, you may perceive a moment in a disagreement as offering possibilities of either rejoinder or an apology. Your motives, goals, plans will take shape within those two constructions of potential action. You would not even consider appropriate filing a legal brief - and if somehow you found a motive and means to pursue that path, that would radically change the nature of the situation and your counterpart's set of genred options. ("The Writing of Social Organization and the Literate Situating of Cognition" 221)

Taken collectively, genres function as mediating objects that are shot through with social motives and agenic capacities. In Burke's words, they're *instrumental causes* that allow individuals to make sense and meaning out of their relations to the world by providing foundations of mutual recognition and possible action among multiple collaborating parties. By concentrating on interlocking systems of written objects that define the bounds of possible activity in fields of science, business, and technology, Writing Studies research accentuates the sociocultural, historical, and mediatory role of texts on human activity; however, because rhetorical genres function in sites of manifold complexity, some rhetorical genre scholarship looks to Activity Theory to provide bounded scenes for investigation.

The first substantive linking of Activity Theory and Rhetorical Genre Studies occurs in David Russell's 1997 *Written Communication* article, "Rethinking Genre in School and Society: An Activity Theory Analysis." In this landmark study, Russell synthesizes Yrjo Engeström's systems version of Vygotskian cultural-historical Activity Theory with Charles Bazerman's work on genre systems. In so doing, he draws special attention to the role of texts as mediating genres in Activity Systems. This is especially important as it is the first time that written objects are not only positioned as mediational means
in Activity Theoretic systems but also function as rhetorical genres that mediate possible action (Fig. 17). Russell posits that many genres exist because they embody social desires that meet recurring situational exigencies of the discourse communities where they circulate; further, he also contends that texts mediate and transform the activity of individual actants in broader systems of culturally embedded, historically inflected human action.

Fig. 17. Simple activity system from David Russell's "Rethinking Genre in School and Society: An Activity Theory Analysis."

Drawing on Bazerman, and Bakhtin before him, Russell's synthesis of Activity Theory and Rhetorical Genre Studies allows him to move beyond the dyadic emphasis of dialogical interaction, widening the scope of study to accommodate the broader discourse communities wherein genres function as mediating tools that assist individuals in carrying out action. Russell's work in "Rethinking Genre" also posits that written genre systems stabilize-for-now the object, motive, and collective identity of activity systems by providing stable structures and protocols that interlock and direct activity. In these systems, each individual that participates in collective action doesn't need to know all of the genres that mediate activity, confer agency, and structure possibility. Because genres embody the expectations of particular discourse communities toward recurrent situations, knowledge of all of the genres that mediate action in particular activity systems isn't necessary; rather, individuals need only know the genres that mediate their own activities. This apparent knowledge gap at the level of the individual isn't a problem for the functioning of an activity system at the level of collective action as the socially-inflected nature of genre ensures that action remains goal-directed toward the needs of the broader discourse community. It is here that Russell
links written genres functioning as mediating tools-in-use to the division of labor that characterizes activity systems, allowing individual actants to carry out manifold actions that appear disparate but are actually corralled under the broader level of collective action.

From Alphabetic to Interfacial: New Media Tools, Activity Theory, and Rhetorical Genre Studies

"Rethinking Genre" and subsequent work by Witte, Haas, and others expanded and elaborated the intersections of Activity Theory and Rhetorical Genre Studies, exploring the agenic capacities of texts as mediating tools to get a peek at the documentary reality where organizations exist. Yet, while the sites of research multiplied, Writing Studies scholars maintained a more-or-less strict attention to alphabetic texts when undertaking activity theoretic-Rhetorical Genre Studies research projects. Spinuzzi's work in Tracing Genres through Organizations, Prior and Shipka's "Chronotopic Lamination," and Geisler's "Textual Objects" all employ methodologies derived from Russell's article and position writing as a mediating technology from which discursive norms, collective motives, and collaborative action can be derived. Relying on Activity Theory to study text as something more than discourse or dialogic dyad, these scholars expanded dialectical theory by locating the heteroglossic interpenetration of social languages first theorized by Bakhtin in wider scenes of human activity. Yet, despite the progression of writing technologies into various forms of new media, Writing Studies uptake of generic analysis circumscribed by an activity theoretic orientation have remained focused on the alphabetic.

The methodology employed in Chapter Four departs from this trend by investigating new media objects - especially interfacial objects and server-side objects - as rhetorical genres that mediate activity in activity systems. This shift is in accord with studies on mediating tools in Activity Theory scholarship. In fact, the International Society for Cultural and Activity Research, a Ph.D. granting association dedicated to research and publication in multidisciplinary theoretical and empirical studies utilizing an activity theoretic orientation, maintains an impressive catalogue of scholarship related to material technologies such as medical records, midwifery instruments, and agricultural implements that function as mediating tools-in-use. Yet, these studies from the fields of psychology, education, and anthropology neglect an attention to non alphabetic tools operating as rhetorical genres. In order to bring Activity Theory and
Rhetorical Genre Studies together to study non-alphabetic new media tools, the methodology employed in this chapter relies on a rearticulation of the notion of genre, expanding its bounds to accommodate the non-alphabetic while also recognizing the important role of these tools in mediating human action.

In "Genres of Organizational Communication: A Structurational Approach to Studying Communication and Media," Yates and Orlikowski note that genres are composed of both substance and form. Substance refers to the "social motives" or "frames for social action" that are expressed in moments of generic use whereas form refers to the "observable physical and linguistic features of the communication" (301). For example, the familiar genre of the recommendation letter contains both substance and form. In terms of substance, the genre of the recommendation letter provides positive or negative recommendations of an individual's candidacy while also relaying details in support of the recommendation. The form of the recommendation letter includes such elements as the address, salutation, body, and closing. Taken independently of one another, neither a document's substance or form dictates a particular genre. To wit: a document that includes an address, salutation, body, and closing might be an epistolary screed; further, a document that speaks highly of an individual's qualifications and effectiveness might be an epideictic funeral oration. Only when we consider substance and form together do we get an accurate picture of the recommendation letter as rhetorical genre.

Yates and Orlikowski's work in "Genres of Organizational Communication" provides an easily understood explanation of genre from the Rhetorical Genre Studies perspective; however, as alluded to before, this notion of genre is almost exclusively alphabetic. To get at new media objects functioning as rhetorical genres/mediating tools in activity systems, a slight modification of the definition of genre is required. The modification proposed in this chapter relies on new media scholar Andreas Gregersen's uptake of rhetorical genre theory. In "Genre, Technology, and Embodied Interaction: The Evolution of Digital Game Genres and Motion Gaming," Gregersen explains that while Yates and Orlikowski's exploration of genre works well for alphabetic texts, it doesn't necessarily hold for gaming genres, specifically motion games like those offered on the Nintendo Wii. Expanding the notion of rhetorical
genre, Gregersen's offers *medium* as a dimension of *form* and a supplement to *substance*. Generic mediums are one aspect of form but are at the same time a thing apart from it. In Gregersen's words,

> On the one hand, genres are defined partly by similarities of form, one subdimension of which is medium -- the medium is thus understood as *part of* the genre. On the other hand, media are to be *distinguished from* genres, the latter of which are understood as typified communicative actions. A reasonable reconstruction of the argument is that genre, once defined as typified actions, does not belong to specific media, but rather can move between media. Yates and Orlikowski themselves offer the following observation:
> 'Though a genre's form may at one point include the medium, that genre may also expand into other media' (1992, p. 319). This quote hints at the kind of situation I want to substantiate here with regards to digital games. Some genres seem constituted by specific technologies, others less so. Such relations will change over time - and, importantly, technologies may also expand into other existing genres as part of such processes." (96)

The addition of *medium* to the definition of genre moves Yates and Orlikowski's articulation beyond the alphabetic by paying special attention to the *(im)materiality* of generic form. Gregersen includes this addition because his work draws attention to interactive technologies such as video game controllers and their role in new media game genres. I rely on Gregersen's inclusion of medium because it moves genres beyond structural and social components that characterize alphabetic text and into the reconfigurable space of piratical user activity, allowing my study of genre to take into account the role of interface in new media generic tool use.

As Brooke notes in *Lingua Fracta*, interfaces are the "ever-elastic middle" that "incorporates, and indeed constitutes" the outside of things (25). In this way, the interface functions as a space of elasticity and reconfiguration, shaping dynamic objects while also providing them stabilized-for-now spaces to dwell. Brooke says as much, noting that, "[The] interface [is] itself a momentarily situated encounter among users, machines, programmers, cultures, and institutions" (42). Johnson-Eilola traces the genesis of computer interfaces in *Datacloud*, conveying the transformation of interface from the static medium of
hardwired connection to the distributed nature of dynamic interfaces in contemporary networked information economies. While Brooke's notion of interface remains mostly theoretical and Johnson-Eilola's historical account hews close to specific examples, both explorations of interface highlight its role as technological medium that mediates individual action, is responsive to change, and renders static specific iterations for particular uses. In this way, interfaces - especially the interfaces that include new media objects and mediate our experiences in digital spaces - function much the same as rhetorical genres. Using the articulation of rhetorical genre as form + substance + medium, this chapter proceeds to analyze new media objects as rhetorical genres functioning as mediating tools within the interfacial spaces of piratical activity systems (Fig. 18). This work provides important explorations of interfaces; however, it cannot account for the sociocultural ecologies where interfaces circulate in material mediums like personal computing stations in home or university dorm rooms - such focus is beyond the capacity of this study. Yet, by paying close attention to reconfigurable digital interfaces that define the bounds of activity in piratical systems, I hope to demonstrate how agency and subjectivity is distributed in participatory archives\textsuperscript{154} while at the same time highlighting how attitudes toward intellectual property that shape subject identity in the previous chapter also inform new media tool development and use.

\textsuperscript{154} My exploration of agency and subjectivity in Chapter Four considers complex digital media ecologies of participatory archives as sites of what Bateson calls an ecology of mind. According to Bateson, the mind isn't something that's restricted to the corporeal body but is distributed across mental, social, and environmental ecologies. The "immanent mind" or concatenation of the social, environmental, and cognitive aspects of human action diffuse autonomous agency across the complex networks and spheres imbricated in and around human experience. As such, this chapter explores the mediational role of tools as what one important technology involved in the process of what Giddens calls "structuration" or the complex iterative co-constitution of structure and agent or what we conveniently refer to as subjectivity.
The Problem of Scope: Levels of Activity

The methodology employed in Chapter Four pushes Rhetorical Genre Studies beyond the alphabetic, allowing for novel considerations of new media objects as mediating technologies that transform human action, confer agenic capacity, and enact social intentions. Yet, there's one more component of this analysis that must be explored to effectively bring Rhetorical Genre Studies and Activity Theory together toward analyzing how new media objects shape writerly subjectivity. In Activity Theory parlance this component is referred to as "scope" and delineates the contexts of activity that are always already operant in activity systems. In Tracing Genres through Organizations, Spinuzzi notes that sociocultural theories such as Activity Theory draw on an integrated-scope approach that tries to account for the iterative constitution of the entire activity system by exploring the role of habitual operationalized actions, goal-directed individual actions, and systemic collective actions.

Operationalized activity answers the question of "How?" in activity systems and is typically characterized by unconscious, routinized human or machine actions. Goal-directed actions answers the question of "What?" in activity systems and it typically characterized by the conscious, directed action of
individual participants. Systemic activity answers the question of "Why?" is comprised of the collective actions of all members participating in the activity system.

Working from Sven's example in Chapter Two, the creation of pegs is his conscious, goal-directed action and answers the question of "What?". In this sense, peg production operates at what Spinuzzi calls the "mesoscopic" level of activity, or the "tasks in which people are consciously engaged" (Tracing Genres 33). Mesoscopic activity is the easiest to observe as the active manipulation of technologies to facilitate action are consciously put to use by members of any given activity system. Moving to a more fine-grained analysis of activity, the microscopic level of Sven's activity answers the question "How?" and tends toward unconscious, routinized activity. Since Sven has been working at the factory for a number of years, he has internalized some of the tasks or operations that he needs to complete the action; namely, he no longer must measure if he has placed a stick of lumber on the machine because he can unconsciously tell if it is correct. This is an example of a one-time action that has been internalized and turned into an operation. At what Spinuzzi calls the "macroscopic" level of activity, or the "ways workers, work communities, cultures, and societies understand, structure, collaborate on, and execute their evolving cooperative enterprises," Sven's collective actions and the actions of all of his comrades at the Ikea factory constitute the collective activity of object creation (the end table) and the generation of capital (motive). Finally, the levels of activity are fluid and contain in their constitution the capacity for transference. A mesoscopic activity can degrade into unconscious microscopic operation; further, what one actant considers a routinized operation another might not be internalized by another actant and hence functions as an action at the mesoscopic.

Table 5. Levels of Activity.

<table>
<thead>
<tr>
<th>Level</th>
<th>Activity Theory Term</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroscopic</td>
<td>Activity (cultural-historical, unconscious)</td>
<td>Collective action of the Hemnes end table assembly line</td>
</tr>
<tr>
<td>Mesoscopic</td>
<td>Action (goal-directed, conscious)</td>
<td>Sven's individual action of wooden peg production</td>
</tr>
<tr>
<td>Microscopic</td>
<td>Operation</td>
<td>Sven's unconscious manipulation of the saw and drill press</td>
</tr>
</tbody>
</table>
Summing Up: A Methodology for Integrating Rhetorical Genre Studies and Activity Theory for New Media Object Analysis

To recap, the methodology employed in Chapter Four attempts to circumscribe the work of Rhetorical Genre Studies by locating new media objects as tools or mediating technologies in broader systems of activity. The analysis that follows sketches activity at the mesoscopic and macroscopic levels, placing an emphasis on new media objects as rhetorical genres constituted by form, substance, and medium. Ultimately, the goal of this methodological synthesis is to highlight the role of mediating technologies on the constitution of writerly subjectivity in systems of distributed social production like that of the participatory archive. For both mesoscopic and macroscopic analyses:\(^{155}\), I make the following moves:

- **Identification**: Identify new media objects that function as rhetorical genres and structure mesoscopic or macroscopic activity in piratical activity systems
- **Cultural-Historical Account**: Locate the new media objects diachronically by considering the *substance* or social frames of action each object fulfills
- **Structural Account**: Consider the *form* of each new media object to discover it's structural features
- **Interfacial Account**: Consider the *medium* of each new media object to discover how it functions in broader interfaces and ecologies of digital activity. Because tools function together in genre ecologies at mesoscopic and macroscopic levels of scope, interfacial exploration of medium will occur after analysis of all tools of a particular scope are complete.

After exploring multiple examples of new media objects functioning as rhetorical genres that mediate and transform human intentions, this chapter will close by highlighting the agenic capacities of new media

\(^{155}\) Unfortunately, this analysis cannot give special attention to human actions that occur at the microscopic level of activity. This omission is mainly an observational issue as I am unable to actively record the kinds of actions that have been rendered operations by piratical site users in distributed locations. What I can conclude given my own experience in these activity systems is that actions such as typing, web browsing, and mouse-use are operations that facilitate actions at the mesoscopic level but remain unconscious to community members.
rhetorical genres, revealing how the tools that mediate human action in sites of distributed social production often embody the perspectives toward intellectual property produced in Chapter Three.

*Mesoscopic Investigations: Three New Media Rhetorical Genres that Facilitate Goal-Directed Action*

Navigation is perhaps the most important action used to make sense of archives. Archives are spaces of fascinating cultural-historical significance as they embody communal meaning and history, carry forth unique cultural significance, provide systematic tools for interpretation, and are malleable to changing needs and desires of the communities that use them. Archives of records are so important, in fact, that Schmandt-Besserat argues in *How Writing Came About*, that they may have actually enabled the future development of writing by providing cultures with standardized symbolic methods to record economic data. In the broader activity systems that constitute bittorrent communities there is an overwhelming need for navigational structures that facilitate archival exploration and discovery. Luckily, unlike at the Ancient Library of Alexandria or The National Archives in London or Washington, D.C., specialists aren't required to facilitate this process. Because bittorrent archives are participatory, tools that draw on user knowledge and expertise override any top-down, systematic categorization schema. The new media objects that facilitate goal-directed, individual action in this study are digital tools like tagging systems, collages, and requests that facilitate digital archive navigation and promote digital media discovery. In the sections that follow, I'll explore how these artifacts function as rhetorical genres, emerging from cultural-historical activity, bearing traces of ongoing activity, stabilizing the activity in which they are used, and solving particular problems of the individuals who use them (Spinuzzi, *Tracing Genres* 39). As mediating tools, the new media navigational objects in this section are consciously selected, interpreted, and produced to mediate the goal-directed actions of actants in participatory archives.

*Folksonomic Tagging*

Vast digital archives and small, personalized collections utilize metadata to provide structure and relationality among media. Metadata, or data about data, takes a myriad of forms and certainly existed
before the advent of digital media; however, the widespread integration of .xml\textsuperscript{156}, a markup language that is designed to carry data but not display data about data, allows users to easily append "tags" or small bits of classificatory information to media on a broad scale. While traditional systems of archival media organization include hierarchical file structures, the ease of incorporating user-generated .xml metadata to provide rhizomatic or associational links among media transformed archival categorization, opening up navigation to the domain of users, not just specialists. The bottom-up, non-hierarchical structure of tag-based "personomies" enables users to create individualized classification schemes for information retrieval. When aggregated and networked, these personomies form folksonomies - collaboratively created, frequency-based categorization networks that harness the wisdom of crowds. As searchable, navigable entities, folksonomies provide social methods of navigating content, allowing users to explore the web using the folksonomic categorizations other users also find useful. Providing new methods of information management and information architecture, the proliferation of social tagging systems like delicious and 43things opened up archival interface design in fascinating ways.

First launched by Joshua Schachter in 2003, Delicious is the first widely adopted social tagging service. Organized around the ability of individuals to contextualize and archive links from around the web with tags and annotations, Delicious not only provided users with individually-generated tagging systems for categorizing web content, it also allowed users to share those classifications. Built around the notion that all tags are theoretically "equal" to one another, Delicious allowed folks on their service to taxonomize their web habits and then share those folksonomies. In other words, Delicious allowed users to develop individual categorization schema for navigating the archive of the world wide web while at the same time sharing those schema with other Delicious members. The development of shared categorization - not classification - created a media ecology unto itself, prompting Delicious users to explore the web through the Delicious folksonomy rather than organic search engine navigation or direct URL visitation. Other services such as 43Things and 2dolebeforeidie adopted folksonomies into their design, allowing

\textsuperscript{156} EXtensible Markup Language.
users to connect not only around shared categorization of content but also around a variety of shared goals.

Delicious, 43Things, and myriad other social networks organized around the concept of folksonomic tagging provide means for meeting the demands of recurrent problems with stabilized-for-now, tool-mediated responses. In the case of Delicious, Schachter hoped to bring order to the chaos to his link-hosting website Memepool. In its infancy, Memepool was a small collection of web links that Schachter found of particular interest. Over time, other web users found their way to Schachter's site, enjoying his content but also sending him additional links to supplement his own. The categorization and inclusion of these reader-generated links resulted in more than 20,000 entries or "far more than any folder system [of the time] could handle" (Surowiecki). Schachter soon realized that tens of thousands of web users were looking around for good links or links that would help them more easily conquer the signal to noise ratio of Internet content. As a result, he developed Muxway and then Delicious, inviting users to collate their favorite links and then share them using social tagging tools. In Rhetorical Genre Studies terms, the substance of Delicious as genre is its ability to meet the recurrent problem of successful web navigation with the stabilized tool of user-generated tags for web content.

The cultural-historical genesis of folksonomic tagging systems like Delicious continued far after its own relevance and utility faded. Numerous other companies, including the wildly popular Pinterest, exploited the same recurrent social need and devised a host of interfaces to assist individuals in categorizing and sharing their web content. In the educational sector, libraries have found multiple methods of integrating social tagging to enhance their content and facilitate user navigation of holdings. The University of Pennsylvania's PennTags157 is the first to do just that; however, libraries at hundreds of other institutions are also making use of user-generated metadata to facilitate exploration and discovery in their archives.

The folksonomic tagging system at Question.cd bears substantive similarity to the rhetorical-generic tools used on Delicious, 43Things, and other social bookmarking sites. Relying on user-generated

157 http://tags.library.upenn.edu/
metadata, two different tagging inputs allow users to draw associations between the specific media being investigated and other media that is in some way connected. In Fig. 19 we see two user generated tagging systems. The first (Input 1) is a familiar social tagging tool that allows users to input other genres that bear some similarity with the music being considered. In this example, the piece of media is a collaborative album by DJ Danger Mouse and Sparklehorse entitled *Dark Night of the Soul*.

Users have tagged the album as a variety of different genres, including "experimental," "indie," "hip.hop," and "collaboration" (Output 1).

When a user clicks on any of these tags they are redirected to a results page that includes all of the torrents that share the same tag.

The other tagging system included on Question.cd is unique to this particular community. The "add artist" tool (Input 2) allows users to include artists that also participated in the production of this album-length release. Because *Dark Night of the Soul* includes performances by a host of performers besides either Danger Mouse or Sparklehorse, these artists are tagged by users and linked by the tool itself (Output 2). By clicking on any of these artists, users are redirected to a results page that includes any media included in the archive released by that artist and available for download. The "add artist" tool functions as a specialized tagging system that allows users to draw connections between artists that may not be apparent when viewing an album's release information.

Substantively, the tagging tools on Question.cd meet a recurrent need for users: navigation of a vast archive of user-generated content. These tools mediate user activity and facilitate particular kinds of action, notably: exploration, association, and formalization of preexisting, though often invisible, relationships among media.
Formally, the structural features of the Question.cd tagging system bear striking resemblance to other folksonomic tagging tools. Like the Delicious interface (Fig. 20), Question.cd's tagging system requires single word tags separated by commas. Two or more words tags are welcome; however, the words must be separated by periods. The outputs of both systems are in list form and provide links for users to click through and visit or acquire new content.

Folksonomic tools like the Delicious and those on Question.cd are substantively and formally similar: they, and many other folksonomic tagging tools like them, meet user needs and facilitate user action by providing stabilized tools for navigating vast digital archives. In this sense, they are rhetorical genres or social frames of action that allow individuals to complete conscious, goal-oriented tasks in technologically mediated environments. As tagging continues to permeate social media and personal collections, it is plausible that the process might move away from conscious, goal-directed action and toward unconscious operation. In other words, tagging may not remain a mesoscopic action forever.

Collages

In *Lingua Fracta*, Collin Brooke discusses the ways that new media tagging tools like Delicious allow users to establish *collections*, or "the individual assembly of a large group of whatever items we might choose to collect" (109). For Brooke, tagging collections and other forms of user-generated metadata function as tools that trace emergence and provide methods for distant reading of large-corpus data. Taken as a social aggregate, tagged links to web content in Brooke's work create coherent narratives from the Babel of digitized information that exists on the web. I turn to *collections* here because tools that create individualized assemblages are important mediational technologies that operate at the mesoscopic
level of user action. Collages have cultural-historical roots that extend deeper than folksonomic systems and mediate goal-directed user activity in novel ways. On Question.cd, the collage functions as a navigational discovery tool that directs user action by providing means of personalization while also filtering the archive to meet the needs of various niche audiences in the broader community.

Historically speaking, the process of collage was likely in use as far back as the invention of paper in China before the Common Era; however, the rise of Modernist art in the early 20th century is the era that most historians associate with the formalization of collage-as-method. Pablo Picasso and Georges Braque first used collage in their work to deconstruct the binary between painting and sculpture. By layering the surface of canvas with glued-on patches of paper, fabric, and found objects, future artists pushed collage in multiple directions, creating multimedia work like wood collage, decoupage, photomontage, and even digital collage. Of course, collage has also been put to use by musicians and filmmakers; however, their creations are often the focus of intense legal battles concerning copyright infringement, transformational use, and status as derivative work.

Artistic collage bears marked resemblance to Brooke's "collection" in that they are both assemblages of partial forms united under an organizing principle or concept. Collage is ubiquitous on the web and, like tagging, its creation has moved beyond the individual to the social. Interestingly, there's little difference between the rhetorical nature of analog and digital collage. An analog collage such as Hannah Hoch's *Cut with the Dada Kitchen Knife through the Las Weimar Beer-Belly Cultural Epoch in Germany* (1919) excises printed photographs of industry, leaders, and the Dada movement to create a critique of Weimar Germany. As collage, *Cut with the Dada Kitchen Knife* functions synecdochally, using parts of specific things (e.g., the head of General Hindenberg on the top of the dancer Sent M'ahesa) to refer to wholes (e.g., the failure of the Weimar republic under the leadership of Hindenberg in the post-WWI reconstruction period). A digital collage such as those found on Pinterest are also synecdochal, providing excerpted images from links that are organized under user-generated tags or more formalized site-wide categories. The difference between analog and digital collage lies in their relation to time. The *duration* of Hoch's piece is frozen in time and speaks, importantly, to a particular historical moment.
Because of their social and aggregative nature, the pinboards of Pinterest are rooted in *deixis*, or what Brooke calls the "timeless present tense," constantly updating and expanding through contributions from site users.

The collage tool on Question.cd is another tool individuals consciously manipulate, creating collections of media that deepens their media profile, facilitating new pathways of archival navigation, and expanding methods of media discovery. User created collages are searchable and organized around a variety of site-sponsored categories such as "Genre Introduction," "Discography," and "Label" as well as around individual interests such as the expansive "Personal" as well as "Theme" and "Staff Picks" (Fig. 21). The uptake of collage tools in piratical participatory archives is a rather recent development, mirroring the playlist creation tools of social music sites like Last.fm and Bandcamp.

![Collage browsing interface.](http://weheartit.com/)

The collage interface is visually rich and bears structural resemblance to other digital collage interfaces such as Pinterest and the teen-centric weheartit\(^\text{158}\). In the "Girls Who Tilt Their Head" collage (Fig. 22),

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\(^{158}\) [http://weheartit.com/](http://weheartit.com/)
users are presented with album covers related to a unifying theme, namely, "A collage for releases with

Figure 22. Girls who tilt their head collage.

Cover Art consisting of girls who are tilting their head." While the theme seems rather esoteric, the creator of the collage explained that the purpose of the collection was to help users discover new music in "a visual way, outside the usual genres of rock, pop, rap, etc." In exactly the same way that Pinterest functions, Question.cd community members can click on any of the album cover images to read more on that artist and the specific release while also being given the opportunity to download the album in question. With the exception of the "Personal" and "Staff Picks" collage categories, users are invited to contribute to the collage, expanding its contents by drawing new connections inside and across music, software, and ebooks. To add to the collage, users are presented with a small box in which they enter the URL of the torrent to be
included. In essence, this small interface performs the same work as the "Pin It!" button or the Pin It! interface used by the collage platform Pinterest (Fig. 23).

In generic terms, substantive qualities of the Question.cd collage tool are complex and arise from multiple social needs that exist in participatory archival spaces. While many users still rely heavily on the search function to sift the archive and find the media they're looking for, some users use the site as a discovery mechanism. The collage tool meets that social need, allowing users site-wide to explore the archive through folksonomic exploration outside of tag lists or clouds. Instead of being bound to search algorithms that return a set of collocated terms, the collage tool lets users play in the archive, expanding their knowledge of the relational ecologies that unite media at varying levels of scale, niche, and esoteric desire. The result is a utility that provides a stabilized, tool-mediated response to the social need to filter, discover, and explore. Beyond community desire to explore the archive in novel ways, the collage tool fulfills a communal-individual function: the development of deeper digital identity centered around personalized media collections. Because Question.cd is a community, individual users often direct their actions toward communal inclusion. In much the same way as expanding a Facebook profile builds digital identity, the production of collages by Question.cd members creates new modes of expression and deeper, multidimensional digital personas while also drawing affinities among site users, creating niche subgroups focused around particular interests.

Substantively, digital collage affords users innovative tools to meet the demands of information glut. On Question.cd, these tools facilitate particular kinds of goal-directed action, notably archival navigation, curation, and exploration. They also help fulfill the social demands of creating community in digital spaces. Formally, the digital collage user interface is much akin to the tagging tools discussed above, providing users a simple input mechanism for drawing associations among media. As stabilized,
tool-mediated responses to recurrent rhetorical situations, collection utilities like the collage tool on Question.cd are remarkably simple yet sophisticated new media rhetorical genres that facilitate user action, enhance navigation of archives developed outside formal classification schema, and expand digital identity in purposeful ways.

Requests

The spread of modems, connectivity software, and networked infrastructure in the late 1970s allowed individuals to connect to one another "online" and facilitated an explosion of information sharing. The world's first operational Internet, ARPANet (the Advanced Research Projects Agency Network), was created in 1969 by the US Department of Defense to share sensitive information at universities, research laboratories, and military installations across the United States. In 1971 Ray Tomlinson, a programmer at Bolt, Beranek and Newman, developed a communication system that functioned inside ARPAnet and facilitated one-to-one communication exchange in the form of email. Around the same time in 1971, the File Transfer Protocol (FTP) was developed by MIT engineer Abhay Bhushan, allowing the transfer of computer files from two hosts in geographically distant locations. In the years that followed, multiple different educational, governmental, and personal exigencies begat technological advancements and serendipitous discoveries, transforming electronic communication and information exchange in the process. The expansion of home computer sales in the late 1970s provided greater access to these peer to peer communication and file sharing technologies, allowing far flung individuals to trade and share in myriad ways.

The Bulletin Board System, or BBS, was the first widespread communication technology that allowed private distribution of content over digital networks. In contrast to the World Wide Web, BBSes were small communities typically organized around niche interests like text-based shareware games, ASCII art, hacking information, and pornographic images. Early on, BBSers utilized .NFO files and threaded, text-based discussion forums to make requests of other users for content. textfiles.com, a remarkable catalogue of BBS data primarily gathered from the 1980s, chronicles some of these early requests and shows how BBSers made requests, "filled" requests, and evaluated fills with commentary.
related to the quality of a shared file. The key to BBS request success rested with the communal aspects of the site, requiring users to maintain a dedicated presence and participation in bulletin board activity.

Adoption of web browsers during the mid to late 1990s resulted in widespread decline of BBS user participation. Graphical interfaces, improved user navigation, and integration of multimedia enticed users and opened up the ability to "surf" to wider, non-technical audiences. While communities did continue to exist in web-based interfaces such as AOL and Yahoo!, requesting, filling, and evaluating shared, and often pirated, information wasn't an integral part of most web users experience. Usenet did fill some of this void; however, the capacity for Usenet to facilitate affinity-based niche communities like those in the BBS era was limited. Peer-to-peer filesharing networks like Napster, KaZaa, and Gnutella in the late 1990s and early 2000s also lacked interfaces that encouraged community development, instead focusing on the rapid expansion of the archive at the expense of digital relationship building among network users159.

After the release of the bittorrent protocol in 2001, smaller niche-oriented file trading groups integrated social web tools like forums and user profiles to build community in digital file-sharing spaces. At first, requests for music files, applications, and ebooks centered around "Offers" forums wherein users would make post text files of their digital media collections, inviting other users to request uploads. "Offers" forums were so popular that bittorrent community site designers recognized the social desire for a requests function and tools were developed to that end. The "Requests" tool on Question.cd fills that social need and illustrates how new media objects not only fit into the cultural-historical models of genre development but also integrate new functionalities to accommodate shifts in digital media distribution. In other words, the requests tool is flexible, adaptive to the interplay of social forces and emergent technologies that circulate in media ecologies of participatory archives by transforming to provide new stabilized-for-now responses to recurring social desires. Let me explain.

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159 Interestingly, the lack of community on the first generation peer-to-peer applications created large participatory archives that lacked user engagement through curation. As a result, the archives of Napster and KaZaa became riddled with false positives created by anti-piracy groups, phishers, and disgruntled users.
After Question.cd users have used search functions, collages, tags, and other navigational tools to sift the archive and fail to find the media artifact they're after, they often turn to the "Requests" tool (Fig. 24). Users are invited to input a variety of different information that corresponds to both the formal classificatory structures that parse the archive as well as folksonomic tagging data and open-field content. These inputs are sometimes automated and sometimes manual; for example, if a user happens to know the Worldcat identification data (Input 1) for the media they're searching for, they can input that information and the requests tool will autopopulate release information, including artist title, album title and release year. The "Tags" box (Input 2) allows users to provide tags in the same manner as the aforementioned tagging tool; however, generic designations such as "funk," "hip.hop," "progressive.rock," and "world.music" allow users to classify the request in the formalized nomenclature of site content. The "Formats," "Bitrate," and "Media" tick boxes (Input 3) provide users the ability to choose between a variation of encoding codecs (e.g., .mp3, .FLAC), data quality (e.g., 192 kb/s, 24bit Lossless), and release formats (e.g., CD, Soundboard, Cassette). These three media characteristics are important to site users, especially the audiophilic, as it allows them to request and acquire media that fits within their own personal collections. The open-field "Description" box (Input 4) provides a space for users to add any commentary they wish to include regarding the release and often serves as a space to include track lists, critical reviews, or other information. Finally, the "Bounty" boxes (Input 5) allow users to acknowledge prospective uploaders with a upload bonus that enhances their sharing ratio, rewarding them for extending the archive beyond the goodwill garnered from participating in archival expansion.
It's important to note here that the substantive features of the "Requests" tool aren't relegated to individual artifact acquisition and the expansion of the archive; rather, "Requests" also fulfills another social motive of site members: community citizenship. Private bittorrent communities requires users to maintain a healthy "ratio" of sharing; in other words, for every megabyte of content downloaded, the site
requires a certain percentage of that megabyte to be reuploaded to other users. On Question.cd, users are required to share their content on a graduated scale up to 60% of the total data they've downloaded. For example, if user X downloads 20 gigabytes of data, they're required to share at least 20%, or 4 gigabytes, of that data back to other community members. After users have downloaded 60 gigabytes of data they're required to share 60% back for any further data they acquire. The ratio system is designed to maintain the stability of the archive over time, ensuring that as older media artifacts are buried deeper in the archive they don't become inaccessible because of a lack of sharing by site members. The "Bounty" function of the "Requests" tool allows requesters to transfer a bounty or defined amount of their own upload credit to another site member for filling their request. In this way, the "Requests" tool not only facilitates participatory archival expansion but also signifies site member participation and investment, rewarding those that upload with additional citizenship credit.

Users hoping to increase their active participation in Question.cd community regularly visit the "Requests" tool to find new material to upload to the site. The "Requests" tool provides additional means of achieving that end. After a user fills out the requisite information and creates a request, a page displaying the desired media is created to guide other user actions (Fig. 25).

![Requests tool output](image)

In this example, a user requested the ebook *Defense against the Black Arts: How Hackers Do What They Do and How to Protect against It*. The requested item page contains identifying characteristics such as the
Worldcat identification number, a short description of the book and a picture of the cover; however, the page also contains two powerful links that connect potential request fillers with the media itself. The "Find in Library" link (Link 1) sends users to the WorldCat database, allowing users to find what libraries in their local area might have the book for checkout in print or electronic versions. The "Find in Stores" link (Link 2) redirects users to a Google Products search that is autopopulated with the book title. The "Find in Stores" link encourages site users to purchase the requested media before sharing with the wider community.

The "Find in Library" and "Find in Stores" functionalities were only recently added to the "Requests" tool and provide a good example of how new media rhetorical genres transform to meet the changing dynamics of technology and social desire in participatory archives. Recall for a moment that the tools in this section are mediating instruments that direct user action and transform user intention. When considered in Activity Theoretic terms, tagging systems, collages, and the requests tool assist in archival navigation and expansion as well as media discovery. They mediate these desired outcomes - or "objects" - and circumscribe the possible methods of achieving those ends (Fig.26).

But ends sometimes change, and even when they remain stable, the means of achieving ends transform, subject to mutations in technology and society at varying levels of scale. The changes in both
means and ends create what Activity Theorist Yrgo Engestrom calls "contradictions" or ruptures that occur when nodes of an activity system transform, creating "dynamic tensions" within the system that must be resolved through destruction of constraints and construction of new systems\textsuperscript{160}. In the case of the "Requests" tool, Question.cd members recognized that the number of media being requested far exceeded the rate at which requests were filled. In fact, the archive of requested materials grew so large so quickly that users began to question the utility of cataloging such information at all, instead opting to return to the forum-based, threaded request systems typical of early bittorrent communities and BBS networks. The Question.cd development team floated numerous different proposals in site forums, proposing numerous alternative tools to the ineffective "Requests" function. Eventually, after extended deliberation with the broader community and with smaller code and development teams, the updated "Requests" tool was released with WorldCat and GoogleProducts integration. The new media rhetorical genre of the "Requests" tool mutated, transforming to meet the needs of the broader community. In the process, it restabilized the activity system of archival expansion and facilitated a dramatic uptick in "Requests" fulfillments. The inner contradiction in this case was a mediating tool that failed to successfully assist individual users in achieving goal-directed action. As a result, the contradiction was resolved through new forms of tool mediation, or, to put it in Rhetorical Genre Studies terms, the "Requests" tool was developed as an "improvisational strategy triggered by the interaction between socialization . . . and an organization" resulting in a restabilization of genre as a "flexible set of recurring practices (textual and nontextual)" (Schryer, "Walking a Fine Line" 450).

\textit{OiNKPlus : A Genre Ecology at the Interstice between Mesoscopic and Macroscopic Activity}

In her \textit{College English} article "Integrating Rhetorical and Literary Theories of Genre," Amy Devitt argues that while singular textual genres are important to consider in response to particular contexts, a richer way to conduct genre analysis might be to consider how genres call other genres,

\textsuperscript{160} The cycle of contradiction and resolution intrinsic to any activity system bears striking similarities to what Johnson-Eilola describes as processes of fragmentation and destabilization vis-a-vis articulation theory. According to Johnson-Eilola in Chapter Two of \textit{Datacloud}, contradictions lead to fragmentation and destabilization of a dominant subjectivity. Afterward, rearticulation allows for the inclusion of new ways of ways of being that often incorporate new technologies and ideologies into an emergent subjectivity more suited to new contexts.
creating complex interaction among multiple genres in response to equally complex rhetorical situations. In another *College English* article the same year, Bawarshi echoes Devitt, noting that while rhetorical situations call forth socialized activity in the form of generic use, usually more than one genre is operating in any social situation (351). In his 2003 monograph *Tracing Genres through Organizations*, Clay Spinuzzi also explores the ability of any given genre to mediate the activity of more than one activity system; likewise, he also explores the opposite arrangement: the ability of any activity system to be mediated and transformed by multiple interlocking genres. Spinuzzi refers to the complex coordination of multiple genres to mediate activity a *genre ecology*. He notes:

> [W]hen we focus on a single genre (say, a computer interface) to the exclusion of the other genres that workers coordinate with it, we may come to believe that the genre is the linchpin of the system: if only we [information designers] could redesign that one genre properly, it seems, the entire system would function more smoothly at all levels of scope. But we never really deal with linchpins. No genre can function as a linchpin because genres are densely coordinated in what I have metaphorically called an *ecology*. In genre ecology, intercoordinated genres intermediate each other and any change in the ecology (such as altering, introducing, or removing a genre) can change the entire dynamic.  

*Tracing Genres* 119-120

While the section on "Mesoscopic Investigations" has hitherto explored singular genres extracted from their imbrications in genre ecologies, this last analysis of generic tool mediation at the mesoscopic level of activity will briefly explore an interlocking set of new media objects that direct user action and assist in the same systemic activity: navigation of the archive and discovery of media artifacts. In this section we'll also return to *medium*, in addition to *substance* and *form*, to describe how new media objects function as rhetorical genres *interfacially*. It is the contention of this study that interlocking new media rhetorical genres can best be observed, described, and analyzed when the interface is emphasized as this is the immaterial space that interweaves genres, allowing users to utilize a host of new media tools to direct
their activity and assist them in achieving their goals. The section will close with a brief consideration of scale, emphasizing how mesoscopic new media genre ecologies are often coordinated by singular macroscopic new media rhetorical genres.

Greasemonkey & OiNKPlus: Augmented Browsing & User Scripts

While Internet Explorer and Netscape Navigator dominated early web browsing platforms, the addition of the Mozilla Foundation's Firefox browser expanded the tools and functionalities available to web users. Originally part of AOL-owned Netscape's web division, the Mozilla Foundation declared its independence after huge cuts in its budget by AOL. Soon after the launch of the open-source Firefox browser in 2004, users began developing extensions and add-ons to augment web browsing. Using a variety of Java scripts that automatically transform and personalize web content, Firefox browser add-ons allowed users to change the default browser interface, reconfigure the design of some web pages by tweaking site .CSSs, and integrate RSS, FTP, social bookmarks, and developer tools into their browsing experience. Though most contemporary web users don't think about extensions in too much detail, add-ons like the Weather.com toolbar, GoogleEarth browser support, and StumbleUpon are commonplace additions used by millions of Firefox users worldwide.

Greasemonkey is an open-source Mozilla extension that allows users to install scripts - or small programs that automate the execution of tasks. These scripts augment the browsing activity of web users, allowing them to tweak individual pages and entire sites to better suit their navigational needs. After installing the Greasemonkey extension from the Mozilla extensions website, web users visit userscripts.org to download and install open-source, community-member authored scripts to transform their browsing experience. As of February 2013, individuals on userscripts.org contributed over 97,000 user scripts, augmenting everything from Google search results to the appearance of Amazon product pages.

One such script that we'll consider in this section is OiNKPlus. With over 116,000 downloads, the OiNKPlus script functions as a "media enhancer" and "artist discovery" tool that augments the
exploration of participatory archives on bittorrent sites like Question.cd. According to the script author, OiNKPlus was developed because,

Music discovery is an essential part of private torrent sites. Although OiNKPlus was originally developed exclusively for OiNK, after the site was taken down by the BPI and the IFPI, I decided to go all-out and support not only the most popular private torrent sites, but some of the most popular public ones too. ("Indieana").

In activity theoretic terms, the OiNKPlus script incorporates a variety of mediating tools to facilitate conscious, goal-directed action by torrent community members. As users look for newer, more sophisticated ways to explore and discover content, conventional data sifting technologies like search boxes simply can't deliver an associational experience the way that a tool like OiNKPlus does. Inasmuch as OiNKPlus incorporates a variety of new media objects as mediating tools that facilitate archival navigation and discovery, we can also consider this complex assemblage as a genre ecology: a multidimensional, multi-object, multi-genre response to the recurrent action of participatory archival navigation and digital media discovery.

*OiNKPlus - Components*

The OiNKPlus Greasemonkey script incorporates a variety of individual tools (Fig. 27).
The "Similar artists" tool pulls metadata from an associated "Similar artists" input box included in every artist torrent description. Using the user-generated data from "Similar artists" input, OiNKPlus aggregates and collocates data, emphasizing the artists most often identified by site users as related to the band in question. In the example provided above (Fig. 27), users identified twenty-eight artists whose generic similarities are fairly congruent with the type of music composed by Talkdemonic. When users click any of the similar artists in the list, they're redirected to a new page on Question.cd that contains all of the media uploaded as that artist. Denoted by a small tag icon, the "Tags" section draws on the
aforementioned user-generated tags to guide potential downloaders expectations about the kind of music Talkdemonic produces. The "Abstract" section pulls from the social music site Last.fm to provide users with a short biographic summary of the band, allowing them to trace the historical genesis of the band as a means of creating additional identifications. The "MySpace player" section draws on the MySpace social network, embedding the player found there to preview particular tracks before they go about the process of downloading an entire piece of media. The "External Links" section allows users to automatically query popular informational sites like Last.fm and Wikipedia to learn more about the artist; additionally, the "External Links" also provide automatic queries to commercial sites like iTunes, Amazon, and Bandcamp, allowing users to quickly access and purchase material by the artist should they feel compelled to do so. Finally, the "Elsewhere" section allows users to automatically search other private bittorrent sites such as Pancakes.fm as well as public trackers like ThePirateBay and Mininova.

Taken collectively, the OiNKPlus tool provides Question.cd community members numerous avenues for exploring artist content via preview functions while also allowing users to draw new associations among artists whose creations are generically consubstantial. Drawing on both formal and user-generated classificatory metadata, the tool enhances user experience, allowing community members to successfully meet two goals: participatory archival navigation and archival discovery. Interestingly, OiNKPlus also provides associational visualizations, guiding members whose primary form of engagement isn't necessarily list-based. The "Similar Artists Map" (Fig. 28) draws on both Last.fm similar artists links as well as the user-generated similar artists tags to create a visual representation of media connections. Utilizing the same frequency-based visualizations as popular tools like tag clouds,
artists who were tagged more frequently have thicker connective lines and their font appears larger.

Figure 28. Similar artists map on Question.cd.

The final component of OiNKPlus breaks from an emphasis on archival navigation and music exploration, instead highlighting the interconnectedness of digital and analog worlds. The "Upcoming Concerts" section (Fig. 29) allows users to see where the artist or band will be appearing or performing in the near future. Further, when the "Go to Thread" option is clicked, users are taken to a forum on Question.cd that connects individuals hoping to attend the same performance. Herein community members coordinate meetups to attend the show and in the process build social connections in the material world. The "Upcoming Concerts" section of OiNKPlus functions in much the same way as the social ecologies that Hawk describes in his article, "Curating Ecologies, Circulating Musics." According to Hawk,
[D]igital media allow musicians to curate their own ecologies of practice in order to open pathways for the production of social ecologies around and through music . . . . [these kind of immaterial connections] fold back over onto physical ecologies and gathered publics in the form of the shows and concerts attended by folks who are involved in [the band's] digital practice. (165-6)

While the "Upcoming Concerts" section doesn't necessarily help users achieve participatory archive navigation, it does enhance artist discovery by providing virtual community members the opportunity to network, and in the process, shifts the ecological impact of the OiNKPlus script away from digital worlds into analog environments.

**OiNKPlus - Medium/Interface**

The substantive and formal characteristics of OiNKPlus components mirror the tagging, collage, and requests tools at the mesoscopic level of activity. Substantively, the script allows users to meet the social needs of archival navigation and artist exploration and discovery. Formally, most of these tools use simple user input boxes to record user-generated metadata that is then transformed into various data-sifting outputs like the Similar Artists Map visualization. When we supplement this exploration of mediating tools as rhetorical genres with a consideration of medium or interface, we get a clearer picture of the power of new media objects at mesoscopic levels of activity in digital environments. In *Lingua Fracta*, Brooke argues that "the mutability of new media means that we should be shifting our focus from textual objects to medial interfaces" before providing an ecological rendering of the rhetorical canons for new media (6). Brooke's project is of particular importance to articulating the interface as the ever-elastic, interstitial space wherein new media objects interlock and overlap to create new media genre ecologies. These ecologies, and their interfacial wrapping are crucial to understanding tool-mediation in digital activity systems like the participatory archive at Question.cd.

A key insight that Brooke makes in his book is the notion that while analog textual artifacts remain fairly static, *interfaces change* - and they change for a variety of reasons. In Brooke's study, he traces the transformation of the *World of Warcraft* interface, highlighting how user progression through
the game necessitates the transformation and customization of the interface to more successfully meet user need and desire as well as quest-specific demands. In much the same way, Question.cd users making use of OiNKPlus are able to reconfigure the content sections, toggling different components on and off and rearranging entire sections to better assist them in navigating the new media content embedded in the medium. Interestingly, the OiNKPlus interface also changes in another way: unlike user-initiated interfacial reconfigurations, shifts in aggregated metadata culled from site users transforms the output of the OiNKPlus script, reflecting the associational links site users draw among media over time. Interfacial transformation of this sort relies on the collective input of the entire community and more accurately syncs with previous articulations of rhetorical genre encountered throughout this chapter.

If rhetorical genres modify according to shifting rhetorical circumstances and embody situational expectations, the interfacial medium of OiNKPlus is responsive to these processes at the level of the individual and the social. Further, as an aggregation of multiple preexisting new media objects brought together to fulfill the recurring social motive of archival navigation and media discovery, OiNKPlus coordinates the activity of what Spinuzzi calls "genre ecologies" or Orlikowski and Yates call a "genre repertoire" : a set of genres/agents that given communities understand and know how to manipulate. To that end, the OiNKPlus script is a mediating-tool functioning as rhetorical genre ecology, providing users with a series of generic outputs that enhances participatory archive navigation, facilitates artist discovery and sometimes even promotes interaction with the physical ecologies of community members outside the digital realm. All that being said, OiNKPlus is problematic when considered from the mesoscopic level of activity. For example, while OiNKPlus does contain multiple mediating tools that direct user action, it simultaneously coordinates the entire navigation activity of the user. In this sense, it can't function as singular tool use as it is a tool-of-tools. To understand how rhetorical genres like OiNKPlus can be better theorized beyond the mesoscopic, the remainder of this chapter turns to analysis of macroscopic activity, or genres whose use is unconscious but whose function organizes not only individual action but the activity of an entire system.

*Macroscopic Investigations: Content Management Systems, Trackers, and Large-Scale Rhetorical Genres*
The macroscopic layer of activity involves the ways "workers, work communities, cultures, and societies understand, structure, collaborate on, and execute their cooperative enterprises" (Spinuzzi, *Tracing Genres* 32). Macroscopic activity could be considered the contextual or organizational layer in which large-scale activity occurs and constitutes the broader ecologies of collective action. While mesoscopic actions are ripe for investigations into shorter, more targeted investigations like those conducted in the previous section, macroscopic analysis of mediating technologies in participatory archives like Question.cd require a longitudinal orientation that more explicitly traces the cultural-historical genesis of community goals and motives. Further, because Activity Theory accounts for integrated scope among the three levels of activity, the macroscopic layer incorporates multiple mesoscopic activities under broader macro-level activity. While the OiNKPlus script coordinates multiple new media rhetorical genres that facilitate navigation and discovery, it also functions as a mediating technology at the macroscopic level of activity - but only for the users who actually put it to use. The scope of the OiNKPlus genre ecology simply isn't vast enough to account for the collective actions of the entire Question.cd activity system, itself a space of complex, multidimensional activity and internal contradiction.

The goal of this section will be to identify and analyze two mediating technologies that function as rhetorical genres in the macroscopic layer whose influence and importance extend beyond the individual goals discussed in the previous section. To that end I'll first consider the importance of diachronicity and cultural-historical tracing when dealing with macroscopic rhetorical genres. This section will posit the importance of compound mediation when considering interlocking activity systems or, in Writing Studies terms, genre systems. Next, I'll explore the role of content management systems and bittorrent trackers diachronically, paying close attention to the historical needs and cultural desires that gave rise to such software. Third, I'll explore two macroscopic rhetorical genres that structure the activity system in participatory archival environments. The first is Gazelle, a content management system designed to increase site efficiency, incorporate community-building tools, and provide a fluid interface for user-initiated site navigation and utilization. The second is Ocelot, a lightweight bittorrent tracker that
remains invisible to site users but facilitates the activity of sharing content in novel ways. I'll close by connecting new media rhetorical genres in the macroscopic layer to what Actor Network Theorists have called "runaway objects" or monstrous, distributed activities whose rapid expansion threaten the very notion of bounded human activity itself.

**Compound Mediation, Activity Systems, and Genre Ecologies**

In a chapter from Bazerman and Russell's edited collection *Writing Selves, Writing Societies*, Spinuzzi describes compound mediation as "the ways that people habitually coordinate sets of artifacts to mediate or carry out their activities" ("Compound Mediation" 98). The notion of compound mediation is present in all activity systems and Question.cd is no different. In fact, the aforementioned OiNKPlus script is a perfect example of a tool that allows users to carry out their desired action by manipulating various tools that have been consolidated under one interface. Yet, users don't act outside of organizational contexts; rather, they're imbricated in broader communities of practice that define the limits of acceptable action through rules, divisions of labor, and shared, though often contentiously defined, motives and objectives. Further, the tools that individuals use in these organizational contexts are interconnected and co-evolve in fascinating ways. In this sense, complex multi tool interaction should be considered *ecologically*, wherein the tool assemblage is greater than the sum of its individual parts and the tool ecology is the mediator of activity - not the individual tools themselves. Spinuzzi argues that compound mediations, or the rich tool assemblages that collectively mediate user experiences in the macroscopic layer, can be considered "genre ecologies" or "the genres of artifacts [that] collectively mediate the workers activities, and in so doing, become interconnected with each other in mediational relationships" ("Compound Mediation"101).

Spinuzzi's genre ecology framework isn't without precedent in Writing Studies. In "Intertextuality in Tax Accounting: Generic, Referential, and Functional," Devitt argued that "genre sets" coordinate the activity of individuals in particular contexts. Working from Miller's notion that genres are forms of social action that provide stabilized responses to recurrent situations, Devitt argues that disciplinally developed, stabilized, and regulated texts interweave to direct the action of discourse communities in powerful, yet
circumscribed, ways. Orlikowski and Yates's 1994 article "Genre Repertoire: Structuring the Communicative Practices in Organizations" treads similar territory, arguing that while textual genres determine sequence in organizational communication, they also overlap. By tracing the sequences and overlaps of genres, the authors argue that "[T]o understand a community's communicative practices, we must examine the set of genres that are routinely enacted by members of the community" (542).

Bazerman's "Systems of Genre and the Enactment of Social Intentions" is another iteration of the genre sets/genre repertoire framework. In this book chapter, Bazerman critiques speech act theory and provides an account of genre systems, or "interrelated genres that interact with each other in specific settings. Only a limited range of genres may appropriately follow upon one another in particular settings, because the success conditions of the actions of each require various states of affairs to exist" (97-8).

Where Spinuzzi's account of genre ecologies and the works by Devitt, Orlikowski and Yates, and Bazerman differ is his explicit connection between collections of rhetorical genres and the role of mediating tools in *electronic activity systems*. The genre ecologies that mediate the collective activity of an entire digital ecosystem like Question.cd mirror Spinuzzi's genre ecologies in that they're comprised of visible, interlocking tools that direct user action through compound mediation (Fig. 30); however, this chapter argues that largely invisible rhetorical genres function at macroscopic scope, making such genre ecologies possible in the first place. Like mesoscopic tools, these mediating technologies are also the product of cultural-historical development in delimited discourse communities; however, instead of assisting users in carrying out conscious, goal-directed actions, these tools embody social motive and collective desire, defining the bounds of agency community-wide while allowing Question.cd to exist at
all. Going forward, this section will consider two such macroscopic mediating technologies used to coordinate collective activity in the Question.cd activity system: the Gazelle content management system and the Ocelot bittorrent tracker. By analyzing their cultural-historical genesis as well as their generic transformation, this section argues that code-based new media rhetorical genres at the macroscopic layer of scale embody the collective social motives of the Question.cd participatory archive while also structuring the agenic capacities of other tools at meso and micro levels of practice.

The Gazelle CMS: Coordinating Collective Action

Content Management Systems (CMS) are computer programs that allow individuals to publish, edit, and modify their web content without engaging in direct .html modification. While web 1.0 websites contained static pages that required knowledge of .html and .css to change content and appearance, web 2.0 technologies such as the web CMS allow lay users to manipulate their content through a central
WYSIWYG editor before publishing directly to the web. In this sense, the web CMS allows site administrators to produce content, deliver content, and retrieve content in an relatively straightforward manner. Most CMS-run websites utilize .php (PHP: Hypertext Processor), a scripting language designed to take in user inputs such as mouse clicks and output database driven .html documents. The use of .php is what makes CMS websites dynamic as the server-side scripting language receives signals to modify, retrieve, and display web content that's modified without direct manipulation of the .html code. The world's largest social network, Facebook, uses .php to serve its 1 billion plus users over 570 billion page views per month.

The most famous web-CMS currently in use is the WordPress platform. Initially released in 2003, WordPress has been downloaded and installed over 65 million times and is used as the CMS of choice in 22% of all new websites registered with ICANN. What makes WordPress especially unique is its clean user interface and relatively straightforward customizability. Plugins, widgets, and themes allow site administrators to expand site capacities, transforming this once humble blogging tool into a CMS capable of running enterprise level websites. Other web-CMSs like Drupal and Joomla! provide similar functionalities to WordPress but are designed to provide larger-scale network capacities for enterprise applications. Academics are even putting web-CMSs to use with greater frequency. Created by the Public Knowledge Project, Open Journal Systems (OJS) is a well-respected, multilanguage CMS used to digitize the academic journal submission, review, and publication process. At present, OJS is used as the CMS by at least 11,500 academic journals worldwide.

While direct peer-to-peer technologies like Napster and KaZaa offered massive media archives, they lacked functionalities that encouraged community development. The first content management systems developed for piratical web communities amended this problem, providing users with some rudimentary means of connecting with one another in a more direct manner. TBsource, an early all-in-one CMS-tracker platform included social components such as user profiles, public forums, and private messaging systems. While these kinds of site functionalities seem typical today, they were new to file sharing communities and tapped the power of digital social networks. The TBsource social functionalities
allowed file sharers to connect in new ways, thereby consolidating small userbases around niche media such as anime, elearning materials, or Mac applications. With the demise of larger peer-to-peer networks and the integration of social media technologies in private bittorrent communities, userbases exploded. In fact, before being taken down by European law enforcement organizations, the iconic Oink.me bittorrent community went from 1,000 users to 100,000 users in just over a year. With the increase in users come an increase on server-side resources, resulting in a lack of performance from the site. After two years and nearly 150,000 registrations, Question.cd's own site began to falter, returning 404 errors and crashing on a weekly basis. As a result, a team of community members at Question.cd decided to work together on a new CMS: Gazelle.

Before exploring the Gazelle CMS as a macroscopic mediating tool that organizes genre ecologies in the mesoscopic layer, we should first explore how something like a bundle of .php code might function as a new media rhetorical genre. If you dig deep in the history of North American Genre Studies, you're eventually led to the work of Bakhtin, Medvedev and Voloshinov. As philosophers of literature and language, the so-called "Bakhtin circle" reworked the notion of genre in the early 20th century, providing some key insights into the ways that genres function rhetorically at macroscopic levels of scale. In *The Formal Method in Literary Scholarship*, Bakhtin and Medvedev argue that genres aren't static textual artifacts but instead of culturally grounded, historically bound means of "seeing and conceptualizing reality" (134). In later work, Bakhtin would further explore the capacity of texts and speech to be inscribed with social motives. Exploring the *utterance* in "The Problem of Speech Genres," Bakhtin highlights the importance of addresivity and the socialized nature of communication. Noting that, "from the very beginning, the utterance is constructed while taking into account possible responsive reactions, for whose sake, in essence, it is actually created" he eventually cedes, "From the very beginning the speaker expects a response from them, an active responsive understanding. The entire utterance is constructed, as it were, in anticipation of encountering this response" (94). Bawarshi later links Bakhtin's notion of addresivity to generic form, arguing that
The speaker's very conception of the addressee is mediated by genre, because each genre embodies its own typical conception of the addressee. In fact, the very word and its relation to other words is also mediated by speech genres. ("The Genre Function" 348) These speech genres are not, however, universal inasmuch as they're intensely rhetorical, being attuned to their prospective audiences, contexts, and chronotopic location. So, while Bakhtin's theory of genre universalizes generic function, it also recognizes that specific genres are bound by their cultural-historical genesis and present rhetorical situation. Reflecting on Bakhtin's notion of genre, Morson and Emerson agree, stating:

Each genre implies a set of values, a way of thinking about kinds of experience, and an intuition about the appropriateness of applying the genres in any given context. An enormous amount of unfinalized cognitive content is acquired each time we learn a new kind of social activity with its attendant genres, content whose very nature has remained largely unexamined. (291-2)

Morson and Emerson's emphasis on the "largely unexamined" nature of the genres of social activity is particularly apropos to grasping the ways that rhetorical genres structure macroscopic activity. As Spinuzzi, relying on Leont'ev, argues in Tracing Genres through Organizations, activity at the macroscopic level is largely invisible and operates without conscious acknowledgement on the part of individuals participating in the system. Genres at this layer play important stabilizing roles in sustaining entire activity systems, allowing the collective action of numerous subordinate mesoscopic and microscopic actions and operations to aggregatively move the activity along; however, individuals aren't typically cognizant of macroscopic activity beyond recognizing the shared social motive or object rendered. Rhetorical genres at this level are much more akin to Miller's original formulation that genres respond to exigence, or the "socially objectified motive" that defines rhetorical situations (Spinuzzi, Tracing Genres 31) or Bakhtin's notion that genre embodies "social memory." What is perhaps most interesting about the largely invisible, socially inflected nature of mediating tools at macroscopic scale in this study is their literal invisibility: the Gazelle content management system produces interfacial outputs.
that users engage everytime they visit Question.cd; yet, most users rarely contribute to the building, testing, and production of the CMS itself. While collages, requests, and tagging systems draw on user expertise to facilitate specific forms of goal-directed action, Gazelle coordinates most of the user tools discussed in the previous section to enhance individual goals such as navigation, discovery, and archival expansion.

Like any rhetorical genre, the Gazelle CMS undergoes transformations as social motives shift and contradictions in the site-wide activity system occur. In its initial development phase, Gazelle addressed contradictions that occurred from the technical incapacities of the original TBsource CMS code. When the Question.cd userbase rapidly increased after the inclusion of social profiles, forums, and private messaging, the original TBsource simply couldn't handle the new server loads and data transfers required to keep the site running. As a result, a group of site members worked feverishly over the course of eight months to write a new content management system from scratch. This contradiction in macroscopic activity was huge, resulting in a newly emergent macroscopic rhetorical genre: Gazelle. In the sections that follow, I'll briefly describe what social motives gave rise to Gazelle code changes over the course of its development and analyze it's substantive, formal, and interfacial features. I'll also illustrate Gazelle's role as macroscopic rhetorical genre that mediates mesoscopic activity through genre ecology coordination.

Thankfully, the development process of Gazelle is preserved in extensive changelogs on the Project Gazelle website\textsuperscript{161}. By analyzing these changelogs we get a peek into the incorporation of social motives and user desires in a new media object operating as rhetorical genre at macroscopic levels of scale. To explore this instantiation of collective desire in tool-development, I'll investigate the development of artist permissions, subscription features, and the collector addition. While each of these tools are used by site members at the mesoscopic level of user-directed action, Gazelle coordinates all of these features in a broader genre ecology that emphasizes social aspects of archive expansion, discovery, and acquisition.

\textsuperscript{161} https://ssl.what.cd/gazelle/login.php
One of the first tools developed for the Gazelle CMS was the "Artist Permissions" function. As the Question.cd community user base grew, many artists realized that exposure in such an environment might increase their visibility, and hence, their viability as creatives. Not long after the launch of Question.cd, well-known artists like Trent Reznor began releasing their tracks to the Question.cd community, encouraging users to share and reuse their creations to make new compositions. Little known artists followed their lead, betting on the importance of exposure and the power of long-tail niche marketing to increase their visibility over the net. Because many unknown artists were already uploading their content to the Question.cd archive, developers of the Gazelle CMS incorporated "Artists Permissions" allowing original contributors to claim a special class of user that rewarded them with special ratio limits and requirements while also pushing their contributions to the "Vanity House" section of the community landing page. Incorporating a tool to allow artist uploading of their own content, the Gazelle CMS fulfilled the broader community desire to reward content producers with higher visibility across the network.

The "Artists Permissions" designation emphasized the social nature of the site, highlighting the works of particular artists whose personal contributions to the community increased their visibility. Yet, site users were still unable to keep up with archival supplementation of specific artists and genres beyond manually revisiting each. As a remedy, the Gazelle developers introduced various subscription services to the Question.cd frontend. The subscription tool is embedded at various locations on the site, including specific artist pages, genre pages, and collages. Much akin to the subscription tools available in most conventional Internet forums, the subscription tool allowed users to passively keep track of archival additions to areas of their interest. By utilizing a RSS module tied to specific user accounts, the subscription tool provides users the capability of catching up with the artists, genres and collages that most interest them. By writing subscriptions into the Gazelle CMS, developers further extended the collective desire of more easily navigating the archive to discover media.

One of the last new tools designed for the Gazelle CMS is the "Collector" addition (Fig. 31). Not incorporated until release candidate two, the collector tool allows users to automatically sift and
download content based on their specific media preferences. The collector addition allows users to first
specific preferences for bitrates and media types in their profile settings. After initial setup, users are free
to visit an artist page and automatically download all torrents that meet their media desires. Because the
Question.cd community is populated by a large number of audiophiles who prefer lossless quality rips,
the collector addition carries out the collective desire to curate personal media collections with content of
particular quality and format.

While I've only explored three mesoscopic tools integrated into the Gazelle CMS, there are many,
many more. What's important to note here is not necessarily the individual tools themselves but the
function of the content management system to coordinate their activity across the entire Question.cd
piratical system. By incorporating sharing technologies into
its design, the developers of Gazelle made conscious
choices about how to best facilitate the collective motives
of the entire site. In this way, the CMS operates
substantively as a mediating technology at the macroscopic
level of genre. Formally, the CMS adopts features
discussed in the previous section on mesoscopic new media
rhetorical genres, emphasizing the role of user-input boxes
in media curation and extension.

![Collector tool](image)

Figure 31. The "Collector" tool.
The interfacial features of the Gazelle CMS are remarkable and hinge on their pliability. Taking direction from long-established CMSs like WordPress and Drupal, Gazelle allows users to redesign the output of specific kinds of pages to better meet their information sifting habits. These "kinds" include artist pages, forums, requests, colleges, and formal documentation, among others. The interfacial design affordances of Gazelle allows users to manipulate information outputs, customizing them for individual navigation purposes. Each of these pliable spaces are marked with a black arrow in Fig. 32. This malleability is an essential feature of new media rhetorical genres at the macroscopic level of scale because it allows for specific user customization that directs mesoscopic action while still facilitating the collective action of the entire system. As an "ever-elastic middle," the Gazelle CMS interface renders static products but exists, at the macro level, as a process-structuring agent in the Question.cd ecosystem.

Ocelot: Mediating Connections

Gazelle's coordination of multiple mesoscopic genres is relatively visible inasmuch as users directly manipulate the interface, utilizing novel means of navigation and discovery. As a new media rhetorical genre, Gazelle facilitates the broader social motive of the
site: participatory archive extension and curation, while also coordinating multiple mediating technologies that encourage community formation and division of labor. Yet, for all its novelty as a macroscopic genre that coordinates multiple interlocking genre ecologies, Gazelle is incapable of actually connecting distributed users in the act of sharing. To achieve this collective social motive, all bittorrent-based piracy communities require a *tracker*. Trackers are lightweight pieces of software that facilitate connection among bittorrent users, providing the only major critical point in the bittorrent ecosystem. The tracker - even more than the CMS - moves piracy communities away from niche affinity groups toward file-sharing publics. Yet, private piracy communities like Question.cd and TheLibrary.org aren't the only organizations that use trackers to facilitate file sharing and distribution. Linux, Wikipedia, Project Gutenberg, and contents of Archive.org can also be distributed via bittorrent as the distributed nature of the protocol reduces resource load, allowing for massive distributions with relatively small technological demands.

As a new media rhetorical genre functioning at the macroscopic level of scope, Ocelot was developed because of a destabilization in the activity system where it functioned. After the demise of the legendary Oink's Pink Palace bittorrent community in October 2007, new bittorrent communities sprung up to take its place. In fact, in the first two weeks after the Oink.cd shutdown, at least six private, invite-only bittorrent sites launched, providing safe haven to pirates who once considered Oink's home. Utilizing the same bittorrent tracker software as Oink's, Question.cd was one of these communities; however, Question's popularity would rise exponentially in a relatively small amount of time, creating problems for both the hardware and software that made the site possible.

After its initial launch, Question.cd purposefully kept the user base small to ensure that pages loaded quickly and people found the content they were looking for in a timely manner. But as the site population grew, so did the load on the tracker responsible for coordinating connections among community members. As of 2008, the tracker's technological capacities were nearing their threshold. Only a year after its launch, the Question.cd tracker software, called XBTT, was responsible for coordinating over five million individual connections at a rate of 3,500 hits per second. This meant that
when an individual user's bittorrent client software announces, the tracker has only 80 microseconds to search through its database of over 900,000 torrents and 5,000,000 peers to compute a response and send it back to the user. XBTT could handle this kind of load; however, as the community grew it was obvious that a new tracker solution was necessary to ensure the health and stability of the Question.cd piratical activity system.

The Question.cd administrators anticipated the technological incapacity of XBTT and began to explore solutions soon after the site launch in 2007. First, a developer called "WhatMan" tried to rewrite the tracker in .php instead of C++. The resulting tracker, Lioness, was very efficient but couldn't scale to the user base sizes site administrators anticipated in the coming years. In early 2009, another developer "lenrek" coded a preliminary version of Ocelot in C++; unfortunately, upon further testing, lenrek's tracker software also failed to support the load required to connect the hundreds of thousands of users of Question.cd. By early 2010, the XBTT tracker simply couldn't support the size of the community and Question.cd began to time out. 404s, tracker errors, and delayed tracker announcements became so common that users began to speculate about the scalability of tracker software and the technological limits of bittorrent community size. As a remedy, Question.cd administrators began doubling and tripling instances of XBTT. By multiplying the number of XBTT trackers running at the same time, site developers bought another few months; however, this solution was risky as the stability of the archival connections began to waver. Site administrators risked crashing the entire tracker by continuing to stack XBTT on the server hardware.

The Question.cd administrators faced what Spinuzzi calls "destabilizations" in their macroscopic activity system. Until the beginning of 2010, the XBTT tracker functioned as a new media rhetorical genre, facilitating the collective motive of file sharing by providing invisible means of connection and coordination. The destabilization created by expanding user bases and archives created a central contradiction in the macroscopic practical activity system and, as a result, the annihilation of the entire community and archive became a distinct possibility. Because varying levels of scope are coconsitutive, the destabilizations of XBTT as a macroscopic mediating technology bore breakdowns at the mesoscopic
and microscopic levels as well: because the tracker was incapable of facilitating connection among peers, users lost interest in continually curating and extending the archive through tools of navigation and discovery; further, because of their disengagement at the level of user-directed action, community members also neglected microscopic operations like logging in and browsing the archive. Due to inactivity at the microscopic and mesoscopic level, many users lost their Question.cd community membership and were banned for not being good citizens. In total, the destabilizations created by the technological inadequacy of the XBTT tracker code resulted in systemic contradictions at all three levels of scale, challenging the viability of the entire Question.cd ecosystem.

In August of 2010, Question.cd community member WhatMan returned to the Ocelot project and recoded the earlier work of various contributors, creating the first complete build of the new tracker software. Using an agile coding philosophy, WhatMan integrated many of lenrek's key design choices, reworking the original C++ Ocelot to reduce code bloat and integrate various bittorrent client-end features. Site administrator "?" recounts the initial testing of WhatMan's redesign of Ocelot thusly:

On September 1st, ocelot was ready for performance testing. We replaced one xbtt instance with it, and it scaled. So we replaced two, and it scaled. We tweaked it a bit, and then replaced the third and fourth instances, tweaked it a bit more, and replaced the load balancer. What four XBTT instances and a load balancer were failing to handle before, was now being handled by one, singlethreaded instance of the latest ocelot. Then we pushed it harder - we lowered the announce interval to 40 minutes, and then to 30, and it scaled. Then we lowered it to 20 minutes, and linux broke before ocelot did. It was beautiful. The dev team rejoiced, and banded together to add the reaming features and fix the remaining bugs. By September 3rd, ocelot was considered feature complete, and we let it run the entire swarm - one tracker for five million peers, at a 30 minute announce interval. ("What.cd Debuts Lightweight")

WhatMan's rewritten Ocelot confronted the technological incapacity of XBTT, providing an alternative new media rhetorical genre to mediate the macroscopic activity of the entire Question.cd community. It answered the contradiction of the activity system with a new, improved mediating technology that
restabilized Question.cd and facilitated more expansive forms of connection among individual users. After developing, testing, and deploying Ocelot in late 2010, the entire Question.cd development team decided to open-source license the software, allowing other bittorrent communities to integrate Ocelot into their own activity systems. In this way, Ocelot not only mediates peer connections and facilitates peer-to-peer activity on Question.cd but also on nearly all other private bittorrent communities on the net.

Summing Up: Macroscopic New Media Rhetorical Genres

Taken together, Ocelot and Gazelle function as new media objects that mediate the collective activity of the entire Question.cd ecosystem. Gazelle provides the architecture and functionality necessary to sustain collective activity in distributed systems. By introducing a social component to participatory archival creation and curation, Gazelle functions as the mediating technology through which users interface, navigate and discover the Question.cd archive. As a rhetorical genre operating at the macroscopic level of activity, Gazelle embodies the collective motives of the site, structuring the activity and agency of site members by directing their individual motives toward the shared motives of archival expansion and community building. By coordinating multiple genre ecologies whose individual tools function at the mesoscopic level of activity, Gazelle provisions possibility and circumscribes agency in the Question.cd ecosystem, allowing users to conform to the agenic capacities instantiated in its design. The community members who first designed Gazelle confronted numerous systemic contradictions, reworking the vision of peer-to-peer file sharing by incorporating the social. Eliminating the destabilizations that plagued previous file sharing technologies, Gazelle provides a stabilized-for-now response to a recurrent rhetorical situation: how to encourage, recognize, and reward creation and curation of materials outside the bounds of capital and work. As a new media rhetorical genre functioning at the macro level of scope, Gazelle circumscribes user agency and shapes subjectivity through its coordination of mesoscopic tool ecologies, mediating individual user action while also shaping user identity.

While Gazelle structures social navigation and discovery by coordinating mediating technologies on the frontend of the Question.cd activity system, Ocelot coordinates the backend networks that make
content sharing possible. By condensing the C++ code and reworking the technological capacities of bittorrent trackers, Ocelot carries out the collective desire to acquire and share digitized media. As the backbone of the Question.cd network, Ocelot stabilizes the activity system by addressing destabilizations and contradictions that arise as participatory archives scale to heretofore unimagined sizes. Further, because Ocelot was open-source licensed, it is now coordinating the technical demands of bittorrent communities across the web, allowing users in hundreds of niche participatory archive communities to carry out activity at the macroscopic level of scale.

*Agency, Subjectivity & New Media Rhetorical Genres*

While Chapter Three produced an empirical account of site member attitudes, Chapter Four locates agency in the interaction among site members and mediating technologies. Chapter Four also focuses on what Burke calls the *instrumental causes* or the technologies and tools that mediate human desire. Functioning as conduits that link humans to their lifeworld, *instrumental causes* are underwritten with agenic capacities imbued over long histories of cultural-historical use; further, as mediating technologies, artifacts provide creative solutions to the contradictions that develop from diachronic destabilizations in any activity system. In the sections that follow, I'll bring together new media rhetorical genres with theories of agency and cognition to demonstrate that as subjectivity diffuses over digital networks, so does agency and identity. This diffusion is the central process for rendering the "subjectivity" I first discussed in Chapter Two.

I've foregrounded Rhetorical Genre Studies in this chapter to emphasize the rhetorical role that objects play in structuring human activity. Looking beyond early articulations of genre as either *form* or *substance*, the Rhetorical Genre Studies treatment of new media objects in this analysis also highlights the essential element of *interfaces* in understanding the social, political, and cultural articulations circumscribed in objects like tagging systems and content management systems. Those traces function as specters or haunts in much the same way as Derrida describes in *Spectres of Marx*: the revenants of object use phase in and out of human activity somewhere between prior use and future desire. This incongruity
between past and future object use\textsuperscript{162} recognizes the codification of social motives inside new media tools while also accepting the possibility of systemic destabilization and tool reconfiguration.

Following a cue from Spinuzzi's work on non-official, textual workplace genres, Chapter Four also divides activity into mesoscopic and macroscopic layers. As tools that unconsciously structure the activity of all actants in an activity system, macroscopic tools coordinate multiple meso- and microscopic rhetorical genres. Their agency is distributed across digital environments and is informed by attitudes and ideologies of the community members that contribute to their design. Macroscopic new media tools like content management systems and bittorrent trackers may not appear to be genres; however, their role in coordinating entire genre ecologies makes them an integral part of social digital experiences.

Mesoscopic tools allow individual users to consciously manipulate information to reach a goal. In the case of Spinuzzi's study, mesoscopic tools like post-it notes mediate individual activity, allowing them to achieve their goals more efficiently by utilizing non-sanctioned textual genres. In this analysis I've followed a similar tact, drawing attention to the ways that new media objects function at the mesoscopic layer. The novel contribution here is a recognition that in distinction from the individualized texts in Spinuzzi's work, new media objects operating at the mesoscopic level of activity rely on social data to assist users in achieving particular ends. Such a recognition shifts the onus of mesoscopic analysis away from a single individual's personomy to the folksonomic systems that characterize tool-use in digital environments. The move away from person to folk has important implications for studying distributed agency as the implicit social motive embedded in text-based genres becomes explicit in new media objects that rely on crowdsourced metadata to facilitate various forms of navigation and discovery. Distributed theories of agency aren't new; in fact, researchers in the posthumanities have explored non-Cartesian accounts of agency and subjectivity using both empirical and theoretical methodologies. In the last section of this chapter I'll briefly explore some of these theories before reflecting on the import of

\textsuperscript{162} A deep resonance is found between hauntological analysis and Greek articulations of \textit{chronos} and \textit{kairos}. In "A Time to Speak, a Time to Act," Artemeva explores this convergence, roughly correlating \textit{kairos} as the moment of destabilization and rearticulation and \textit{chronos} as the quantitative, culture-bound history of generic use. The \textit{revenants} in Artemeva's analysis play an integral role in creating tensions among existing genres and future anterior objects, emphasizing their relation in making "real" the "virtual."
new media rhetorical genre analysis of agency for better understanding distributed activity in digital environments.

Edwin Hutchins's *Cognition in the Wild* problematises disembodied views of cognition and agency, proposing an alternative framework for tracing how humans interact with their environments to achieve particular ends. In fact, his theory of socially distributed cognition extends the activity-theoretic notion of internalization by arguing that the human mind doesn't merely internalize recurrent instances of tool-use but is, instead, one media interacting with numerous others towards moments of cognition. He notes,

> Internalization has long connoted some thing moving across some boundary. Both elements of this definition are misleading. What moves is not a thing, and the boundary across which movement takes place is a line that, if drawn too firmly, obscures our understanding of the nature of human cognition. Within this larger unit of analysis, what used to look like internalization now appears as a gradual propagation of organized functional properties across a set of malleable media. (312)

Ontologically speaking, Hutchins' argument is what Latour would refer to as "symmetrical"

163 inasmuch as it shifts the focus away from the elevated individual human mind interacting with numerous artifacts toward a series of interactions among human and non-human actors that collectively define agency and eventual action. In Hutchins' rendering of Act, there is not emphasis on "I think" but instead a close treatment of the correspondence and coordination of the human mind with other mediating artifacts. This results in analyses that don't take up artifacts-in-themselves but instead considers how human and non-

163 The principle of symmetry is at the core of Latour's program. In *We Have Never Been Modern*, Latour uses the phrase "A Parliament of Things" to describe the ontological symmetry between subjects and objects - or in his words, quasi-subjects and quasi-objects. Latour's point here is that the dualisms of nature-society, truth-falsehood, material-semiotic, knowledge-power, etc., are all products of an anthropocentrism that permeates Western thought and creates artificial distinctions among the myriad subject-object hybrids that mediate human experience. For Latour, recognizing the ontological symmetry of objects and subjects affords new methods of sociology wherein researchers: 1) redraw networks to include non-human actants as agenic entities; 2) trace the revised networks of association and transformation revealed through ontological revision; and 3) provide accounts of these revised networks, highlighting the concentration and absence of quasi-objects and quasi-subjects around particular nodes of contention and consensus.
human constituencies coalesce around processes central to marine navigation and orienteering. Hutchins explicitly references the flat nature of mediation, arguing that mediating artifacts aren't something that merely "stands between" a subject and object of activity but are instead, "one of many structural elements that are brought into coordination in the performance of the task. Any of the structure that are brought into coordination in the performance of the task can be seen as a mediating structure" (290). In this flat ontology, Hutchins argues that human agency is "lightly equipped" and that what Activity Theory defines as the "Subject" is "a very special medium that can provide coordination among many structured media - some internal, some external, some embodied in artifacts, some in ideas, and some in social relationships" (316).

Hutchins' work on socially distributed cognition resonates with numerous works from across the posthuman spectrum. In *How We Became Posthuman*, Hayles follows Hutchins lead but extends his sense of distributed cognition and agency to the medium of computer mediated communication. In describing the "post" in "posthuman," Hayles notes that "there is no *a priori* self that existed free from the wills of others . . . we have *always been networked* through our informational and material connections to others that circulate in our orbit" (4). In *My Mother was a Computer*, Hayles pushes her notion of distributed subjectivity and posthuman consciousness even further, describing the "computational universe" that unconsciously structures the self through varying levels of technological, digital, and electronic mediation. She goes on to describe the computational process as one that starts with a parsimonious set of elements and a relatively small set of logical operations.

Instantiated into some kind of platform, these components can be structured so as to build up increasing levels of complexity, eventually arriving at complexity so deep, multilayered, and extensive as to simulate the most complex phenomena on earth, from turbulent flow and multiagent social systems to the reasoning process one might legitimately call "thinking." (18)

Hayles and Hutchins' work are deeply informed by first and second wave cybernetic theory, explorations of autopoiesis and structural coupling by the biologists Maturana and Varela, and non-dualist theories of mutualism and multiplicity drawn from Deleuze and Guattari's rhizomatic analyses. What's important to
note here is that despite their epistemological differences, Hayles, Hutchins, and a host of other thinkers from across the posthuman spectrum all articulate alternative formations of subjectivity, agency, and cognition. In these alternative renderings, the Cartesian subject is demystified and revealed to be an aggregate bundle of networked connections among humans, non-human mediating artifacts, and the broader environments where all these Actors come together. These posthumanists argue, with varying degrees of intensity, that we must adopt new ontological articulations that recognize relationality among heterogeneous entities as the constitutive element of reality and cognition.

Working forward from an articulation of subjectivity as distributed and networked, this chapter shows how mediating tools in the mesoscopic and macroscopic layers of activity play an integral role in constructing user experiences of participatory archives. These tools confer particular agenic capacities and address recurrent rhetorical situations; namely, in the Question.cd community, these mediating technologies provide generic responses to the social need of archival navigation and media discovery. In other words, these technologies create contradictions or moments of fragmentation and destabilization that render new articulations of subjectivity to come to the fore\textsuperscript{164}. To connect the distributed agency of mediating artifacts in activity systems to work familiar to Writing Studies scholars, I've relied on rhetorical articulations of genre, emphasizing how tools embody social motives and allow individual and collective action to meet recurrent exigencies of bounded rhetorical situations. As I argue throughout, new media objects like tagging systems and content management systems should be considered from a rhetorical genre perspective circumscribed by an activity theoretic epistemology. From this perspective, technological tools can be elevated to equal status with human actors as they internalize social motives while also coordinating with other mediating actors to facilitate the construction of a shared digital ecology: the Question.cd ecosystem.

In the final chapter of this dissertation, I'll explore the structuration process that brings together Attitude and Agency in piratical participatory archives. This summation will articulate the heterogeneous

\textsuperscript{164} This process of struggle, change, fragmentation, destabilization, and rearticulation is at the core of Johnson-Eilola's notion of Symbolic-Analytic work in \textit{Datacloud} and bears strong resemblance to the technical communications "in the wild" traced throughout this research project.
nature of the piratical ethos, emphasizing its iterability. It will also unify the "subject" and "subjectivity" garnered from Chapters Three and Four, rendering a picture of piratical identity as rhetorical becoming. Chapter Five will also explore future applications of this research, emphasizing the important role of communicational-mediational methodologies in authorship studies and technical communication.
5. Conclusion: Implications for Digital Intellectual Property Policy, Technical Communications Research, and Methodology in the Digital Humanities

Introduction

The Piratical Ethos: Textual Activity and Intellectual Property in Digital Writing Environments is as much methodological meditation as grounded investigation into the theorization, operation, and contestation of intellectual property in the age of digital reproduction. In the preceding chapters, I offer a mixed methodology for tracing what Burke referred to as Attitude and Agency of particular Actors in sites of distributed digital production. The two components of this methodology include: 1) an analysis of piratical discourse concerning intellectual property to reveal the multifaceted Attitudes toward intellectual property from the grounded perspective of pirates themselves; and 2) an analysis of mediating tools that iteratively structure possible user activity, confer and distribute agenic capacity, and operate as new media rhetorical genres in digital environments. By focusing on agency and attitude, this methodology sketches not only two components of Burke's pentad but also two main nodes of Engestrom's third generation activity system; namely, artifact/agency and the subject/attitude (Fig. 33).

Fig. 33. Overlaps between Burke's Pentad and Engestrom's Activity Triangle.
As Fig. 33 demonstrates, the overlaps between Burke's pentadic analysis and Engestrom's third-generation Activity Theory are multiple. These convergences arise because, at their heart, Burke's pentad, or hexad, and Engestrom's activity system are heuristics for understanding the polyvalent nature of the rhetorical situation. The analysis conducted in this research project focuses on the Attitudes of Agents or Subjects as well as the Agency imbued in and through Artifacts to provide an account of the subjective as well as the objective constituents of rhetorical action. This emphasis on the subjective and objective affords an account of the ideology or Attitude motivating collective and individual Acts that secure the construction of an Object of activity; further, by exploring the human and non-human interaction on a molecular level, this analysis reflects the molar forces of context; namely, the Division of Labor enforced by the Rules of the Scene as defined by the shared Purpose of Community.

The emphasis on Attitude and Agency (Fig. 34) reflect the twin claims made by this research project: first, Attitudes toward intellectual property must be rethought in an age of distributed social production.

Figure 34. Foci of research in The Piratical Ethos.
This claim is borne out by the results of the analysis conducted in Chapters Three and Four and provides an important starting point for intellectual property reform in policy and planning by teachers, politicians, governmental bodies, and transnational trade organizations. The attitudinal analysis of Chapter Three revealed not only widespread anti-corporate sentiment and a small contingent of intellectual property supporters, it also drew attention to the networked, social nature of media in the contemporary period. The findings suggest that content industry efforts to prosecute piracy have largely backfired, resulting in a band of consumers who willfully ignore intellectual property protections as a strategic form of resistance. More importantly, the prevalence of Attitudes emphasizing the social/sharing aspects of digital media underscore the technological transformations currently reconfiguring the media landscape. As consumers increasingly share, remix, and redistribute digital media content, less and less attention is paid to the owner and more and more attention is paid to the connector, or networked node who makes available bits and pieces of media content, sometimes toward novel and emergent ends. This emphasis on the connective, sharable, and social qualities of media is crucial to understanding evolving Attitudes that constitute the piratical ethos.

The second claim of this research project is paired with the first and depends on it to function: new media objects operate as rhetorical genres that proscribe possible action, distribute agency across networked users, and incorporate the aforementioned Attitudes toward intellectual property into their design. The analysis of Chapter Four emphasized the iterative relationship among dominant Attitudes toward intellectual property and the design of new media object functionalities that make sharing possible. Because new media objects operate as rhetorical genres in sites of distributed production, they confer agency and determine the possibility of participation in such spaces. As Attitudes toward intellectual property increasingly emphasize the connective aspects of networked media ecologies, they also permeate new media object design. This iterative relationship is important not only for understanding how new media rhetorical genres operate in the participatory archives of this study, but also how new media tools might facilitate particular kinds of activity in multiple sectors outside of piratical gift
economies. I'll explore these implications later in Chapter Five; however, the crucial claim that arises from this analysis is that technological artifacts play an integral role in structuring the possibilities of human action while also embodying the attitudes of the wider communities of practice that use them . . . or at least they should if they are to be integrated into rhetorical activity effectively.

In the sections that follow, I'll provide a rationale for this methodology, emphasizing how tracing Attitude and Agency allow me to explore, by extension, the community, rules, and divisions of labor present in piratical activity systems. I'll then explore future research opportunities made possible by my analysis, emphasizing the audiences who would most benefit from the theoretical, methodological, and pedagogical implications of this research project.

Previous Territory

Other Voices

I began this dissertation emphasizing a series of interrelated problems that face humanities researchers and writing pedagogues in the age of digital composition. In Chapter One, I explored the notion of agency, tracking differing theorizations of agenic capacity by linking the ability to act with the constitution of the subject and its imbrication in larger networks of agents. When considering the activity of networked writers in digital spheres, I emphasized what Yochai Benkler calls commons-based peer production or the practice of multiple individuals participating over digital networks to collectively create archives and texts whose authorship is distributed and whose ownership lies in the "common." This section explicitly linked the practice of commons-based peer production in the networked information economy to disputes over intellectual property, highlighting the (in)capacity of capital to continue capitalizing on non-rivalrous goods like knowledge production. I followed this introduction to distributed production with an exploration of genre, emphasizing the agenic capacities of genres operating as objects imbued with social motives. By tracing genre through the works of Bakhtin, Miller, Artemeva and Freedman, Bazerman, and others, I highlighted the capacity of non-human textual agents to initiate action, mobilize collective actors, and buttress the construction and proliferation of discourse communities.

Based on these initial explorations into Agency, I designed a research study that asked important
questions about the connections among peer production, intellectual property, authorship theory, and Rhetorical Genre Studies. Working from an initial hypothesis that agency is a distributed phenomenon that's embedded - to lesser and greater degrees - in the tools that mediate our activity, I turned to scenes of digital activity to limn the contours of agency and its distribution among networks of interrelated agents. This section connected communication and agency to the velocity of rhetorical objects, highlighting the viral and rhizomatic nature of media proliferation over digital networks.

In addition to considering the role of agency in distributed production, the first chapter also tracked the genesis of different theories of authorship and their connections to intellectual property policy and law. Relying on the work of Rose, Woodmansee and Janzi, and Vaidhyanathan, I reviewed the genesis of Romantic authorship from the Enlightenment through to the contemporary period, emphasizing the primacy of the Author and his ability to capitalize on intellectual creation at the expense of the public good. I also explored the union of Romantic authorship with utilitarianism instantiated in the U.S. constitutional copyright clause and brought contemporary articulations of posthuman subjectivity into conversations with atomistic conceptions of the author, drawing attention to the questionable foundations of intellectual property law in Western democracies. Especially important to these considerations of posthuman subjectivity in relation to intellectual property policy is the work of Krista Kennedy and Julie Cohen. Both authors point out the complex distribution of agency across human and non-human actors in both pre-digital and digital contexts. Further, especially in Kennedy's case, the construction of authorship in the legal and theoretical sense is called into question through the distributed, machinic agency of bot-written Wikipedia texts.

Chapter One also explored a fundamental conflict: the rate of technogenesis vs. the rate of sociogenesis. Relying on the work of Gille and Stiegler, this last portion of Chapter One argued that technological development typically outpaces the capacity of society, regulated by legislative bodies in developed democracies, to create guidelines for ensuring the highest level of prosperity in use. Because this research project exists in the Scene of distributed social production, this section emphasized the disjunct between analog intellectual property law and digital media practice to question the hegemony of
Romantic articulations of authorship undergirding contemporary intellectual property policy. This section also drew on Writing Studies scholarship to problematize Romantic authorship, emphasizing the social nature of writing and media composition both before and during the ongoing digital communications revolution. The final section of Chapter One introduced the Subject of this research study: the digital pirate. Because piratical practice explicitly ignores analog intellectual property paradigms and because piracy is practiced by millions of Internet users around the globe, I explored previous scholarship on pirates and piracy from Writing Studies to provide a picture of what work had already been conducted on this population and what could be explored in the future. As outliers, pirates embrace the results of technogenesis far before the parties that legislate sociogenesis; as such, they provide a meaningful population to investigate the conflict between intellectual property and distributed social production in digital spaces.

Soon after selecting pirates as my object of research, I realized that I needed a method to conduct investigations that not only qualify piratical attitudes on intellectual property but also pay close attention to the immaterial spaces that facilitate piratical activity and, likely, inform the production of piratical attitudes. As a result, I turned to previous work done in Activity Theory, Writing Studies, and Rhetorical Genre Studies to construct a methodology that addressed not only the individual pirate but also her activity inside wider contexts of piratical practice. I explored and explained the resultant communicational-mediational methodology in Chapter Two.

The methodology employed in this research study strives to bridge a couple key methodological binaries; namely, empiric-hermeneutic, micro-macro, subject-object, and communication-mediation. To effectively address the differing epistemologies of each couplet, methodologies and methods employed in The Piratical Ethos draw on a variety of analytic lenses; however, ontologically speaking, the research of this dissertation relies heavily on multiple iterations of cultural-historical Activity Theory. As an ontological account, Activity Theory situates human activity as multivalent, complex, socially and culturally situated, and reflexive. Because of its emphasis on tools and user-directed action, Activity Theory is easily applied to the foci of this research project: Attitudes of Subjects and Agency in Artifacts.
Before discussing the results of that study, let me explain how the methodology of *The Piratical Ethos* bridges the aforementioned methodological gaps, drawing on a variety of methods in the process.

*Empiric-Hermeneutic*

Carol Berkenkotter's call for "epistemological ecumenicalism" in "Paradigm Debates, Turf Wars, and the Conduct of Sociocognitive Inquiry in Composition" might have been a plea from an empirical researcher for equal treatment of qualitative, quantitative, and theoretical work in Writing Studies; however, until the recent revival in empirical methodologies led by Haswell, Anson, and others, work at the disciplinary core of Writing Studies skewed toward hermeneutic theory-making. The long period between the early 1980s and the mid 2000s saw writing research skew toward postprocess theories of either Marxist or identity politics persuasion; however, with increasing constrictions on humanities budgets in recent years, a growing contingent of researchers in the discipline argue for a return to replicable, aggregable, and data-driven methods and methodologies roughly comparable to those in the social science (if not the hard sciences). The methodology employed in this research project recognizes the import of empirics and hermeneutics by implementing a methodological strategy that draws attention to their iterative constitution of one another. The quantification of qualitative data in Chapter Three relies on a systematic implementation of grounded theory from the works of Glaser and Strauss to inform the development of key research questions as well as the identification and selection of data for the study. This chapter also relies on Cheryl Geisler's process of "analytic induction" to provide replicable methods of segmenting, analyzing, and coding streams of qualitative data; namely, text-based discussion forum posts. The conclusions garnered from the process of grounded analytic induction are empirical quantifications of qualitative data and provide insights into the Attitudes of piratical subjects.

The methodology employed in the empirical portion of this dissertation is balanced by an emphasis on the interpretive with respect to new media objects. Using Engestrom's third-generation activity system as a guide, the fourth chapter looks to the ways that genres, or typified social actions, are inscribed in the tools that mediate the individual and collective actions of piratical subjects. While different from pure hermeneutics, my work on new media rhetorical genres is still interpretive and relies
on pioneering language theory by the Bakhtin circle as well as later interpretive work by Miller, Berkenkotter and Huckin, Bazerman, Russell, and Spinuzzi, among others. The key to the interpretive, theoretical work of Chapter Four is the recognition that media and language are socially imbricated, contextual, and circumscribed with the attitudes and ideologies of the individuals, collectives, and networks through which they travel. Inasmuch as new media objects and language reflect user ideology and attitude, they also confer agency, defining the possibilities of media use, manipulation, and modification through their intertwined relation to cultural-historical use and the possible parameters of networked action. The hermeneutic work of Chapter Four emphasizes the cyclical relation among new media objects and their users, tracing out moments of iteration and emphasizing the reciprocity among individuals, their communities of practice, and the tools they use to mediate their networked digital activity.

Micro-Macro

Inquiry in the human sciences has long struggled with the question of scale. The tensions that arise from research that focuses on the individual versus research that focuses on context coalesce around generalizability and specificity: contextual research argues that deep understandings of the sociocultural, historical, and material structures of research situations allow for generalizable claims that can be tested against other similar contexts. Individual research often emphasizes the opposite by closely investigating the singular in order to attain granular details about specific research subjects. Obviously, research at the individual and contextual level of scope are important to understanding any research problem; however, most research methodologies have emphasized either the individual subject or the wider context. The research methodology I employ in this research project attempts to draw these two emphases together by looking to the important points of overlap where context and individual inform the construction of one another. This methodology doesn't attempt to define a prime originator or singular source of activity; rather, it recognizes that the relationalities that bring together contexts and individuals are productive points of rhetoric and elucidation. It also recognizes that to produce a *rhetorical* account of research
problems researchers must look to the context and individual, and the reciprocal relationship between the two.

Before I could explore the relationalities between individual and context, I first needed to define each. Chapter Three provides a rendering of the individual - or subject - of the research project by isolating the activity that characterizes user participation in piracy communities and then quantifying those multiple user perspectives. This produced an account of the subject as an ideologically motivated participant. Chapter Four explored the context of piratical action by highlighting the spaces and tools that mediate the individual and collective actions of digital community participants. Chapter Four also brought together subject attitudes from Chapter Three with agency embedded in contexts of mediated tool use, highlighting the relationalities between both the micro and macro levels of scope\textsuperscript{165}. These points of convergence between individual and context yield an important conclusion from this work: the attitudes of subjects participating in digital activities are often informed by the tools and spaces that mediate that activity; likewise, the spaces and tools designed by subjects participating in digital communities are inscribed with the social motives and desires of the individual as well as the wider network of users.

*Subject-Object*

In an absolute sense, the methodology of this dissertation is subject-centric inasmuch as the accounts Activity Theory provide rely on a present, active subject to function. The human centeredness is also present in Activity Theory's emphasis on community and division of labor; however, there is also a strong recognition of objects in Activity Theory's epistemology. Specifically, Activity Theory places great emphases on the objects that mediate human participation multiple networks and contexts. These objects, or mediating artifacts in Activity Theory parlance, not only play a crucial role in transferring human intention into action, they actually transform human intention; further, this transformation is central to recognizing the ontological status and agenic capacity of objects in the lifeworld. *The Piratical Ethos* supplements the Activity Theory account of mediating artifacts as agenic by recognizing their

\textsuperscript{165} While I use "micro" and "macro" to describe research emphases on the subject and context, the activity theoretic methodology employed in chapters three and four actually use the terms "meso" and "macro" to describe scope at the level of individual and collective/context.
function as rhetorical genres or recurring responses to typified rhetorical situations. This rearticulation recognizes new media objects as mediating tools that transform subject intention, sometimes enabling and sometimes constricting subject action in order to conform to the broader motives of the network.

While the methodology of the dissertation is subject-centric, it does its best to recognize the ontological status of objects, their agenic capacities, and their integral position in any account of rhetorical activity. By providing both an account of the subject vis-a-vis the analysis of attitudes in Chapter Three and an account of the object vis-a-vis the new media object analysis in Chapter Four, The Piratical Ethos tries to span the divide between subject and object centric methodologies, instead focusing on accounts of each as well as the overlaps and relationalities that occur between the two.

Communicational-Mediational

While I might have characterized the methodology of this research project as "empirical-hermeneutic," "micro-macro," or "subject-object," I chose "communicational-mediational" for a couple of different reasons. First, I was inspired by Spinuzzi, Hart-Davidson, and Zachry's 2006 presentation "Chains and Ecologies: Methodological Notes toward a Communicational-Mediational Model of Technologically Mediated Writing." In their article, the authors claim that "knowledge work" or the kinds of collaborative productions created by distributed users over communication networks require new research approaches that account for the textual objects produced as a result of knowledge work as well as the socio-cultural and technological affects of such labor. In their article, Spinuzzi, Hart-Davidson, and Zachry explore ways that "the camera follows the ball" of communication through the "transactional, intersubjective exchange of information, thoughts, writing, or speech" while also attending to the way the "camera follows the game" by observing the "systemic dynamics and changes in strategy" embedded in broader rhetorical contexts or ecologies (43-5). The emphasis on communication and mediation described through the metaphors of Spinuzzi, Hart-Davidson, and Zachry's article seemed to dovetail nicely with the activity theoretic analysis I hoped to conduct; further, the author's use of "communicational-mediational" seemed to encompass the "empiric-hermeneutic," "micro-macro," and "subject-object." Let me explain.
The "communicational" focus from "Chains and Ecologies" encompasses the subject-centric nature of interpersonal communication used in this research study to uncover piratical attitudes; further, the use of grounded theory and analytic induction in Chapter Three rendered an empirical account of communication. Finally, by their nature of scope, investigations into the subject are circumscribed to micro-contexts of the individual. In contrast, the "mediational" focus from Spinuzzi, Hart-Davidson, and Zachry is object-centric in its attention to the objects that constitute contexts of rhetorical action in piratical spaces; further, the heavy use of Rhetorical Genre Studies to analyze mediating technologies such as browser plugins and extensions is theory-driven hermeneutics. Finally, by their nature of scope, investigations into contexts and ecologies of action must account for the macro-contexts of what Burke famously called the "Scene." The communicational-mediational methodology illustrated in Chapter Two and put to work in Chapters Three and Four strives to address each constituent of the aforementioned couplets (Table 6) while also highlighting how these apparent binaries intersect and overlap toward the iterative production of rhetorical action and identity - especially in contexts of digital or networked activity.

Table 6. Communicational-Mediational Methodological Couplets.

<table>
<thead>
<tr>
<th>Communicational</th>
<th>Medialional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empiric</td>
<td>Hermeneutic</td>
</tr>
<tr>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>Micro</td>
<td>Macro</td>
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</tbody>
</table>

*On Attitudes and Subjects*

The communicational portion of the methodology proposed in Chapter Two was put to use in Chapter Three, revealing the motivations, ideologies, or what Burke called "Attitude" of the Agents or subjects involved in piratical activity. Though Attitudes "modify [an individual's] ways of action" from the outside, they tend to *appear* as atomistic, self-contained viewpoints from which individuals claim agency and carry out activity (Burke, *Grammar* 237). An investigation into Attitudes of Cartesian subjects might appear contradictory to the wider body of authorship theory and poststructuralist thinking concerning the fragmented, distributed nature of the author-subject; however, research in the broader
humanities as well as Writing Studies continues to research individual authors writing or creating individual texts. Working in concert with the "linguistic turn," the "social turn" in the humanities allows researchers to study individuals and their creations while also recognizing the essential contributions from outside the individual. Chapter Three proceeds with this subject-epistemology, recognizing that an individual's subjectivity is a socialized product of cultural and historical development, constructed from the outside through the myriad connectivities that constitute experience; however, this outside is intrinsic, a deeply embedded, multivalent arrangement of cords and knots that appear to coalesce into an individual subject. By tracing the attitudes or ideologies that circulate and coalesce around particular activities such as piracy, Chapter Three attempted to answer the question, "Who are the subjects of piratical activity?" with the answer, "Attitudes X, Y, and Z are the most important components of Subject-Identity in piratical spaces."

Relying on the basic tenants of Glaser and Strauss's work in grounded theory to develop my research questions, identify the phenomena I hoped to observe, and select relevant data for analysis, I also incorporated Cheryl Geisler's process of analytic induction to segment, code, and recode the data culled from user-generated discussion forum posts related to intellectual property and piracy. The bittorrent collectives I investigated are what Henri and Pudelko call "communities of practice" characterized by strong ties, sustained community participation, and information object production. The identification and quantification of user attitudes are easier to deduce in such virtual environments because the continued existence to the site requires collaborative relationships, common practices, and collectively recognized needs and desires. Though the attitudes that inform user piratical user identity and community ethos aren't capable of being condensed into a singular attitude, they bear similarities to one another and aggregatively constitute what I call the piratical ethos.

Overwhelmingly, attitudes toward intellectual property in the participatory archives skewed toward resistance. Of the sample considered, 82% of codable data segments evinced some form of resistance, primarily in economic and technological terms. Those members of the community supporting intellectual property relied heavily on Lockean "Sweat of the Brow" arguments to stake their claim to the
legitimacy of intellectual property doctrine. A smaller percentage evinced a protectionist justification for intellectual property, arguing that for future technological, scientific, and artistic innovation to take place, a protection must be provided for intellectual property creators. Interestingly, while the processes of data selection and coding were strongly guided by grounded methods, the protectionist arguments tended toward mainstream academic and legal justifications for the continuation of intellectual property in the form of copyright. This correlation suggests that the popular discourse of intellectual property propagated by copyrightists and the legal establishment influences individual articulations of some pirates and structures the support-response of lay users.

Attitudes that resisted intellectual property were much more complex than those of support and required additional coding schema to quantify. While some attitudes of resistance adopted popular discourse indictments of copyright on the basis of an erosion of public or common goods (14%), the overwhelming majority of segments (70%) claimed economic and technological resistances. As the data initially coded as economic and technological were so complex, I developed a tertiary coding schema for each. Because these user attitudes comprise over 50% of the entire sample size, I argue that attitudes of technological and economic resistance comprise the chief attitudinal perspectives constituting the piratical ethos.

Comprising 42% of the economic attitudes of resistance and 13% of the overall dataset, attitudes of anti-corporatism constitute the largest quantity of codable segments and suggest a deep seated distrust of the content industry by many Internet users. Individuals who adopted the anti-corporate attitude often referenced copyright as a tool for corporations to generate profits at the expense of artists and creators, highlighting an inverse form of the "Sweat of the Brow" argument for intellectual property protections. This finding suggests that the erosion of "Big Media" and the rise of smaller, independent media collectives that emphasize profit sharing among label and artist at the local level could produce important transformations in the practice of piracy and instances of intellectual property infringement.

In a close second to attitudes of anti-corporate economic resistance, attitudes of technological resistance that emphasize the "social" constitute 11% of the overall data sample and 39% of the
technological. These attitudes are perhaps the most interesting quantifications of the entire study as they highlight the developing tensions among technologies of reproduction/circulation and social media. Subjects rejecting analog intellectual property using the social defense tend to emphasize the capacity of piracy to spread awareness of artists to wider audiences outside specific localities and contexts. This is especially true of artists on independent labels whose geographical range is limited by economic and temporal factors. Users adopting the social attitude also highlight the role of community as a justification for piracy. Citing various forms of sustained engagement and community development, these users emphasized the piracy network as an augmented virtual space where their participation in various practices of participatory archive creation and curation were motivated by affinity connections to other users in the same community. The correlation between social attitudes of resistance to intellectual property and participation in contemporary forms of participatory archive production suggests a fascinating component of the piratical ethos: namely, individuals in networked digital archive building reject analog intellectual property protections because they're incommensurate with new sharing technologies and alternative media distribution and circulation pathways. These transformations in attitude should be considered integral for understanding Web 2.0 (and beyond) user motivation and could become productively integrated into intellectual property reform for the digital era. Perhaps more importantly, recognizing the importance of new media sharing technologies on the formation of user attitudes and identities might lead to new paths of user-driven new media object development in a variety of work, education, and leisure contexts. Before I explore these potentials, let me first recap the findings of research on "objects."

On Objects and Agency

The mediational half of the methodology described in Chapter Two was put to use in Chapter Four for a couple of different purposes: first, by focusing on the new media tool-based interactions that mediate piratical activity, Chapter Four analyzes the ways that objects play an integral role in facilitating particular kinds of actions in the Question.cd media ecosystem. Second, the focus on objects extends the scope of research beyond the subject to the macro-level contexts of collective action in sites of
participatory archive creation. Finally, by closely mapping the generic function of new media objects at the meso and macro levels of scope, Chapter Four advocates a reorientation toward tool-use, emphasizing the iterative relation and co-construction of subject, object, and agency in sites of distributed social production.

As Burke makes clear in *Grammar of Motives*, Agency, or *instrumental cause* is necessary to carry out any Act (284). The objects that Agents engage to carry out particular actions function as intermediaries that transform human desire and are enabled from outside the subject itself. In other words, tool-use actually *transforms* the Agent, reshaping subject-desire as well as the entire system, network, assemblage, or, in Burke's words, "Scene" where Acts occur. Implicit in Burke's work and explicit in the later writings of Hayles, Deleuze, and DeLanda is an ontological shift that rejects the hegemony of the Cartesian subject, instead positing that human activity is a complex intermingling or knotwork of human-object interactions that not only direct action but also circumscribe agency. Recognition of the iterative relation among subject and object is key to understanding Chapter Four; however, without some sort of methodological approach to sketching this dynamic, the conclusions of the section rested on shaky pins. To address this lack, I turned to the Writing Studies subfield of Rhetorical Genre Studies to understand and map the complex relations among objects and subjects in sites of distributed social production.

In "Uses of Activity Theory in Written Communication Research" David Russell points out that "Genres are, in a sense, classifications of artifacts-plus-intentions" (45). This reading of genre as a dynamic object embedded with social desire is essential to understanding the function of new media objects in general as well as in sites of participatory archive creation. Artifacts such as browser plugins, tagging systems, bittorrent trackers, and content management systems mediate user activities at meso and macro levels of scale; however, embedded in each of these tools one finds, to varying degrees, attitudes of intellectual property resistance from Chapter Three. In other words, *these attitudes are coded into the design of the artifact*. This recognition might appear rather commonplace; in fact, most humanities scholars recognize that technologies are ideological. That being said, there have been relatively few studies that tie together the attitudes and ideologies of technology users and designers with new media
tools that facilitate particular kinds of action. Chapter Four assists in this work, providing a theory for analyzing new media genres on the basis of form, substance and medium; further, Chapter Four also highlights how large-scale rhetorical genres operating at macro-levels of activity shape user experience, agency, and participation (Fig. 35). When taken together with the attitudinal analysis of Chapter Three, Chapter Four provides a novel path for explaining how agents and technologies work together in a cyclical relation to construct experience in sites of distributed social production. In the final section of this research project I will consider what this analysis offers stakeholders in academic institutions, the private sector, and policy making circles. The implications and extensions of this section will revolve around methodological development in the digital humanities, information and experience design in technical communication settings and intellectual property reform in multiple arenas.

Stakeholders & Additional Applications

In addition to developing a communicational-mediational methodology for exploring distributed social production in digital environments, this work also hopes to generate robust accounts of its own value. To that end, this last section will consider what stakeholders might gain from explorations into the
dynamics of coordination in networked activity systems following the methodology and conclusions I've
developed here. Though my own study is small-\(n\), it is my contention that the approaches and techniques
developed in Chapter Two and deployed in chapters three and four are favorable departure points for
meaningful work in rhetorical inquiry, technical communication, and intellectual property policy
development.

**Digital Humanities Researchers**

As an emerging, cross-disciplinary field, the digital humanities investigates how humanistic
disciplines can be enhanced by sustained inquiry into the intersections of media, technology, and human
production. To date, these examinations employ a vast array of methodological orientations from
computational analyses of linguistic problems to cyberethnographies of digital cultures. While some may
view this diversity of methodological orientation as cross-disciplinary weakness, I take an opposite
stance, arguing that epistemological ecumenicalism in methodological orientation is what creates
complex, euphonic renderings of symbolic and material action in the digital realm. Following Johanek in
*Composing Research*, I believe that methodological plurality and contextualist epistemological stances
allow us to consider not "which research method or which epistemological stance is sensitive to context"
but to ask instead, "In what context does that sort of argument make sense . . . . In what contexts do
divided ways of knowing serve us well?" (102). Because the contexts of digital humanities research are
deeply imbricated in what Pickering called "the mangle" or the "mélange of user practices, socioeconomic
conditions, and technologies [that] produce experience," the communicational-mediational methodology
employed in *The Piratical Ethos* may prove useful to researchers investigating the ensemble of rhetorical
practices circulating through networks of distributed social production (qtd. in Nardi 70).

In *Humanities Computing*, McCarty recognized that the bulk of scholarly work conducted in the
"digital humanities" takes two forms: scholars are either using computers to do analytical work or they're
doing analytical work, sometimes with the help of computers, on computer mediated spaces\(^{166}\). This

\(^{166}\) McCarty's own digital humanities scholarship skews strongly toward the use of computation to confront
traditional humanities problems; however, interestingly enough, his work in *Humanities Computing* is an exercise in
analytical bifurcation is useful because it draws attention to the methodological tensions that exist between two prominent camps in the field: those that draw their methodological epistemology from computer science, statistics, and mathematics and those whose methodological epistemology is rooted squarely in the social sciences, most notably anthropology and sociology. One needn't look far into disciplinary publication to see this bifurcation at work. Issue 6.2 (Summer 2012) of *Digital Humanities Quarterly* contains scholarly articles on various aspects of digital culture including pieces on embodied expression in digital spaces, the mechanics of peer-produced academic projects, and the role of virtual research environments in teaching the humanities. Contrastingly, the Summer 2012 edition of the *Journal of the Digital Humanities* included articles on mass-corpus distant reading of archived newspapers, computational renderings of ancient Roman transportation networks, and a GIS-powered database of French book traders during the 18th and 19th centuries.

While *The Piratical Ethos* does rely on quantification to make claims concerning subject attitudes, it cannot be considered digital humanities scholarship that uses computers to do analytical work; rather, the scope, methodology, and conclusions derived from this research project are more akin to what is often called digital anthropology, netnography, or online ethnography. This closeness to the social science strain of digital humanities scholarship is the result of a simple reality: computers can't think, and that's ok. As McCarty notes, computing encounters systemic failures when required to solve problems requiring "even a minimal degree of intelligence . . . [but] What if we were to ask what we can do, not just within the limits its propensity to failure imposes, but also with these limits?" (4). That desire to think within the limits of systemic incapacity continues to yield rewards as digital humanities implement applying analytics to academic cultures who use computers to mediate their own work. In this sense, *Humanities Computing* is a fascinating attempt to reconcile the two digital humanities cultures.

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167 In this sample, the articles in *Digital Humanities Quarterly* skewed toward research into digital cultures while the articles from the *Journal of Digital Humanities* were heavily computational in nature; however, this isn't indicative of editorial sway at either publication but instead reflects the multiple research foci and methodologies being published under the broader heading of the "Digital Humanities."

168 See Holloway-Attaway and Hogskola (2012), Causer and Wallace (2012), and Bellamy (2012).

169 See Torget and Christensen (2012), Meeks and Grossner (2012), and Burrows and Curran (2012).
methods of distant reading, GIS, and metadata analysis to produce novel ways of seeing and interpreting information through computational lenses.

For those digital humanists investigating the practice of science and technology as cultural activity, interpretive analytics that may or may not use computers are often appropriate. Because science, technology and digital culture occur within a knot of "material agency" wherein "powers, capacities, and performances" are located in the machinic assemblages of human and non-human actors\textsuperscript{170}, methods and methodologies for studying such spaces must take into account the world of *anthropos* and *machina* as theirs is our shared world of *doing things* (Pickering 6-7).

As digital archives grow and expand in coming years, new research in the digital humanities will benefit from sustained engagement with questions of distributed social production in archival spaces. Beyond large-scale public archives like Archive.org and piratical archives like those considered in this project, community archives, heritage archives, and academic archives will provide important sites of participatory activity. Open-source web publishing platforms like Omeka and Inventio are making the tools of participatory archive creation and curation available to wider audiences across the web, enabling more and more members in particular communities of practice to engage with one another over distributed forms of archive building and tool development. It is my contention that conducting analyses like Chapter Three's use of grounded analytic induction will assist researchers of participatory archives to get at the attitudinal or ideological underpinnings of *why* individuals and communities participate in such settings; further, by paying close attention to the generic function of tools that mediate user activity in such spaces, researchers may gain insight an important but underarticulated area in digital humanities research: the intertwined relationship among tool use, tool development, and user attitudes in digital sites of distributed social production.

\textsuperscript{170} Deleuze and Parnet discuss the assemblage in ontological terms, highlighting how desire and coordination interlace to make actual the virtual, emergent cyborg lifeworld. The authors note, Desire only exists when assembled or machined. You cannot grasp or conceive of a desire outside a determinate assemblage, on a plane which is not pre-existent but which must itself be constructed . . . In retrospect every assemblage expresses and creates a desire by constructing the plane which makes it possible and, by making it possible, brings it about. (96)
The participatory archive as research site and object of study in this dissertation provide novel and underexplored areas of inquiry for digital humanities researchers; however, the *process* of tool design and implementation illustrated herein might serve as a productive starting point for future research into the overlaps and gaps between technical communications in the wild and technical communications in hierarchical, institutionalized settings. By conducting future research into the attitude-tool-community matrix that characterizes formal technical communication and interface design, scholars studying the relation among technology, tool-use, digital communities, and distributed social production might evaluate whether the tool development process illustrated in this single site study is scalable across other research populations and locations.

Michael Salvo's article, "Rhetoric as Productive Technology: Cultural Studies in/as Technical Communication Methodology" argues that technical communicators shouldn't aim for "transparent" models of communication wherein messages are sent and received with no interruption or static from broader rhetorical contexts. Instead, Salvo claims that technical communications are riddled with contesting power dynamics among humans, technologies, and institutions. Moving away from instrumentalist articulations of technical communication as unproblematic transfer of meaning, Salvo recommends an attention to invention, design, arrangement, and deployment of technology in culture to more successfully critique and create technical communication scholarship in the field. In this sense, Salvo views rhetoric itself as productive technology of culture - a collection of semiotic and material tools that assists individuals in enculturating themselves into the tribes, affinity groups, communities, and networks that collectively construct experience. The work of *The Piratical Ethos* embraces Salvo's definition of technical communication inasmuch as it attempts - with varying levels of success - to pay attention to the culture of computer-mediated communities while also investigating the role tools play in conferring agency and constructing culture.

Salvo's renewed attention to the cultures of technical communication is synonymous with consideration of users in the design of technical communications. It is my hope that the methodology
employed in *The Piratical Ethos* will assist technical communicators practicing user-centered, participatory design of technical documents, interfaces and tools by providing viable methods for mapping user attitudes and needs in the tool development process.

As interface design moves into digital spaces and as visual language increasingly depends on mediating tools and sharing technologies to be rhetorically effective, the transformation of unorganized, unstructured, and complex data into navigable and customizable interfaces requires a sustained attention not only to semiotics but also to the cultures and audiences wherein particular documents and technologies circulate. In other words, interface design should be considered an exercise in user-centered design; or, in the best case, an engagement with participatory design. Close attention to the *culture* of piratical communities of practice in this research project reveals that successful tool design is a function of the needs and attitudes of the community members who put the tool to use; further, because technological transformations increasingly accommodate wider user participation through metadata generation and linking technologies, an attention to the networked qualities of information objects is an essential awareness for contemporary technical communicators. Yet, most technical communication environments aren't characterized by the kinds of distributed social production in "wild" locales that we see in this research project. In the sections that follow, I'll consider how the tool and attitude analyses of *The Piratical Ethos* could be important for tool and interface design in institutionalized settings, focusing on the role of participatory design and the importance of accounting for culture in creating effective technical communications. It should be noted that this section is speculative and will require a good deal of further research into sites where organizations rely on centralized solutions to evaluate whether the methodology and conclusions of *The Piratical Ethos* are scalable across different technical communications contexts both in the "wild" and in formal, institutionalized settings.

One important conclusion drawn from the analyses of Chapters Three and Four is the mutually informing relationship among community, individual, and goal in the digital tool design process. The rules and goals of the community of practice wherein individuals participate shape the expectations of users and provide stable metrics of how to assess their contributions to wider community networks.
Likewise, the motivations of individual community members alter the trajectory of the community in small, incremental ways. The aggregative changes affected over large timescales in communities of practice like Question.cd are the result of this iterative relation and challenge many long-held assumptions about the effectiveness of asymmetrical or vertical organizational structures. As this research suggests, in the wilds of technical communication, lateral or horizontal organization tends to prevail, enabling site users and community goals to coexist and develop congruently in a process of systemic flow and contradiction, resulting in massive peer productions who owe their existence to gift economy ethics, not capitalist motivations.

So what's the importance of the individual-community-tool building process to technical communication environments in corporate, institutional, or non-wild settings? In work-based activities typical of post-industrial knowledge work, distributed production characterizes many work environments. As brick-and-mortar institutions give way to various forms of remote work and as large-scale organizations require employment forces to engage with shared systems across global expanses, employees are progressively engaged in forms of work that resemble, at least in inputs, the participatory archive building investigated in this study. Though individuals in the community don't self-select to participate, and despite motivation for individual participation arising from profit motive, the process of distributed social production is increasingly the norm for knowledge work in the networked information economy. Considering the remarkable tools that piracy communities have developed to turn data into information, ease navigation of large information structures, and facilitate various forms of sharing via connective technologies, future research into the attitude-tool development process might consider how top-down organizations develop and implement new media objects that mediate organizational activity.

To evaluate whether the conclusions of *The Piratical Ethos* hold in institutionalized settings, this future research could consider how worker attitudes toward workflow, information structure and connectivity may or may not play a fundamental role in tool construction and interface design.

In *Tracing Genres through Organizations* Spinuzzi highlights how workers in institutional settings don't wait around to be rescued by information designers but "create their own practices, tools,
and texts constantly, sometimes in cooperation with existing information systems, sometimes in
competition with them" (2-3). This flies in the face of many user-centered tool design principles and
processes inasmuch as the development of "centralized solutions" is perhaps not the best method of
developing new media objects that mediate worker activity, increase efficiency, and allow workers to
successfully conduct work in processes of distributed production. Taking a cue from Spinuzzi's analyses
of the textual and new media mediations that structure worker activity and the analyses of The Piratical
Ethos, I argue that the development and implementation of user-centered tools must be flexible enough to
accommodate individualized means of making sense of information while also remaining stable enough
to provide systemic analyses of information to yield panoramic readings to meet organization-wide goals.
The key to making this happen is twofold: first, tool designers should understand the attitudes that
motivate individual worker behavior as well as the broader community so they may develop fuzzy, but
stable, maps of the dominant categorization trends of institutional culture. Second, to acquire this sort of
information, tool designers could implement folksonomic metadata creation tools so users can curate their
data in ways that make sense to them as well as the broader communities where they work.

In my own investigations into the community-individual-tool matrix, I traced how new media
objects that rely on user-generated metadata facilitated navigation of large-scale archives while also
circumscribing particular paths of activity. Following this particular methodology might allow technical
communicators and interface designers to co-develop tools that embrace a process of collaborative or
participatory design. Because the Activity Theory analysis conducted in The Piratical Ethos accounts for
the historical use of tool-mediation as well as individual and community-wide interests and points-of-
view in relation to archive construction, it provides one method mapping the successes and contradictions
inherent in participatory archive activity systems. Communicators in institutional settings might engage in
such investigations to get around two central problems of "user needs" design; namely, the reality that
users can't need what they don't already know in practice and the problem of individual preferences and
opinions that singular users foreground to the detriment of networks or the broader community (Miettinen
and Hasu 2). By mapping user attitudes as well as the function of new media rhetorical genres in
constructing particular forms of institutional activity, interface designers might be able to create a picture of the kind of distributed activity that characterizes work in workplace settings; further, by implementing new media tools that allow users to curate institutional information for personal as well as communal purposes, interface designers could identify contradictions in formalized work structures that might be mitigated by lateral information management of the workers themselves. Paying close attention to the attitudes of workers and by designing tools that meet particular motivational purposes and increase systemic participation, interface designers and technical communicators could play an important role in bringing users, tools, and institutional goals into closer alignment.

**Intellectual Property Stakeholders**

Beyond the methodological contributions of this research project, there are also important implications for those invested in varying aspects of intellectual property. These implications extend beyond the methodological problems of humanities researchers and the implementation of flexible but stable information technologies for technical communicators. Concentrated around a network of stakeholders whose engagement in intellectual property policy-making and reform has fundamental implications in the near and distant future, the investigations of *The Piratical Ethos* provide important contributions and raise important questions in at least three areas: 1) authorship theory; 2) intellectual property in the digital age; and 3) the professoriate.

Foucault's "What is an Author?" is one of the earlier attacks on the theory of Romantic authorship. Since its publication, numerous theorists and philosophers have continued the project of deconstructing authorship, and with it, liberal Enlightenment subjectivity. Yet, it is just this subjectivity that continues to structure intellectual property doctrine at the national and transnational level. In an era where the intellectual outputs of corporations are protected with even more rigorous measures than those of "individual" authors, and where the notion of the "individual" is applicable even to multinational
corporations\textsuperscript{171}, the notion of autonomous subjectivity, and attendant theories of Romantic authorship that come with it, play a central role in public-policy design from local to global levels. Reorganizing intellectual property doctrine to account for systemic, networked, or posthuman theories of authorship reflects a recognition that creative artifacts are more the sum of their parts than singular creations drawn from individual wellsprings of internal creativity. Yet, moving toward a system of attribution to many actors - past and present - that contribute to the construction of an artifact is diametrically opposed to the function of intellectual property as property. As a commodity, the monetary and reputational benefit of authorship cannot be distributed across an entire system of actors - the logistics of proportionality make such an endeavor impossible; however, when we rethink intellectual properties as public good, \textit{citational activity} make recognition and attribution - not capital - the goal of cultural appropriation. Such a move is in keeping with the data coded as public resistance in Chapter Three and dovetails well with the utilitarian intent of the original US Constitutional Copyright Clause.

The pervasiveness of Romantic theories of authorship do have roots in Enlightenment perceptions of the subject; however, in policy-making decisions regarding intellectual property protections, they often function as the key component in organizing intellectual production as privately held economic commodity, not contribution to the public good. Taking a page from the cultural environmentalist program, revisioning intellectual property as \textit{public contribution} not \textit{private property} could revitalize the public domain, allowing intellectual properties to circulate with less impediments so individuals and communities might put them to their own use without monetary recompense or fear of reprisal for source appropriation. This rearticulation of intellectual property is particularly \textit{apropos} for the digital age because it recognizes the what Lessig calls the "non-rivalrous" nature of intellectual creation in an age of infinite digital reproduction; further, because sharing technologies increasingly allow individuals to circulate information products across networked systems at global scales, readjustment toward a citational paradigm addresses many of the criticisms of developing economies concerning access of intellectual

\textsuperscript{171} This detail isn't a reflection on Romantic theories of authorship, \textit{per se}; however, recent decisions such as \textit{Citizens United v. Federal Election Commission} continue to underscore the pervasiveness of Enlightenment subjectivity in judiciary, legislative, and economic public policy.
creations. Moving toward the citational paradigm is a productive first step in addressing disjuncts between knowledge distribution in networked information economies and developing economies. Removing the barriers to access created by understanding knowledge as commodity could encourage creative and scholarly cross-pollination and alliance building across national borders.

As the analyses of *The Piratical Ethos* demonstrates, individuals involved in sharing digital artifacts over piracy networks often explain their activity as a natural outcome of technologies of sharing and reproduction. Because digital communities like Question.cd crowdsource metadata, they're able to construct participatory archives that allow for appropriation, reuse, and circulation of digital artifacts in ways that meet community needs and desires, allowing users to diffuse cultural contributions across the globe. Going forward, intellectual property policy in the digital era should address the networked nature of non-rivalrous digital artifacts, recognizing that circulation and replication will continue to accrue as new media objects - and the communities that use them - intensify connection to other nodes in the worldwide communication network. Such a recognition of circulation, duplication, reproduction, and connection may take a citational tact - as is the case in CreativeCommons or GNU licenses - or those recognitions might create heretofore unknown licensing agreements that allow the creative apparatus to capitalize on intellectual creation while encouraging artifactual use, reuse, and appropriation for the common good.

Recent scholarship in Writing Studies focuses on the ways that digital artifacts travel over networks and serve as important sources for student (re)composition. DeVoss and Porter's "Why Napster Matters to Writing" is prescient it's consideration of a new "digital ethic" of student writers that understands file distribution and circulation as an alternative compositional process. The authors argue that the new digital ethic of file sharing should be engaged by writing instructors so writings that

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172 In *Configuring the Networked Self*, Cohen acknowledges that access to knowledge is a core component to a "just regime of copyright" for the digital future. Noting that "Strategies for ameliorating the North-South access gap involve a range of reforms to national and international laws" that are being hindered by "pressure from established copyright interests . . . [such as] the General Agreement on Tariffs and Trade," Cohen goes on to consider how flexible copyright policy rooted in semantic discontinuity might provide the interstitial spaces of play and exploration required to encourage bi-directional knowledge spread between Internet users in the Global North and Global South (188).
interweave numerous forms of digital media for distribution across networked environments and diverse audiences can be considered on their own terms - not in terms of the traditional rhetorical situation a la Bitzer but instead in terms of ecologies a la Syverson and Edbauer-Rice. Ridolfo and DeVoss's "Composing for Recomposition: Rhetorical Velocity and Delivery" as well as Ridolfo and Rife's "Rhetorical Velocity and Copyright: A Case Study on the Strategies of Rhetorical Delivery" treat other aspects of digital writing in the contemporary period, focusing on the role of velocity and accretion in artifactual use and reuse. Both works highlight the disjuncts between strategies students use to acquire and appropriate source materials and the analog copyright regimes that delineate the legal bounds of digital recomposition.

The work of these authors and numerous others draw attention to the responsibility of writing instructors to take notice of the circulation and appropriation of digital artifacts in their course design. This attention requires a teacherly understanding of the ins and outs of copyright doctrine and fair use in order for writing pedagogy to keep up with the rapidly transforming terrain of digital copyright policy; further, writing pedagogy should advocate that intellectual property literacy become a core component of Writing Studies classes - especially those who go by names like "New Media Writing," "Digital Writing," and "Technical Communication." As the findings in The Piratical Ethos suggest, attitudes that resist intellectual property are multifaceted and complex. As writing instructors, we must be willing to exercise some flexibility in our own approaches to digital intellectual properties, engaging these different attitudes toward intellectual property in ways that continue to value the intellectual contribution of creators while also recognizing the fundamental transformations rendered by our students and their engagement with technologies of reproduction, distribution, circulation, and appropriation. This pedagogical shift is difficult but important work, requiring what Kennedy and Howard call a "rebalancing of understandings of the value of knowledge work within the context of the information age" (462).

Another important area where intellectual property stakeholders might engage the methods and conclusions of The Piratical Ethos is the bourgeoning Open Access (OA) movement. In essence, Open Access is the practice of publishing and distributing academic research with fewer restrictions or
interferences from academic publishers, university presses, and departmental censors. This vetting and publication paradigm not only allows for higher levels of transparency in the peer review process, it also fosters more collegial relations among universities, colleges, departments, and researchers on a transnational scale. As Donahue argues in "'Internationalization' and Composition Studies: Reorienting the Discourse," Writing Studies has for too long focused on the internationalization of its own program of pedagogy, theory and research. Donahue claims this tendency toward navel-gazing has facilitated a harmful political economy of knowledge production. Going forward, OA publication models could increase transnational collaboration on issues in writing and rhetoric by increasing multidirectional access to disparate communities of scholars around the globe. Because OA publication paradigms remove barriers to knowledge spread and information proliferation they create relational ecologies where ideas, expressions, ideologies, and values move across national borders, less impeded by the interests of publishers and distributors who traditionally provide access to publicly funded research for a fee.

In addition to providing increased access to scholarship, OA publication makes use of various new media objects to facilitate the editorial and publication processes. Utilizing wikis, archive curation software, content-management systems, and database-driven research repositories, OA publications implement various open-source publishing and archiving tools to collect and distribute large volumes of scholarly material. As OA continues to gain traction in the humanities and social sciences, it will be important for information designers to consider the role these tools play in facilitating particular kinds of distributed social production; further, as new exigencies arise in the OA community, information designers will need to tap into the dominant attitudes and ideologies of OA users to design and implement tools that meet community needs and enact community ethics.

Finally, and perhaps most importantly, one of the most important takeaways from this research project is the simple recognition that digital copyright policy should be developed for communities of practice - not just for the author and artifact it protects. In other words, before digital copyright reform and rearticulation can proceed, we must collectively create rhetorical accounts of artifacts, highlighting the stakeholders, their attitudes or motivations, and the networked context wherein these artifacts will
circulate. This process of accounting might take a variety of forms; however, the method I've described in this research project highlights the role of individual subjects as well as mediating technologies in the construction and circulation of new media objects. As processes of distributed social production continue to characterize human knowledge work, it will be more and more difficult to trace out the complex host of actors that play a role in making of objects. Relying on the Activity theoretic, pentadic methodology employed in this research project, I hope future researchers may use it to produce thick, rhetorical accounts of networked activity while also identifying systemic contradictions that challenge and amend my own conclusions.
## APPENDIX

### Appendix Item I. Content Codes: Support for Intellectual Property

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<thead>
<tr>
<th>Type of Attitude</th>
<th>Definition</th>
<th>Examples</th>
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| **Sweat of the Brow** | Code as *sweat of the brow* (S) any topical chain that justifies intellectual property on the grounds that an artist is entitled to the fruits of their labor through compensation. | (a) references the amount of work or labor required to create as justification for compensation (e.g., "Artists work hard to create music and books - they deserve to be paid for their hard work," "I can't take money out of the pocket of an author because he is entitled to payment for his creation")
   (b) references the author portion of the US Constitutional Copyright Clause as justification against piracy (e.g., "The US copyright clause states that "Authors and Inventors" should have exclusive right to their creations for a limited amount of time so they can reap the benefits of their efforts") |
| **Theft** | Code as *theft* (T) any topical chain that states that piracy is outright theft. | (a) explicitly equivocates piracy as an act of theft (e.g., "Piracy is theft of someone else's property - intellectual or physical).
   (b) rejects arguments against "copying" on the basis of a copy is equal to a lost sale (e.g., "Copying might not remove an item from the world but it does deprive the artist or label from a sale") |
| **Artist Rights** | Code as *artist rights* (A) any topical chain that argues that artist's are entitled to determine how their content is used by consumers. | (a) references control of content as an artist's right (e.g., "Artists should be able to determine how their content is used once they release or publish it," "You shouldn't be able to change someone else's work without their permission")
   (b) references piracy as a moral transgression against the author (e.g., "Piracy might not be stealing in the classical sense, but it is not ethical because you are taking an intellectual property without the author's consent") |
| **Protection** | Code as *protection* (P) any topical chain that argues that intellectual property should be protected because it insures future production. | (a) argues that creators need "incentive" to produce future work through protection of intellectual property (e.g., "If authors didn't have any legal protections, why would they continue to make work that could just be stolen by someone else?," "Money is the incentive for people to make. If there were no incentive, there would be no new production")
   (b) argues that the creation of intellectual property requires vast resources, or "research and development" (R&D) that should be protected (e.g., "It costs a lot of money and time to produce a drug. Intellectual property is necessary to protect that investment," "The creation of a book is an expensive process and should be protected to ensure books continue to be published")
   (c) argues that protecting intellectual property is necessary to maintain an honest exchange of goods (e.g., "You need IP protections to ensure high quality of goods. If I make a crappy car and call it a Honda, does that make it a Honda? No!") |
## Appendix Item II. Content Codes: Resistance to Intellectual Property

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<th>Type of Attitude</th>
<th>Definition</th>
<th>Examples</th>
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| Public           | Code as *public good* *(P)* any topical chain that resists IP on the grounds that it damages the public interest. | (a) references IP as a barrier to the creation of art (e.g., "IP laws are a chokehold on human creativity," "artistic creations like the remix are illegal but should be allowed to flourish")  
(b) explicitly references "culture" or examples of art restricted by IP (e.g., "Intellectual property prevents new forms of culture - like remix," "IP laws stifle cultural production," "the art of Andy Warhol couldn't exist with today's IP laws")  
(c) references IP as at odds with the rights of the public interest (e.g., "Copyright should enforce the public interest as well as the interests of the creator," "the US constitution says the public should benefit from copyright," "Dead artists material shouldn't be protected by IP") |
| Economic         | Code as *economic* *(E)* any topical chain that references financials as the justification for resistance to IP. | (a) references IP as a tool for corporations to generate profits at the expense of artists/creators (e.g., "Only corporations need the free speech stifling IP laws to prop up their flawed business models," "Music companies just screw the artists out of their hard-earned money anyway")  
(b) references CBPP as an example of production without economic imperatives (e.g., "Look to the example of FLOSS software for non-restrictive IP that is productive," "Wikipedia is a great example of how people work collaboratively to produce without IP protections and without capital investment")  
(c) references a past experience where money was wasted on a bad product as justification for ignoring IP (e.g., "I want to preview my music before I buy it," "I got tired of paying $18 for three good songs")  
(d) references a lack of money as a justification for resistance/ignoring IP (e.g., "I pirate because I don't have the money to buy all the music and movies I'd like to see/hear") |
| Technological    | Code as *technological* *(T)* any topical chain that references technologies as the justification for resistance to IP. | (a) references digital distribution/circulation of media as more convenient than distribution of analog media (e.g., "Ignoring copyright is faster and easier than going to the store to buy something," "Pirating is much easier and faster than going to a store that's a 1 hour train ride away")  
(b) references the need for legal reform of technological change (e.g., "Copying requires no resources nowadays and that's why copyright is outdated," "The Internet has made knowledge available to everyone much more easily," "You can't protect IP with technology because there are always methods to go around protections and circumvention measures," "I would never buy DRM media." "Copying is not stealing.")  
(c) implicitly or explicitly references acts of piracy as a form of social media or publicity made possible through technology (e.g., "If someone listens to music I've pirated, I've increased their awareness of new bands and they may buy an album or attend a show") |
| Apathy           | Code as *apathy* *(A)* any topical chain that references theft or "just because" as justification for resistance to IP. | (a) references that claim piracy is stealing but the writer doesn't care (e.g., "I know that piracy is stealing, but I really don't care if the band or music corps get any money")  
(b) references that claim piracy is ok because the writer is selfish (e.g., "I like free stuff. What can I say, I'm selfish!") |
### Appendix Item III. Content Codes - Economic Resistance to Intellectual Property

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<tr>
<th>Type of Attitude</th>
<th>Definition</th>
<th>Examples</th>
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| **Anti-Corporate**   | Code as *anti-corporate* (A) any topical chain that references corporate greed or corporate control as a reason to justify non-payment for media. | (a) references IP as a tool for corporations to generate profits at the expense of artists/creators (e.g., "Only corporations need the free speech stifling IP laws to prop up their flawed business models," "Music companies just screw the artists out of their hard-earned money anyway")  
(b) references corporations, not authors/artists, as the unjust beneficiary of media creation (e.g., "I won't support a corrupt music industry who steals from artists," "Artists don't receive much of the money from album sales anyway") |
| **Preview**          | Code as *preview* (P) any topical chain that references the desire to preview before purchasing as reason to justify non-payment for media. | (a) justifies piracy as a mechanism to preview films, books, music, and performances before purchasing the entire product (e.g., "I want to preview music before I buy it," "I'm not going to shell out $40 for a CD that I don't even know is any good")  
(b) justifies piracy because of a past experience of purchasing a complete piece of media only to find out that it was of low quality or disappointing (e.g., "I download albums for free because I've bought way too many complete albums that ended up sucking," "Bookstores refuse to give me a full refund for a crappy book; I download because I don't want to waste my money") |
| **Direct Contribution** | Code as *direct contribution* (D) any topical chain that justifies piracy by claiming to give money directly to an artist, author, or musician instead of purchasing their media from a company. | (a) justifies piracy by contributing money to artists through live performances (e.g., "It is worth it to save money and go to a show than blow it all on a bunch of albums made by Sony")  
(b) justifies piracy by contributing money to artists through purchasing merchandise (e.g., "I download albums for free but always buy t-shirts or vinyl at live shows," "I download books for free but if an author comes to a local bookstore, I'll buy a copy to get signed") |
| **Funds**            | Code as *funds* (F) any topical chain that references a lack of money as reason to justify non-payment for media. | (a) justifies piracy due to a lack of money (e.g., "I pirate because I have no money to buy books," "I don't have a job but still want to have music and books, so I pirate")  
(b) justifies piracy by claiming that media is far too expensive (e.g., "$18 for a CD is highway robbery") |
## Appendix Item IV. Content Codes - Technological Resistance to Intellectual Property

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<th>Type of Attitude</th>
<th>Definition</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Convenience</strong></td>
<td>Code as <em>convenience</em> (C) any topical chain that references the ease of acquiring digital media as the justification for resistance to IP.</td>
<td>(a) references travelling long distances to acquire physical media as a barrier to purchasing (e.g., &quot;I am not willing to travel all the way down to the shop for a shitty selection,&quot; &quot;Very little music or books actually make it to this out of the way part of the world I live in&quot;) (b) references the portability of digital media as justification for not purchasing physical media (e.g., &quot;CDs and books are too difficult for me to take in my car or carry on an iPod,&quot; &quot;Physical media like CDs get scratched and destroyed too easily to continue buying them&quot;) (c) references piracy as a means of acquiring difficult to find media (e.g., &quot;I'm not going to pay $50 dollars for a hard to find book if I can download it for free,&quot; &quot;I like rare Japanese electronic music - hard to find in my area so I download it&quot;) (d) references the convenience of digital media over physical media in the general sense as a justification for ignoring IP.</td>
</tr>
<tr>
<td><strong>Definition</strong></td>
<td>Code as <em>definition</em> (D) any topical chain that highlights the difference between &quot;piracy/theft&quot; and &quot;copying&quot; as justification for illegally acquiring digital media.</td>
<td>(a) references the finite/infinite resource binary as justification for piracy (e.g., &quot;Piracy isn't stealing because by downloading I haven't taken physical media - I've just copied it,&quot; &quot;When I download an album I'm not making a resource more scarce - I'm making it more plentiful,&quot; &quot;No one is losing a product, it is just information&quot;) (b) redefines piracy or filesharing to make a distinction between the two (e.g., &quot;Piracy is boarding a ship and stealing physical stuff from it. What we do here is make copies or backups - no physical objects are removed from the world&quot;)</td>
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<tr>
<td><strong>Social</strong></td>
<td>Code as <em>social</em> (S) any topical chain that implicitly or explicitly references piracy as a form of social media or publicity enabled through technology.</td>
<td>(a) References the torrent community as the justification for pirating (e.g., &quot;I love this site because the users turn me on to so many different kinds of music, some of which I buy,&quot; &quot;Filesharing is all about community, eh?&quot;) (b) References piracy as a means to spread awareness of artists and producers (e.g., &quot;More listeners and more readers - more music and more books. Period,&quot; &quot;Without sites like X and Y I would never heard about most of the music I listen to now&quot;) (c) References piracy as a means of discovery (e.g., &quot;I wouldn't even know about most of these bands if someone hadn't shared this music with me on X,&quot; &quot;I've discovered so many authors through downloading from other users&quot;)</td>
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<tr>
<td><strong>Quality</strong></td>
<td>Code as <em>quality</em> (Q) any topical chain that refers to digital rights management or lack of media quality as a problem or justification for piracy.</td>
<td>(a) References the right to control your own material as a reason to pirate (e.g., &quot;I don't want iTunes telling me how to use my own media,&quot; &quot;I will never buy a song that isn't mine to control&quot;) (b) References DRM explicitly as a justification for piracy (e.g., &quot;I pirate just to say &quot;fuck you&quot; to DRM,&quot; &quot;DRM is evil&quot;) (c) References inferior media quality as a justification for downloading content (e.g., &quot;I want FLAC or at least V0 rips of my albums - not crappy iTunes bullshit,&quot; &quot;Why would I pay money for digital music that's 128kbps?,&quot; &quot;DRM and crappy quality? I think I'll pirate instead&quot;)</td>
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