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We have another moment: "rhetoric and composition" + "web 2.0"

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We Have Another Moment:

"Rhetoric and Composition"
+
"Web 2.0"

by

Amanda Hill

Accepted in Partial Completion

of the Requirements for the Degree

Master of Arts

Moheb A. Ghali, Dean of Graduate School

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MASTER'S THESIS

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We Have Another Moment:

"Rhetoric and Composition"
+ 
"Web 2.0"

A Thesis
Presented to
The Faculty of
Western Washington University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts

by
Amanda Hill
May 2008
Abstract

“We Have Another Moment: ‘Rhetoric and Composition’ + ‘Web 2.0’” responds to recent rhetoric and composition scholarship on digital writing, such as that of Kathleen Blake Yancey, who claims that the internet has given rise to a “writing public.” The writer argues that not only do we have a writing public that is changing the nature of writing, but we have a writing public that is changing the nature of the way in which information is delivered, organized, conceptualized, marketed, and copyrighted. The writer analyzes the rhetoric surrounding “web 2.0,” the current manifestation of the writing public, and its components through the lens of ecology and genre theory. Seeing web 2.0 as ecological enables scholars to see the interactions between writer, machine, localized uses of rhetoric, and larger sign systems. Literacy, in a web 2.0 ecology, becomes praxis: a simultaneous consumption and production of text that necessitates negotiation of both connection and disconnection. Further analysis of web 2.0 enables rhetoric and composition scholars to consider not only how public writing is changing, but also how public writing changes the nature of academic writing. Redefining the nature of writing implies that we must continue to reconsider literacy both amongst academics and students so that we may continue to make English studies a site of both critical consumption and thoughtful production of texts.
Acknowledgements

I would like to express my gratitude to the members of my Thesis Committee – Nicole Brown, Donna Qualley, and Bill Smith -- who have freely shared their time and passion. Their influence on my formation as a scholar and teacher of rhetoric and composition, of which this project is representative, cannot be expressed in words.

My deep appreciation goes to Nicole for allowing me the freedom to swim around in my material and offering me just the right life-preserver when it seemed that I would drown in data; to Donna for her careful reading and probing questions on an early draft which have led to a product of which I can be proud; to Bill for his infectious enthusiasm for the future of our field and the relationship between theory and practice which informed the final chapter of this work.

Further, the guidance and support of Cathy McDonald and Dawn Dietrich have been invaluable to me during various stages of this project. The results of their mentorship and modeling of academic inquiry run through this document.

Finally, the completion of this thesis would not have been possible without the presence and encouragement of my graduate cohort, particularly Will Durden, who traveled each step of the process with me, and Jack Meischen, who generously provided the most detailed and thoughtful peer response ever.

I dedicate this piece of scholarship to my parents, Dan and Cheryl, and my close friends Holly and Jenny, without whose love and belief in me I would never have typed a word.
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Introduction:

“We have a moment.”

For quite a long time now, scholars of composition have called for us to consider how computers and the internet effect and reconstitute the nature of reading, writing, and literacy which make up the field of rhetoric and composition. Some, such as Kathleen Blake Yancey, go so far as to claim that we are witnessing a paradigm shift in our digital cultures’ way of understanding writing. In her 2004 CCCC Chair Address, a forum that she admits is often a “call to action genre,” she makes the following observation:

Never before has the proliferation of writings outside the academy so counterpointed the compositions inside. Never before have technologies of writing contributed so quickly to the creation of new genres. The consequence of these two factors is the creation of a writing public that, in development and in linkage to technology, parallels the development of a reading public in the 19th century. (298)

Yancey articulates the tension that composition feels when our content – writing and rhetoric – become part of the public, rather than the academic, domain. What do we do about the fact that students not only know how to write in digital environments, but write in dramatically different ways than they do in our classrooms and they are prolific in these environments? Since new digital environments are rapidly evolving, Yancey argues that this new “writing public” grows out of the confluence between compositions that stand in “counterpoint” (but, I would add, not necessarily opposition) to the writing done in the academy. The writing public is composed of individuals and collectives that do writing that is fundamentally different than that which we teach and traditionally theorize in academia and, moreover, the types of writing they practice change at a brisk pace. The call to understand, let alone
instruct, members of a writing public is daunting indeed since it requires that we immerse ourselves in the cultural swirl of writing they compose rather than allowing it to pass us by unexamined.

Yancey’s comparison between the 19th century reading public and the 21st century writing public begins to point to why taking up the task of diving into the digital writing public is integral for composition. Further on in her address, she notes that the reading public of the 19th century was composed of the burgeoning middle class and that “readers were more than consumers; they helped shape the development of the text-in-process. Put differently, the ‘fluctuations of public demand’ influenced the ways that Dickens and other novelists developed future episodes” (300). Yancey’s address moves on to consider how the writing public might be a vital puzzle piece in forming a new concept of what writing and, more particularly, composition instruction, is. The forums of the writing public that Yancey articulates include blogs, email, presentation software, instant messaging, listservs and bulletin boards and, as she puts it, “whatever genre will emerge in the next ten minutes” (298).

Examining Yancey’s 2004 words in 2008 I notice that the genres she names are, with the exception of blogs, interfaces in which users post or generate typically print (but occasionally visual) content but rarely both. The genres are ones in which the content is typically linear and devoid of links, developed for a particular homogenous audience, or at the least, an audience of few, captured within a particular moment of space and time. In other words, Yancey’s claim that a writing public might be more than consumer and may help shape a text-in-process resounds even more appropriately and perhaps with more urgency four years later. As I will illustrate in my examination of web 2.0, participants have become writers, not just of content, but as collaborators in the writing of software and can be said to not only “shape” texts-in-progress, but to constitute them. In other words, not only do we have a writing public that is changing the nature of writing, but we have a writing public that is changing the nature of the way in which information (data) is delivered, organized, conceptualized, marketed, and copyrighted.
Within what I will call the web 2.0 ecology we in rhetoric and composition have “a moment,” to borrow Yancey’s term, in which to recognize, theorize, and instruct a writing public with the potential for significant impact upon both what writing is and how it is thought about and theorized, both inside and outside academic boundaries. Yancey’s “writing public” becomes a public that also has a hand in how the texts they write are organized and received. Through their acts of writing and organizing data writers alter the interfaces in which they do their work of composing. The writing public in a web 2.0 ecology writes not only the content of the web, but the web itself.

Though I will deal more deeply with individual components of the web 2.0 movement and the rhetoric that constructs the way that we understand them, I wish to begin this project with a simplified, but lucid, definition of what web 2.0 is and an explication of a web 2.0 video text that seeks to do similar work of definition. Since composition has done little to theorize web 2.0 as a movement rather than its isolated components, I will initially turn here to the academic disciplines of education and anthropology. Edward Mahoney, who studies education technologies, succinctly describes web 2.0 in a 2007 Chronicle of Higher Education article in the following way:

*The new Web is less a planned upgrade than a recognition of the way small technical developments, along with quite significant changes in practice, are altering how we interact with information and with each other in the electronic medium. One of the developments has been the ability of people to write on the Web without the specialized skills once necessary to create a Web page. The resulting change is that, rather than simply reading from the Web, people everywhere are now creating online content. What we can see in the Web’s evolution is a new focus on innovation, creation, and collaboration, and an emphasis on collective knowledge over static information delivery, knowledge management over content management, and social interaction over isolated surfing. The jargon-laden stars of the*
second-generation Web -- wikis, blogs, social networking, and so on -- all encourage a more active, participatory role for users. (26)

Web 2.0 is then not a new type of web but a new way of using already existing technologies that are making the web into what educator Stephen Downes has called a “social revolution” that is not about technology, but about an “attitude” towards web technology and the ways that it can, and should, be used. While this revolution hasn’t necessarily meant more access to the internet by marginalized groups, it has meant that those who previously had internet access but were marginalized from the production of content are no longer limited by their lack of technical knowledge in writing the code that constructs the form of the internet. The result is that users of the web hold the ability to read the web but also to write it in both content and structure. Users modification of the web has meant that the nature of the internet has shifted to become a forum for social networking, a forum that is constituted by the networking that takes place there. Sites such as wikipedia, blogs, and YouTube – all sited as web 2.0 interfaces for the way that they allow users to create content through text, image and video but also “mash” old data together from other sites to create highly intertextual and multi-authored data -- are sites where content is not only generated by users but also organized by them as well.

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1 For Downe’s entire articulation of web 2.0 as “attitude” see Chapter Three of this document. I draw attention to the distinction between “revolution” and “attitude” here to emphasize that the central concept of web 2.0 is not a revolution, or inversion, of established principles and power structures but rather a new attitude or way of thinking about what the web can do. In defining web 2.0, others have taken a similar tact. In response to blogosphere chatter contesting the definition of the web 2.0 or even the need to name the current manifestation of the internet as a version in a sequence (1.0, 2.0, etc.) Downes and Tim O’Reilly have focused on the agency of the user. By using “attitude” they point towards the way that web 2.0 is defined by the mindset with which users approach the internet and its capabilities and how shifts in the internet are now driven by users rather than software developers.

2 Duane Merrill, writing a web development page for IBM.com, notes that mashing data emphasizes user participation in internet platforms as users collect data from across the web and “stitch” it together in a “monster-of-Frankenstein-like manner.” He goes on to say that “a mashup Web site is characterized by the way in which it spreads roots across the Web, drawing upon content and functionality retrieved from data sources that lay outside of its organizational boundaries” (Merrill, 2006). Andy Gutmans has noted that Rich Internet Applications which facilitate mashing are mimicking the interactive functions of the desktop such as drag and drop, allowing users of applications such as Flickr Maps to “drag” content from one place on the web and “drop” it into a new context to create a new document (Gutmans, 2006).
Attempting to describe the nature of web 2.0 in linear print form is a challenge that Kansas State anthropology professor Michael Wesch encountered when he attempted to write an academic article about web 2.0. He found that he could describe the phenomenon better visually than he could on paper (Young, 2007). The challenge led him to create “The Machine is Us/ing Us” which he posted on the video publishing website YouTube and which subsequently became a viral video for its popularity. The content of the video is Wesch’s examination of the historical changes that have taken place in the way that text is generated, consumed, and circulated over the last several years. The video moves rapidly through a linear trajectory from writing with pencil on paper to typing in a word document to linking in a word document and to typing on the internet. Within the window of a web source document, Wesch types an explanation of how HTML code keeps form and content (code and data) inextricable so that one must know how to write HTML code in order to upload to the web. With the advent of XML, however, form and content became separate so that data can be “exported” because it is separate from form. In other words, XML facilitated a shift from web documents, whole and static, to web data. The video then shifts to a rapid movement between a google searchbar and various web 2.0 habitats in which data can be separate from form, including a blog that Wesch creates before the viewer’s eyes. He emphasizes, however, that this shift means that alphabetic text is not the only data that makes up the web: images of photographs, YouTube videos, Flickr maps that mash photos and locations, and Wikipedia articles flash across the screen. Just as the data Wesch presents the viewer with is mashed by users to create new, composite data, Wesch’s video itself mashes these sites together, underscoring the fluidity of data production and consumption in these environments.

Wesch’s video provides a narrative history of web 2.0 and a rudimentary technical understanding of the shifts, as well as a quick visual introduction to the myriad data and environments that are the source of web 2.0. However, his video does more than just explicate or present web 2.0;
the last minute and half of the four and a half minute video is dedicated to exploring the implications of what he calls a “database-backed web.” He poses the question, “who will organize all this data?” and the answer, according to him and the *Wired* magazine online article that he presents, is “us” or “we.”

According to the chunks of text that Wesch highlights as the camera scans quickly over the *Wired* article “We Are the Web” are that, “when we post and then tag pictures…we are teaching the machine.” The machine is *using* us while at the same time, as the title of the video implies, it is us-ing us, or bringing users together so that “the machine is us,” as well. This relationship between machine, user, and data leads Wesch to hypothesize a string of items that will need to be rethought within the dialectic relationship that web 2.0 creates. The video ends with a pulsing cursor within the body of a Wikipedia article on Web 2.0. On the screen the words “We will need to rethink a few things…” are typed and “a few things” are replaced in rapid succession by “copyright,” “authorship,” “identity,” “ethics,” “aesthetics,” “rhetorics,” “governance,” “privacy,” “commerce,” “love,” “family,” and finally “ourselves.”

Notably, before typing these words, Wesch highlights and removes all the content of the web 2.0 wikipedia article, implying that the true “content” of web 2.0 is not the descriptions, controversies, or technologies, but rather the way it can, or should, change the way that we conceive of entrenched ideologies. I find it particularly interesting that within Wesch’s extensive list of things that need to be rethought, “writing” is not one of them. The absence of attention to what web 2.0 implies for the nature of writing is one of the primary concerns of my project and so I would like to begin with an explication of that concern by considering the ways in which Wesch’s video enacts and describes web 2.0 writing.

In order to forecast my discussions of ecology and literacy I want to draw attention to the fact that Wesch’s video is a web 2.0 document that at once enacts and critiques the medium in which it functions. Within the video, as Wesch moves from writing interface to writing interface, he either enacts or highlights the different technologies of writing and how they effect the kind of meaning-making that
happens. From the writing technology of the pencil (Baron, 1999) to a word processing document, to online publishing interfaces such as blogs, YouTube, or Wikipedia, the video reveals both the similarities and differences of each writing ecology or habitat as I will refer to them as I adapt ecology theory for reading web 2.0 writing and rhetoric. For instance, the pencil and paper restricts writing to a linear print form that prohibits the linking of data while the Flickr map that Wesch presents shows a composite of visuals, photos, and alphabetic text that have been mashed and tagged by users. As Wesch moves through each of these writing habitats he reveals the way that his own presentation of meaning is restricted by the technologies and acceptable rhetorics of that habitat. Whatever selection of visual, photographic, or alphabetic text it contains, each habitat requires a typical kind of relationship between those modalities. The role that alphabetic writing plays in meaning making is thus different in each habitat so that what writing is – the purpose that it serves – changes.

Ultimately, the concern here is not only the fact that web 2.0 has implications for writing in addition to the implications Wesch articulates, but its greater implications for my project are the ways the writing public – the public that writes in video, images, photo, and alphabetic text – is changing the ways that writing is being done and the ways that writing brings individuals together in particular ecological writing habitats to form both those individuals and those habitats. Of most interest, perhaps, is the fact that the majority of the documents I draw on to describe or critique web 2.0 are, much like Wesch’s documents, composed within web 2.0 habitats themselves. Not only are participants in web 2.0 habitats doing web 2.0 writing, they are also theorizing and critiquing the habitats in which they

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3 Later in this work I will more fully develop my use of the term “habitat” in relation to ecology but for now it may be useful to provide a brief definition. The term is drawn from genre theory, particularly the work of Anis Bawarshi, in which rhetoric is seen as a set of habits enacted within habitats. This theory highlights the way that meaning is made through the enactment of socio-cultural specific languaging. Each habitat involves particular habits of rhetorical action. Habitats are similar to ecologies in that they evoke the environment of the subject. For my purposes, genre theory’s focus on the localized use of language make habitat a useful term to draw attention to the environment of writing action in web 2.0 environments.

4 Certain notable exceptions exist such as House of Leaves. Linear print text may not prohibit, but may discourage, mashing and linking of data.
interact. The theorizing and critique embedded in the web 2.0 documents I draw on makes this particular ecological system of the writing public rich for composition studies since it is a site for not only production of socially meaningful texts but also the kind of reflexive practice that composition pedagogy has long advocated. Our current “moment” is an exciting one in which we can merge the theoretical frames of rhetoric and composition with the growing theories and critiques happening within different disciplines and within the writing public itself.
Chapter One

Theorizing Web 2.0: Writing and Ecology

If we do indeed have a moment, as I would argue, an essential step is to decide how we are going to think about and conceptualize this notion of the web 2.0 writing public. Our perspective will indicate the sorts of actions that we take both as writers and pedagogical theorists. I propose that it may be useful to think about the web 2.0 writing public in terms of ecology because the paradigm heightens our awareness of the many interrelated factors that influence writing acts. Many scholars use the term with an appropriate modifier to deal with the ways in which information and media circulate in a technological environment. Katherine Hayles, and Richard Grusin and Jay Bolter all use the term “media ecology” to describe how various media reclaim and comment upon other forms of media. For Hayles, the phrase indicates the situated nature of the relationships between media interfaces for it “suggests that the relationships between media are as diverse and complex as those between different organisms coexisting within the same ecotome” (5). For Bolter and Grusin, considering media as “agents in our culture,” or a media ecology, also relies upon understanding that media technologies are constructed in part by how they are mobilized by users: “The WWW is not merely a software protocol and text and data files. It is also the sum of the uses to which this protocol is now being put: for marketing and advertising, scholarship, personal expression, and so on. These uses are as much a part of the technology as the software itself” (19). Seeing the act of negotiating technology and software as part of constituting that technology suggests that in a media ecology the “organisms” are both human and machine in origin which opens the door for another view of ecology, one that places the prime focus upon individuals within the mediated environment.

One ecological theory that emphasizes how humans and technology interact is that of activity theorists Bonnie Nardi and Vicki O’Day who use the term “information ecology.” By their definition, “an information ecology [is] a system of people, practices, values, and technologies in a particular local environment. In information ecologies, the spotlight is not on technology, but on human activities that are served by technology” (49). From Nardi and O’Day’s perspective, an information ecology would be distinct from a media ecology for its emphasis on the dialectical two-way interaction between the components of the ecology, rather than a one-way sense of cause and effect between technology and user. Nardi and O’Day draw an important distinction between a “system” and an “ecology” by noting that larger systems are made up of many smaller ecologies. “System,” for Nardi and O’Day, tends to discount or elide the potential for local agency in the system or perhaps prohibits the theorist fromzooming in to examine the particularities that make up the larger system. Ecologies make intervention possible, they argue, because of the way they are made up of relationships that may allow points of access to the larger system for participants and snapshots of localized activity for a theorist to study. Their use of information ecology as a framework also responds to the dominance of the “technology as tool” metaphor. They articulate their reasoning as follows:

We introduce the concept of the information ecology in order to focus attention on relationships involving tools and people and their practices. We want to travel beyond the dominant image of the tool metaphor, an image of a single person and his or her interactions with technology. And we want to capture a notion of locality that is missing from the system view. (50)

The dominant metaphor of the tool, as Nardi and O’Day describe it, sees one individual wielding a single tool for a particular use. In an ecological model, the role of the tool and even the characteristics of it are determined by the participants within the ecology. While a system evokes a sense of a
disciplined and prescribed set of tools, individuals, and functions, a key characteristic of an ecology is that the tools, the technologies, and the individuals coevolve. This co-evolution occurs in an ecology since participants are in close local relationship with both the technology and other users who are using the same technologies.

Though these scholars are positioned within fields that investigate new media or technology, writing studies has also conceptualized writing itself as ecological. In 1986, Marilyn Cooper wrote “What I would like to propose is an ecological model of writing, whose fundamental tenet is that writing is an activity through which a person is continually engaged with a variety of socially constituted systems” (1). For Cooper, using the term ecology is not just a new buzzword for “context” because “an ecology of writing encompasses much more than the individual writer and her immediate context. An ecologist explores how writers interact to form systems” (7). Thus, an ecological model of writing asks that we conceptualize writers as members of dynamically interrelated and responsive ecologies that overlap and affect each other within larger cultural systems of meaning. The ecologies can be made up of media interfaces, technologies, information, and other participants. While Cooper does not critique the term “system” in the same way that Nardi and O’Day do, they each see writers as engaged in smaller scale ecologies which combine to make up larger social systems.

For my purposes, I would like to fuse aspects of each of these ways of defining ecology, but I must first acknowledge that an ecological model may be blinded by the biological metaphor upon which it draws. For genre theory in particular, which also sees writing as socially constituted action, the limitation of ecology is the simultaneously abstract and naturalized nature of the framework. Freedman and Medway contend that “to see human relations as ecology or system involves suppressing the consciousness that it is people, experiencing beings like ourselves, and not abstract systemic elements that are the constituents of these networks” (4). If ecology dismisses the human element as simply a
natural portion of a well-ordered system, without the ability to consciously act upon that system, it would certainly be problematic in its capacity for becoming apolitical. Interestingly, the rhetoric of web 2.0 more fully enacts this problem of abstracting the human relationships into abstract systemic elements, as I will outline later in Chapter 3. The purpose, however, of an ecological model, on concentrating not just on an individual writer and her isolated context but the social habitats in which she acts, is to recognize opportunities for and to enact change in those habitats (Cooper, 1986, Selber 2004). Cooper addresses the call for awareness of the difficulty of enacting social projects through the study of writing in the following way:

It is important to remember that the image the ecological model projects is again an ideal one. In reality, these systems are often resistant to change and not easily accessible. Whenever ideas are seen as commodities they are not shared; whenever individual and group purposes cannot be negotiated someone is shut out; differences in status, or power, or intimacy curtail interpersonal interactions; cultural institutions and attitudes discourage writing as often as they encourage it; textual forms are just as easily used as barriers to discourse as they are used as means of discourse. A further value of the ecological model is that it can be used to diagnose and analyze such situations and it encourages us to direct our corrective energies away from the characteristics of the individual writer and toward imbalances in social systems. (12-13)

An ecological model theorizes the ideal ecology and how a writer might operate within that ecology providing that she does not have to negotiate problems such as exclusion, cultural currency, issues of authority or awareness of the rules of the system. James Paul Gee, in his work on discourse and literacy, has claimed that one cannot critique a discourse from inside a discourse unless one has achieved literacy within multiple discourses and meta-level knowledge, which requires a complex process of both natural acquisition and formal learning practices. (Gee, 1987). Thus, Cooper's
ecological model is predicated upon the writer not only being able to function in the ecology but to critique it as well, since no ecology will be “ideal.”

Approaching web 2.0 from an ecological standpoint may be a way to introduce a meta-level knowledge as a tactic for intervention to both those who study and practice web 2.0 writing as long as the model continues to take into account individuals’ discursive literacies since, as Gee and Cooper both point out, each individual is the meeting point of many discourses and socially constituted systems. Operating within an ecological model does not necessarily lead to ecological change but could lead to awareness of ecological possibilities. Not all web 2.0 sites function ecologically (i.e. the blog that is not linked or read by others) but an awareness of technical, ecological, and discursive possibilities for such a blog opens up opportunities for new kinds of localized ecological action.

Diagnosing the ecological components and analyzing their interactions engages us with the ecology, or one of the discourses, that the writer functions within. Rather than decontextualizing writers and ignoring the multiple discourses in which they act, let alone the tensions and connections between those discourses, an ecological model with attention to social/political issues draws our attention directly to them as the both constituting and constituted by the writer herself.

If we choose to articulate writing as ecological and at the same time integrate awareness of discourses and the power of dominant discourses, perhaps the way that ‘ecology’ and ‘genre’ come together is in highlighting the extent to which the writer has the ability to act within her ecology and the genre(s) that make up that ecology. As Cooper puts it, “Writing is one of the activities by which we locate ourselves in the enmeshed systems that make up the social world. It is not simply a way of thinking but more fundamentally a way of acting” (13). Seeing writing as action that makes up an ecology becomes the locus for claims that writers can constitute ecologies that they write within. If one simply thinks something in a particular context it does little, if anything, to the surrounding environs. If,
however, one engages in *action*, the action results in some *reaction* either in the environment (the blog site, for example), the inhabitants of the medium (other bloggers), or the larger ecology itself (the blogosphere).

Discussing writing as action and a matter of habits and habitats created through exigencies doesn’t necessarily mean that broad changes will occur to the system but they may to the localized ecology. While Cooper seems to use “ecology” and “system” somewhat interchangeably, Nardi and O’Day draw an importance distinction between the two terms, viewing ecologies as smaller and more re-active components that together make up larger social systems. For Nardi and O’Day, the usefulness of ecology as a framework lies in the fact that it emphasizes the local rather than the systemic:

> We can all name the ecologies we belong to and participate in. In an ecology, we are not cogs in sweeping sociological processes. Instead, we are individuals with real relationship to other individuals. The scale of an ecology allows us to find individual points of leverage, ways into the system, and avenues of intervention. (50)

Writing as social *action* then may be what takes place on a local level in which the writer has established personal relationships with individuals rather than social groups. Thinking of an ecology as a way of conceptualizing the smaller scale components of larger social systems may help negotiate the difficulties that genre theory identifies about acting within, critiquing, and changing dominant or secondary discourses. A key element towards that change, however, still lies in meta-level knowledge: the individual must “find” points of leverage and thus be able to identify those technologies or contexts that contain the capability for change.

Perhaps this is where genre theory may be useful in fleshing out the notion of writing as action within an ecological model. As Anis Bawarshi puts it “writing is not a social act simply because it takes
place in some social context; it is social because it is at work in shaping the very context within
which it functions” (168). For genre ecosystem theory, the key to the notion of shaping the context is
not so simple, however, as deciding to act. Bawarshi draws on Giddens’ theory of structures that holds
that participants both function within structures that are ideological and conceptual and actualize those
structures through social practice. Though writers actualize these structures, they often do so without
what Gee might call meta-level awareness. Lack of critical awareness is, according to Bawarshi, due to
the fact that a writer’s motive to act in a particular context “becomes such a part of what seems to be
‘natural’ or common sensible that we no longer consider the ideologies that sanction and enable our
actions. We just act” (171). Writers perpetuate particular genres within ecologies by treating them as
exigencies, by acting on what seems natural and not employing critical thought. Thus, the genre in a
larger ecology is “the habitat that makes habit possible and the habit that makes habitat possible”
(172). In other words, the practices in an ecology constitute the ecology, but the ecology reciprocally
demands certain practices and makes them seem natural.

In order to do more than “just act” the writer must begin to recognize that an exigency exists
within an ecology and to consider how it urges her to “just act.” Freeman and Medway argue that the
usefulness of genre theory is that “understanding genre as social action enables us to understand what
is being learned when we (or our students) learn new genres” (2). Among the things we gain when we
see an ecology as a site of both habit and habitat are a better understanding of our own motives in
following the exigency of a genre; we learn more about the habitat and we understand how to more
effectively intervene in the habitat itself. While theorists do agree that writers are constituted by the/social systems in which they think/write/act, how writers reciprocally constitute those systems is a more
critically charged site of debate. In each theory, however, some awareness – whether it be of “genre,” “habitat,” or “ecology” – is required in which the writer is not simply writing but also engaging in the act of critique or analysis of the ecology surrounding them. Constituting the ecology (the technologies therein, other individuals, and ultimately the system in which the smaller-scale ecology takes place) requires more than simply the ability to act in the ecology, but also the ability to consciously act upon the ecology.

To continue to put these theories of ecology and genre in conversation with web 2.0 writing, I must acknowledge that what I mean when I say “writing” is quite different from Cooper’s, Gee, and Bawarshi’s understandings and may have subtle distinctions from Hayles and Bolter and Grusin’s concepts of how users interact with media. What makes up a web 2.0 ecology is a composite of the computer hardware, the software interface, the particular web 2.0 genre that forms and is formed by users, and the users/writers themselves. What may distinguish web 2.0 ecologies from ecologies theorized by the scholars cited above is that it is not simply language based, alphabetic, visual, or auditory – web 2.0 ecologies include a mashing of multiple modalities of communication. While many scholars have made the claim that writing is changing, that writing is fundamentally different than it has ever been before given the rise of the digital computer, I think that Anne Wysocki’s metaphor of a rug offers a fresh perspective and is aptly descriptive of how many scholars feel about negotiating the word “writing” in a time of new media:

6 When meta-level awareness occurs and can be employed is debated amongst literacy and genre scholars. According to Gee, meta-knowledge occurs through learning and explicit instruction but must be preceded by acquisition. Thus, meta-knowledge can only be effective once an individual has already acquired competency in an ecology or genre so that s/he may then use meta-knowledge to “talk about, describe, explain it” (140). For genre theorist Amy Devitt, however, explicit instruction in genre awareness (meta-knowledge) can proceed acquisition or tacit knowledge (198). Though Gee and Devitt both approach meta-knowledge through the lens of classroom instruction, they address the logical concern of when and how meta-knowledge becomes powerful in a given context, but arrive at different answers. The answer to when meta-level awareness translates into power to act on ecology thus depends upon how, and at what stage of acquisition or learning, one believes that meta-knowledge can actually occur.
Do you miss that thick richly-printed rug that (apparently) used to be under your feet, the one into which (for at least several of the past centuries, as various theorists describe it) you could lose yourself in contemplation of its well-ordered and contained patterns? It’s the rug that was pulled out from under you […] within the last 15–20 years […] but part of what has changed the warp and woof that used to seem so steady underneath us is precisely that we are now aware of the warp and woof, that we are aware of the complex weaves of writing as a material practice. (1-2)

Whereas writing as action might be said to refer to individual acts of writing and the temporal and spatial contexts of those acts, writing as practice might be used to refer to the overall collection of those individual acts. For instance, a blogger may participate in an act of writing as she composes a blog post. The individual blog post that she writes, however, may not be representative of her blogging practices which may include mashing of data, visual, textual, and video posts, reading and commenting on other bloggers sites, and responding to her own readers. Her writing practices may be far more collaborative, intertextual, and social than the act of writing an individual post may reveal. Thus, while writing is changing, and as Wysocki points out it always has, what has changed is that teachers (and I would argue practitioners) of writing have become aware of writing as action, as practice, as socially constituted.

By discussing web 2.0 writing as an ecology I am not so much concerned with naming the ways that web 2.0 writing will change how we write. What I am concerned with is how analyzing web 2.0 may cause us to consider how individual writing acts, practices, and the ecologies in which they occur can enhance our understanding of the “warp and woof” -- the material practices -- of writing. My goal for this project is not so much to hypothesize to what extent web 2.0 writing can be described as an ecology, or even to say how that ecology will change other writing ecologies (though both are rich
sites for further research), but rather to use the analysis of web 2.0 ecology and the rhetorics and literacies that take place there in order to force consideration of how we think about what writing is and does in public and academic spheres.

To begin with, one fundamental difference between print writing and most web 2.0 documents has already been theorized to a great extent by Gunther Kress, and that is the dominance of the screen and the image in digital writing. He explains the position of alphabetic writing in this image-dominated mode in the following way:

After a long period of the dominance of the book as the central medium of communication, the screen has now taken that place. This is leading to more than a mere displacement of writing. It is leading to an inversion in semiotic power […] The logic of image now dominates the sites and conditions of appearance of all ‘displayed’ communication, that is, of all graphic communication that takes place via spatial display and through the sense of sight. That now includes writing, which is becoming display-oriented. (9)

For Kress, this inversion of the logic of image and writing means that writing now is subject to the spatial logic of image. He continues by explaining how this logical inversion changes the ways that the modes of image and writing carry meaning: “No mode fully carries all the meaning […] each of the two modes will be used for specialized tasks, the tasks which are best done with that mode. As a consequence writing is no longer a full carrier either of all the meaning or of all types of meaning” (21).

In terms of an ecological model, this means that in order to theorize any digital writing, including web 2.0 documents, we must consider the ecological placement of writing differently than we would have in other, non-digital, non-screen or image-based texts. In many print documents, the question of what function alphabetic writing serves is a mute one. In multi-modal texts, however, the question of how the ecology values and utilizes alphabetic writing is a useful, even pivotal, question. If writing is a
technology, as some theorists have suggested (Ong, 1986), then it is one component that will co-evolve in relationship with other technologies and the uses to which users apply it. If writing is no longer the dominant technology of communication, writers are faced with new considerations, including the following that Kress articulates: “Where before all information was conveyed in writing, now there is a decision to be made: which information, for this audience, is best conveyed in image and which in writing” (21). That writers in web 2.0 ecologies such as blogs, YouTube, and Wikipedia consider questions of image or text, along with audience, implies that they have a different kind of understanding of the concept of writing and audience than purely alphabetic writers have. Not only is there the question of what to say and how to say it, but also the question of what modality to use. The addition of modality to the equation of composition multiplies possibilities for composition, partly by bringing up the question of design. Since the screen is a visual technology, even linear print text takes on visual elements that it doesn't possess on the printed page. Here again it's important to talk in terms of ecology for a writer can be said to be aware of her/his local constraints but not necessarily how they relate to the system or practice of writing as a whole. The additional considerations of modality, design, and the visual mean that not only scholars who study writing, but digital writers as well are now more aware of the “warp and woof” of the writing ecology in which they take part, for the multiple-modalities call attention to the material practices of writing that writing in a single mode may not.
CHAPTER TWO:

Articulating Web 2.0 and Rhetoric and Composition

“Web 2.0,” a term that was developed within the business community and has begun to make its way into more popular, as well as academic, vernacular was coined simultaneously with the time of Yancey’s address: 2004. Web 2.0 is, in essence, a description of new ways that already existing internet technology is being conceptualized and used. If, as Yancey argues, our writing public is reinventing writing as we know it, doesn’t it behoove us to consider ways in which this writing is being described, harnessed, and mobilized, elsewhere? Are we able to recognize the moment when new rhetorics in other spheres emerge that articulate the nature of writing and literacy? With the example of web 2.0 in particular, I would argue that we have some catching up to do. While the definition and use of the term “web 2.0” is widely debated and hotly contested in business and some educational disciplines, dominant rhetoric and composition scholarship has all but ignored the term and thus, the movement as a whole. As of 2007, amongst the journals College English, College Composition and Communication, and Computers and Composition, only the latter contains any reference to the term. That single reference is not research or analysis, but a call for papers that I will discuss in more detail below. I do not claim that this small collection of data proves that web 2.0 is not talked about, theorized, or taught; indeed, many within my own master’s program have discussed the concept with students and are considering the details of it. Nor does this data imply that isolated aspects of Web 2.0, such as wikis, blogs, YouTube, Flickr, and tagging7 are not being discussed, analyzed, and written about by

7 I use the term “tagging” to refer to the way the organization of data on the web is shifting from taxonomy to “folksonomy” which Tim O'Reilly describes in the following way: Folksonomy is “a style of collaborative categorization of sites using freely chosen keywords, often referred to as tags. Tagging allows for the kind of multiple, overlapping associations that the brain itself uses, rather than rigid categories. In the canonical example, a Flickr photo of a puppy might be tagged both “puppy” and “cute”—allowing for retrieval along natural axes generated user activity’ (2005). Or, as Michael Wesch puts it, tagging is the vehicle through which users organize the data that users create.
scholars. What it does say quite clearly, however, is that the rhetoric surrounding and composing web 2.0 has been all but ignored in mainstream published rhetoric and composition scholarship. It is not realistic to expect the field to necessarily take on all aspects of internet technology development at once. However, I argue that an attention to the ambiguous rhetoric of the term “web 2.0” and an analysis of its components through the lens of ecology theory can enable us to consider not only the changes that are occurring within the writing public and how they are constituted by the language that describes them, but also how those changes urge writing scholars to more fully articulate what currently constitutes the “warp and woof” of writing. Redefining the nature of writing also implies that we must continue to reconsider literacy both amongst academics and students who make up the writing public so that we may continue to make English studies a site of both critical consumption and thoughtful production of texts.

Since the single hit for “web 2.0” in three composition journals is a call for papers, let me first examine the way in which rhetoric and composition is beginning to engage with the terminology. In late 2007 the journal *Computers and Composition* published a call for papers entitled “Composition in the Freeware Age: Assessing the Impact and Value of the Web 2.0 Movement for the Teaching of Writing.” The CFP includes a nod to the controversy over the term “web 2.0” and describes web 2.0 technologies as the turn to the internet as work space which includes a focus on social networking and collaboration. The guest editors position the journal in relation to web 2.0 technology in the following way:

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8 See O’Reilly, 2006. Though many have jumped on-board with the term, O’Reilly notes that some trivialize it as “a meaningless buzzword” (2005). Others take issue with the rhetorical move of numbering versions of the web (web 1.0, web 2.0), which implies static software uploads. The heart of much of the controversy however is less about terminology than it is about the idea that the web is somehow “new.” O’Reilly has addressed this problem by clearly articulating that web 2.0 refers not to new technologies, but existing web technologies being put to new and different uses.
The focus of the Web 2.0 movement is on users, devices beyond the personal computer and uses beyond the individual workstation. These concepts would appear to have application in the teaching of composition due to the iterative, unfinished but always updatable nature of writing now evident on the web and in software development, especially with regard to open-access materials and open-source environments. (483)

The CFP proceeds to ask questions about the definition of web 2.0 in relation to composition, the use of web 2.0 platforms in writing instruction, and the potentially reciprocal relationship between web 2.0 platforms and our field. What seems significant to me about this CFP, and what it implies about the relationship of rhetoric and composition to Web 2.0 platforms, is what is absent. For one, within the language of the CFP itself, there is a move to consider how academia may harness the writing public of the web 2.0 movement: attention is turned towards the “application” of web 2.0 in the teaching of predetermined and unexamined (albeit valid) composition tenets such as process theory (“unfinished but always updateable nature of writing”). The goal of the CFP seems to be to consider how the writing in web 2.0 habitats can be used to illustrate, reify, or prove writing concepts to students within the university. It would be unfair, of course, to pay attention only to this section of the CFP. The editors pose important questions that could, potentially, lead to examination of rhetoric and composition in relation to the agency of the writing public: “How should we define Web 2.0 thinking in the context of composition?” and “How do our uses of Web 2.0 applications fit or not fit within existing institutional and educational structures (e.g. technology and curriculum planning), and how might our uses change those structures?” (483). Again, however, I would like to pay attention to an “absence” within these questions. We are proceeding upon the assumption that web 2.0 is, indeed, a definable, quantifiable entity that, moreover, scholars in the field of rhetoric and composition can comprehend and mobilize in their classrooms in savvy and rhetorical manners.
While mobilizing web 2.0 in the classroom may be a way to come to understand its nature, the history of composition and its relationship with technology seems to imply that the move to appropriate may be erroneous, perhaps even dangerous. Too often, new technologies (or in the case of web 2.0, new ways of using old technologies) are adopted unquestioningly, without examination of the rhetorics, politics, and social forces that they introduce into the classroom (Selfe and Selfe, 1994, Selber, 2006). As Cynthia Selfe has pointed out, too often English studies classroom practices integrate new technologies into the classroom without investigating the cultural truism that technology equals social change (Selfe, 1999). I propose that before we can begin simply “using” web 2.0 applications “as educational tools in composition,” as the CFP puts it, we need to consider what exactly it is that we are using, to what extent web 2.0 may or may not be related to social change. Perhaps the first step for this is considering the locus of the term “web 2.0,” the definition of it, and the rhetoric that constructs it. Though the respondents to the CFP may do the work of critiquing the use of web 2.0 in the classroom, the CFP still signifies an attitude of unreflective adoptism. Since it is against this kind of adoptism that my project reacts, my first move is to consider the source for the CFP’s definition. The locus and rhetoric of web 2.0 is one thing that, notably, goes unexamined in the CFP’s questions so I will consider whom the CFP points to as the research upon which it bases its claims about what web 2.0 is.

The CFP references the publications of five individuals in its description of the features of Web 2.0. Of these five, two are businessmen (Tim O’Reilly and Doug Addison), and two are situated within the field of education and technology (Steven Downes and Bryan Alexander). While it is not unusual for a CFP, particularly one in a journal such as Computers and Composition that constantly negotiates disciplinary issues, to draw upon research or evidence from other fields, the perspectives of its references interest me in this particular case. O’Reilly is what Alexander calls an “exponent” of Web 2.0
in that he has digitally published a great deal of writing that seeks to define and explain, as well as defend, the use of the term “web 2.0.” Downes and Alexander both digitally publish work that describes what web 2.0 is. More importantly, they both move to consider the web 2.0 writer as not just a consumer or a chunk of “collective intelligence” to be “harnessed” (O’Reilly) as software development rhetoric tends to describe digital writers, but as individuals who are active members of social networks.

For Downes and Alexander, the ultimate interest in web 2.0 is how it can be effectively harnessed for educational purposes and scholarly collaboration. Since the term web 2.0 first began within the software development industry, I will use the language of Tim O’Reilly to unpack and make sense of the terminology. Since my project, however, is most concerned with claiming the web 2.0 language and movement as a space for rhetoric and composition thinking, theorizing, and action, I will address three key questions as I move through web 2.0 terminology:

- Why is it important to pay attention to the rhetoric that surrounds web 2.0?
- How has the field of rhetoric and composition previously thought about the issues that web 2.0 raises?
- How can the ecological theory of both writing and media – already operating in rhetoric and composition – be mobilized to craft a way of reading, theorizing, and working within the environment of web 2.0?

I want to put the terminologies of online composition used in web 2.0 discussions in conversation with ecological terminology. Doing so will not only show how these terminologies connect in telling and significant ways that reveal an attention to the act of composition in the realm of digital writing, but also show the practical application of ecology theory.
Using Ecology Theory to Read Web 2.0

Web 2.0 means that the internet is being used in ways different than before. In order to describe this new way of using the web, different terminologies have been coined including the “read/write web,” online writers as co-developers of software interfaces, or internet users as “mashers” or “organizers” of data. It is, in the language of O’Reilly, a revolutionary concept that for educational theory pinpoints a revolution of the social, and a revolution in the way learning happens. I feel, however, that this conversation is one that rhetoric and composition needs to enter for we have insight to offer when it comes to making sense of how writers can both write data and the contexts in which they publish that data. This is where ecology comes in: genre theory and ecology have worked to theorize that writing is dynamic, writing is a web, genres in which we write are fluid and both constitute writers and are constituted by them. As Bawarshi puts it, habitats form habits, and habits form habitats. While composition and media studies have theorized different contexts, writing or technological, as ecological systems or habitats, web 2.0 is a site that requires a composite of ecological theories to make sense of it because of the dialectic relationship between writing acts, the machine, and users that I outlined in the Introduction with my explication of Michael Wesch’s YouTube video. I want to unpack some of the particular jargon of web 2.0 not with the intent of critiquing the systems of knowledge that the rhetoric implies (which I will do in Chapter Three) but rather to show how the rhetoric of web 2.0 being articulated by Tim O’Reilly actually utilizes the sense of the web as an ecological system. The connections are eerily appropriate, showing how important a moment this is for composition to enter into the discussion of web 2.0.

As O’Reilly wrote in 2005, the definition of web 2.0 was compiled by example, by considering what set certain web software applications apart from others. As he puts it, “Web 2.0 doesn’t have a hard boundary, but rather, a gravitational core. You can visualize web 2.0 as a set of principles and
practices that tie together a veritable solar system of sites” (O’Reilly, 2005). As O’Reilly suggests, a discussion of the characteristics of web 2.0 is best represented visually. In Figure 1, O’Reilly represents the web 2.0 solar system with a “gravitational core.” For O’Reilly, the gravitational core of web 2.0 is the business practices he advocates in order to foster the practices that make web 2.0 possible. In other words, if internet businesses fail to “harness collective intelligence,” Wikipedia could no longer function, according to O’Reilly. The circles above the gravitational core are examples of web 2.0 platforms and the principles they represent. For example, blogs represent the principle of participation on the web as opposed to valuing traditional forms of publication. The circles towards the bottom of the image include the premises for development of web 2.0 business practices: “trust your users,” consider

![Web 2.0 Meme Map](image_url)

Figure 1: Tim O’Reilly’s Web 2.0 Meme Map
software as in a “perpetual beta” state, allow users to “play” and “hack” the system, etc.

While O’Reilly’s use of a gravitational core for conceptualizing web 2.0 seems useful for considering the core principles businesses must adopt to understand and flourish in web 2.0, I hesitate to propose a similar “gravitational core” for rhetoric and composition’s understanding of web 2.0. Since I am connecting a number of theories about writing, ecology, and web 2.0, I have chosen to represent my explanation as a set of networked images9. By drawing these connections, I wish to highlight the ways that web 2.0 texts may create new meaning out of composition theory and how composition theory can make new meaning of web 2.0 texts. Were this document a hypertext piece, each citation or visual would be linked to others in ways that compose meaning through their relationship. Since the following images are part of a print text document, however, I must invite the reader to think of the images as whole images, much as one might read a web page. The reader is meant to navigate her/his way through the images in any way that creates meaning and to consider the multiple pathways both within the image and into the accompanying images. In other words, the images are meant to link within themselves and to each other: In Figure 3, one might link the image internally by linking “database” from Wesch’s video with “database” in O’Reilly’s definition or “data” in my blog. At the same time, the images do not necessarily have to be read sequentially so the “database” in Figure 3 might be linked with the “data” in the O’Reilly citation in Figure 6. Indeed, the reader may forge intriguing connections by using the images to “link” back into other portions of the print text in which they are contained, using the images from Wesch’s video, for instance, to return to my explication of it in the Introduction.

9 A web is a frequent metaphor for writing and thus may lose some of its metaphorical power, as well as implying a static, non-changing entity. Instead, I have chosen “network” because it implies temporary connections as well as potential for disconnections, the flow of information between points, and that meaning is created through the users navigation of the text.
There is an urgency in the notion of ecology, because we all are aware of the possibility of ecological failure due to environmental destruction" (56).

Tim O’Reilly: The long tail Success in a web 2.0 ecology depends upon reaching out to and harnessing the collective power of the small sites that build up the bulk of the web’s content. Web 2.0 must reach out to the entire web, to the edges and not just the center (O’Reilly, 2005).
Tim O’Reilly: RSS and the Wisdom of Crowds RSS is crucial within blogging and allows users to not just link to a document or webpage but to subscribe to the database of the blog which is perennially changing. This “live web” feature is a stronger link than the usual bookmark and has allowed for, as O’Reilly puts it, the blogosphere to become “the equivalent of constant mental chatter” on the web. The power (and threat) lies then within the aggregate of the blog, or the collective “wisdom of the crowd” (O’Reilly, 2005).

Tim O’Reilly: Software above the level of the single device Software needs to be designed so that it exists in the spaces between devices, rather than on either client or server. The web thus becomes a database, serving as a platform for collection of developer-user created software and content (O’Reilly, 2005).

Marilyn Cooper: “The metaphor for writing suggested by the ecological model is that of a web, in which anything that affects one strand of the web vibrates throughout the whole” (9).
Tim O'Reilly: The Perpetual Beta  Internet software is not a static artifact but rather a process of engagement with users. Users are treated as co-developers and the software is developed continuously and out in the open. Companies thus harness the “collective intelligence” of the web users to make sure their software gets better each time it is used (O'Reilly, 2005).

Marilyn Cooper: “An important characteristic of ecological systems is that they are inherently dynamic; though their structures and contents can be specified at a given moment, in real time they are constantly changing, limited only by parameters that are themselves subject to change over longer spans of time” (7).
Nardi and O’Day:
“Ecology suggests diversity in a way that community does not...ecology implies continual evolution. The idea of community does not put the same emphasis on change” (56).

“Sites of local participation offer both opportunities and responsibilities for shaping the way technology works in our lives” (55).

“We cannot overemphasize a key point here: only the participants of an information ecology can establish the identity and place of the technologies that are found there. Indeed, this is a responsibility, not just an opportunity” (55).

Marilyn Cooper: “An ecologist explores how writers interact to form systems: all the characteristics of any individual writer or piece of writing both determine and are determined by the characteristics of all the other writers and writings in the systems” (7).
Marilyn Cooper: “Textual forms, like language forms in general, are at the same time conservative, repositories of tradition, and revolutionary, instruments of new forms of action. A textual form is a balancing act: conventional enough to be comprehensible and flexible enough to serve the changing purpose of writing. Thus, new forms usually arise by a kind of cross-breeding, or by analogy, as older forms are taken apart and recombined or modified in a wholesale fashion” (9).

Tim O'Reilly: Harnessing Collective Intelligence Software grows organically out of the process of users creating and linking data. Wikipedia and the practice of “folksonomy” (the collaborative tagging of sites or images to create associations for data management) demonstrate how user-generated content and links create a “better” web that is written and managed by users (O'Reilly, 2005).

Figure 6: Tagging and Mashing
Nardi and O’Day: We can all name the ecologies we belong to and participate in. In an ecology, we are not cogs in sweeping sociological processes. Instead, we are individuals with real relationship to other individuals. The scale of an ecology allows us to find individual points of leverage, ways into the system, and avenues of intervention” (50).
My methodology in crafting the preceding selection of texts, connected both through visual alignment and my own alphabetic writing, follows the work of Johndan Johnson-Eilola on articulation theory. In writing about hypertext, digital connection, and the social activities of online writing that make up web 2.0, there is a point at which I have found that the ability for linear print text to contain or create meaning out of web 2.0 material begins to break down. Due perhaps to the fragmented, transitory, and hyper nature of some of the compositions I draw upon, it becomes difficult to create a fixed connection between them. Articulation theory speaks to this difficulty by highlighting the indeterminate and contingent nature of language. Johnson-Eilola puts it this way:

Like language, objects – concrete objects like texts or motor scooters or conceptual things like the words – objects ‘mean’ not because they inherently, automatically mean something, but because of what other objects they’re connected to. And, like language – often, as language – people can attempt to forge new connections in certain situations; they can connect objects together in various ways to shift the meanings. (202)

My method of connecting materials is meant to both heighten the act of connecting, of linking this material, and the way that they “mean” through those connections, but also to highlight the ways of making meaning that each of these texts represent. Johnson-Eilola maintains that a strength of articulation theory, of focusing on connection and webs of connotations, is that the theory in action “provides a way for thinking about how meaning is constructed contingently, from pieces of other meanings and social forces that tend to prioritize one meaning over another” (202). Within my connections I draw attention to articulating the nature of the spaces between, for instance, Michael Wesch’s anthropological context and Marilyn Cooper’s position as a composition theorist. By forging these connections and highlighting their disciplinary priorities I aim to illuminate the darker corners of web 2.0 to see how a collection of data might lead to a definition of web 2.0 as ecology but also as a
particularly significant site of analysis for rhetoric and composition. In discussing articulation theory as an act of collection, Johnson-Eilola also points out that “collection is a social and political act; there are not mere disembodied facts, but choices” (212). My choices are meant, to some degree, to perform the social nature of web 2.0 writing itself and are political to the extent that I am claiming public writing and business practice as a site for intervention (or perhaps more accurately, interaction) with the perspectives of rhetoric and composition.

The images above are designed to define web 2.0 not only in terms of its characteristics, but of its variety of modalities, as well. Videos, blogs, photos, hypertext, and multiple online interfaces also make up the ecology of web 2.0. I have shown, I hope, that the changes that have occurred are not technological nor are they social – they are a curious mixture of both, a reciprocal relationship in which the machine, the user, and new capitalist structures of the information economy (Kress) form and are formed by each other. I would like to conclude this chapter by citing Gunther Kress’ consideration of the changes in contexts for writing:

Even though [the changes] involve the new information and communication technologies, they constitute a revolution of a social and not just a technological kind. These changes are unmaking the era of mass communication and its social structures, through a new distribution of the means of access\(^{10}\) to the production and reception of messages in the public domain.

(17)

Kress’ emphasis on the connection between the dissolution of mass communication and social climate are important to me for they point to a further distinction between the “reading public” of the 19th century that Yancey describes and the “writing public” that is evolving now. As the ecology of web 2.0

\(^{10}\) New means of access still do not address Cynthia Selfe’s critique in her 1998 CCCC keynote address that access to technology in a material sense is never equally distributed across race and socio-economic status. Rather, Kress is referring to new avenues to participate in technologically mediated public domains once material access has been achieved.
continues to grow and evolve it seems reasonable to conjecture that larger social structures – existing outside the web – will as well. For example, Miller and Shephard’s genre analysis of weblogs found that the blogging phenomenon may have gained strength through the increasing voyeurism of late 1990’s culture but also served to perpetuate and normalize “mediated voyeurism and exhibitionism” (Miller and Shephard, 2004). The reading public has become a writing public, but not only a public who writes text, but who writes (or perhaps more appropriately) composes image, video, and meaning carried in and through multi-modality. By composing text and image, these writers also compose the form systems in which they exist, both on the web and outside of it. In the case of Miller and Shephard’s blog example, blogs may be said to have effected the way that form systems carry expressions of identity both online and in other examples of mediated voyeurism, such as reality television shows. The tacit power that the writing/composing public has is, however, still mediated by older modes of conceptualizing human agency and behavior. I want to turn in the next chapter, then, to considering how this phenomenon of the web 2.0 writing public – composers of text and image, defined by the link and by data, by fluid and contextual meaning – is constructed and thus harnessed in the rhetoric that itself seeks to describe web 2.0.
Chapter Three:
The Rhetoric of Web 2.0 and the Global Brain Metaphor

Alexander argues that “ultimately, the label ‘Web 2.0’ is far less important than the concepts, projects, and practices included in its scope” (33). I would agree with him that the argument over whether the term “web 2.0” is accurate, appropriate, or even necessary is not necessarily a productive conversation. Far more productive for scholars is an understanding of the components of the movement, especially since the practices are extensive and constantly changing. I do think, however, that concentrating exclusively on the “concepts, projects, and practices” as Alexander puts it, may elide the language used to describe and thus constitute those practices.11 Thus, while I will have previously considered the components, I now turn to unpacking the rhetoric of web 2.0. The aim of this chapter is to explore how the rhetoric of web 2.0, while extolling its virtues for the power of the collective, serves also to construct that collective into a potentially homogenous whole that is knowable and controllable. Doing so enables a negotiation of the more threatening aspect of a collective that has “wisdom” and the power to manipulate the web for its own purposes. These constructs rewrite older narratives about globalization and opportunity in such a way as to make the collective intelligence an understandable biological entity and elide any differences that would impede constituting all co-developers in the web 2.0 ecology as having the same levels of influence, literacies, and aims. Constructing web 2.0 as a biological and human entity but putting emphasis on the social also elides the productive opportunities

11 My move of starting with the rhetoric of web 2.0 is, of course, indicative of disciplinary practice. The traditions in rhetoric and composition in which I have been schooled privilege critique and rhetorical analysis. My methodology here is influenced by the work of such as scholars and Selfe and Selfe who, in 1994’s “The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones” urge teachers to pay attention to the way that the rhetoric that structures ways of knowing and using computers constructs marginalized users in positions of subordination and disempowerment. Such work takes “common sense” notions of rhetoric and identifies the ways that they are socially and culturally specific and enact power relations in subtle ways that rhetorical analysis can make visible.
for the post-human networked subject as well as the cautions of ignoring the politically charged nature of the interface (Selfe and Selfe, 1994).

The rhetoric surrounding web 2.0 is firmly ensconced in older cultural narratives that Cynthia Selfe makes visible in “Lest We Think the Revolution is a Revolution: Images of Technology and the Nature of Change.” Selfe draws attention to the tendency among English Studies educators to think of technology solely in terms of social change, even as we negotiate a certain level of tension regarding those changes. Selfe, while certainly not arguing against the possibility for social change in the context of technological progress, seeks to draw attention to how the visual rhetoric of computers actually operates to reify conservative ideologies. She describes the danger of the level of optimism she has noted in the following way:

This optimism about technology often masks in a peculiar way, however, a contrasting set of extremely potent fears. Moreover, and perhaps more importantly, an exclusive focus on the positive changes associated with technology, often serves to distract educators from recognizing how existing social forces actually work to resist change in connection with technology; how they support the status quo when technology threatens to disrupt the world in any meaningful way; how our culture, and the social formations that make up this culture, react with a special kind of conservatism to technology, even as we laud the changes it promises to bring. (293)

By examining advertising images, Selfe reveals how the rhetoric of technology often draws upon and rewrites the conservative myths and stereotypes that constitute narratives of exclusion and power through “ethnocentrism, racism, classism, sexism” (322). These narratives that reinforce gender roles, class structure, and blindness to racial inequities represent the struggle against the progressive potential of new technology. Though Selfe examines advertising images more widely circulated than
the language of web 2.0 that I am examining, I find it interesting to compare her findings about how advertising negotiates technological change with how the changes of web 2.0 are articulated within the software industry and even within education.

Globalization, and particularly the potential for the internet to create a “global village” have been significant topics in both scholarly and business realms since the internet began linking people and content continents apart. In fact, it continues to be a great concern for the field of rhetoric and composition, with a recent volume of *Computers and Composition* dedicated to the topic of “Global Issues: International Perspectives on Computers and Writing.” Selfe details how the integration of global perspective and global subjectivities has been threatening to American concepts of identity: “Becoming just another member of the tribe, just another citizen of the global village, suggest the possibility that Americans could be asked to relinquish their current privileged status in the world” (294). She sees that in response to this threat, many images of the global village become revised so that they cast Americans as the colonizers of an exotic global digital realm.

In the revised narrative, the global village retains its geographical reach, but it becomes a world in which different cultures, different peoples, exist to be discovered, explored, marveled at – in a sense known and claimed by – those who can design and use technology. Inhabitants of this electronic global village, in turn, become foreigners, exotics, savages, objects to study and, sometimes, to control. (295)

Although the language of the “global village” seems like rather quaint terminology eight years after the publication of her article, the narrative she outlines is still operating within the rhetoric surrounding web 2.0 with the call for study and control of the inhabitants. Now, however, the global village has become the homogenously-cast “collective intelligence” that is to be studied and manipulated by software corporations which cast the user in the role of the foreigner, whose excess is to be collected and
mobilized towards business success. For example, Tim O'Reilly argues that one key aspect of web 2.0 technology is that it is designed to become “better the more people use it” which includes the “ethic of cooperation” in which the software becomes akin to a mediator, drawing together disparate peoples and data into the same software environment and database and thus harnesses “the power of the users themselves” to supply better software and more readily accessible data (O'Reilly, 2005). It would seem that the software feeds back to the user the unmediated data of other users from far reaches of the web. A so-called “ethic of cooperation” elides any kind of hierarchy of design, whereas harnessing the power of users implies that the software simply serves to fuse together disparate entities without constituting or restricting how they interact or coalesce. This rhetoric casts the user as she who is simultaneously discoverer and discovered, explorer and explored, thus both colonizer and foreigner since she both uploads and downloads.

O'Reilly’s turn to a biological metaphor implies that conceptualizing web 2.0 users and their data as far-flung and disparate pieces to be brought into contact with each is too unwieldy to maintain. Hyperlinking is the foundation of the web. As users add new content, and new sites, it is bound in to the structure of the web by other users discovering the content and linking to it. Much as synapses form in the brain, with associations becoming stronger through repetition or intensity, the web of connections grows organically as an output of the collective activity of all web users. (O'Reilly, 2005)

O'Reilly conceptualizes the global brain as a growing entity, one that thus does not have hard or fast exterior boundaries or limitations. The brain metaphor might, indeed, be read as an apt and malleable one: the human brain is made up of complex organic elements with radically different functions. This metaphor of the web as brain, with users connected through their synapses of content and links, however, still elides material and physical differences. While the global brain itself may not be
homogenous, the metaphor still inscribes the user/co-developer into a collective in which race, class, or gender is elided. The users similarities trump her differences for the sake of the “collective.” Moreover, she is constituted as a forger of content and connections, a cog in the system, a spark of power to be harnessed for the good and betterment of the whole. Also interesting is the way that the action of users is cast not really as pure collective intelligence, but as a biological function – thus knowable, concrete, and perhaps predictable. Unlike the unwieldy nature of a “collective intelligence,” a collective brain – which is what O’Reilly truly seems to be describing – can be studied and claimed under previously established ideas about the function of the human brain. Such a metaphor takes away the progressive potential of the post-human networked subject whose identity is shifting and networked among spaces by reinscribing her/him into a single known and organic entity. A user, or self, constituted by connections is threatening to the status quo, according to the way media theorists Bolter and Grusin describe it: “The logic of hypermediacy, expressed in digital multimedia and networked environments, suggests a definition of self whose key quality is not so much ‘being immersed’ as ‘being interrelated or connected.’ The hypermediated self is a network of affiliations, which are constantly shifting” (232). Though O’Reilly’s notion of “collective intelligence” and the “co-developer” allow for connectedness, affiliations, and shifting, the larger narrative of the web as brain constructs a boundary within which those connections can shift: a brain cannot be portioned out across a network and remain functional. Not only does the brain metaphor construct boundaries in which the co-developer may operate, fully observed and assumably controllable by the companies harnessing the co-developer, it also erases all levels of material and physical difference for the sake of a homogenous intellectual whole; the rhetoric seeks to absorb the expressions and identity of the individual into the software platforms of the web itself. O’Reilly even draws upon the concept of the global as he extends his metaphor of web-as-brain to incorporate the phenomenon of blogging.
If an essential part of Web 2.0 is harnessing collective intelligence, turning the web into a kind of global brain, the blogosphere is the equivalent of constant mental chatter in the forebrain, the voice we hear in all of our heads. It may not reflect the deep structure of the brain, which is often unconscious, but is instead the equivalent of conscious thought. And as a reflection of conscious thought and attention, the blogosphere has begun to have a powerful effect. (O’Reilly, 2005)

Not only is the web a sort of global brain into which we are all active but constituted participants but O’Reilly’s metaphor of blogs as “the voice in our heads” implies that each type of web 2.0 platform might be read as serving a larger function within the web-as-brain paradigm. While O’Reilly notes that the collectivity of blogs, as writer/readers link and respond to each others content, is where the threat to mainstream media lies, it is still unsettling to think of how this rhetoric adapts the narrative of the global village into one of the global brain, thus conceptualizing all participants as part of a whole (assuming universal access) and disembodying them as well.

This narrative of the global brain and collective intelligence would seem to be one that is pervasive enough to have warranted representation in visual terms, as well. The image in Figure 8 shows headshots both full and partial of a wide variety of races, ages, and gender. At first, the image may seem to challenge the notion of the global brain metaphor as homogenizing since it presents a heterogeneous collection of visages. The image is composed in rows, with faces repeated at regular intervals. For instance, the image of a pale young child occurs at the top of row five and again eight sections below in the grid. While this may not have been the intent of the image’s designer, the repetition of the child’s image implies that he is representative of other children in the web 2.0 movement but may also imply that he is interchangeable for any other face in the image. Thus, while
the image represents difference, it still treats difference as indistinct in that one difference may be exchanged for any other difference.

Figure 8: Web 2.0 Face Collage

As other rhetorics of web 2.0 that I will cite contend, this image implies that web 2.0 is a movement constituted by people, more specifically by the body part that we identify with the head – people’s brains. Notably absent from this image is any machine, computer, or digital interface. Much as with O’Reilly’s rhetoric then, the co-developer, the people that make up web 2.0, are encouraged to think of their experience as part of a whole constituted by other people, not by relationships mediated by machine or interface. Additionally, education scholar Stephen Downes has described web 2.0 in such a way as to draw attention to individuals and away from the computer, calling it an “attitude” rather than a technology. He writes, “For all this technology, what is important to recognize is that the
emergence of the Web 2.0 is not a technological revolution, it is a social revolution" (3). Certainly, a
key point in understanding what web 2.0 is entails learning that it is not about a new version of the
internet, but rather about existing technology being used in different ways, ways that call for and
courage collaboration, participation, and open-source data free of copyright so that users may create
new data and new links freely.

This emphasis on the social, not to mention the use of the term "revolution," call to mind
another narrative of computers and change that Selfe touches upon, that of the “Land of Equal
Opportunity.” This narrative, drawing upon the mythos of the American dream, emphasizes “equity,
opportunity, and access.” The digital realm, much like the frontiers of American land, becomes “a land
available to all citizens, who place a value on innovation, individualism, and competitions” (302). Selfe
goes on to explain that while this narrative exists in visuals marketing computer products, so does a
revised narrative, one that leaves out people of minority race or class, thus constituting a narrative of
opportunity for the privileged few. What is potentially disturbing about the rhetoric of “collective
intelligence,” the “global brain,” or even web 2.0 as a “social revolution” is that these narratives assume
not only access but web 2.0 literacy – the ability to not only read but edit and collate data in a savvy
and informed way. Within these narratives, the web 2.0 co-developer becomes an individual with innate
literacy capabilities whose class, ethnicity, sexuality, etc. are consumed into the “social” and the
“collective.” While I will return to this concern later to explain how the theory of ecologies of writing and
media may claim this social and collective as a productive site, it is through the focus on the local
rather than the global.

One specific way in which these rhetorics ignore potential for difference lies in the way that
they focus on the social at the detriment of the digital and computational. As noted earlier, much of this
rhetoric assumes a user experience that is unmediated by the web 2.0 interface. Bolter and Grusin
have contended that the desire of software designers has long been to create an “interfaceless” interface of a virtual reality in which the user has such an intimate relationship with the content that she is wholly unaware of encountering it through a medium. Ironically, a conceptualization of the web as interfaceless (as exemplified in Figure 8 and in O’Reilly’s metaphor) seems to have been achieved through the heightening of the interfaced nature of web 2.0 platforms. An ‘interfaceless’ interface, as Bolter and Grusin describe it, would contain no familiar tools such as buttons, windows, scrollbars or icons (24). Paradoxically, web 2.0 interfaces that allow for uploading, posting, editing, and management of data on the database call attention to the act of encountering and manipulating an interface. Take, for instance, the Wikipedia edit toolbar in Figure 9. Not only does it include more familiar text editing icons, but also buttons particular to the Wikipedia software such as adding a signature, a block of quoted text, or a formatting setup. A scrolling text window, similar to the format of most blog sites, accompanies the toolbar. My point here is not to argue that the goal of interface design as a whole has changed, but rather that the visual rhetoric of web 2.0 interfaces works to construct the uploading, editing, contributing user as in control of not only the text on the pages but also structural and visual concerns such as images and formatting.

The web 2.0 interface thus raises a significant and puzzling contradiction: rhetoric about web 2.0 seems to elide the interface (such as in O’Reilly’s language and the image in Figure 8) but the visual rhetoric of web 2.0 interfaces themselves heighten the experience of the interface. If, however, the underlying message of the rhetoric of web 2.0 is that both businesses and educators are the colonizer who can know and understand the co-developer/user, perhaps the elision of the interface is

12 While Bolter and Grusin assert that computer interfaces are designed for transparency so that they become immersive experiences and elide the user’s awareness of mediation, web 2.0 interfaces seem to invert this paradigm. As a composer of both the content of the web and the structure and organization of the web itself, the user often has access to the formatting structures of the interface, such as in the Wikipedia edit window in Figure 9, so that feeling immersed in a non-mediated environment seems unlikely.
understandable. If users are conceptualized through their relationships and negotiations of multiple interfaces the homogeneity of the “collective intelligence” or the “social revolution” might begin to break down. If the rhetoric continues to dwell in generalizations of “data,” “collective,” “user,” etc., it may not have to take into account how the local nature of ecological habitats form users to manipulate interfaces in different ways in order to communicate to their audience. There seems to be an interesting conflict between how web 2.0 discussions seek to define web 2.0 as in flux (the perpetual beta) but insist upon describing those users in generalized, sexless, raceless, contextless terms.

Interestingly, O’Reilly’s rhetoric and use of the biological metaphor of collective intelligence more fully delivers on the concerns of genre theorists Freedman and Medway cited in Chapter One,
namely that viewing genre as ecology turns human consciousness into “abstract systemic elements”
that make up “networks” than does the ecological framework of composition. The rhetoric of O’Reilly
and others may be working to support cultural and economic status quos by abstracting material and
physical human experience even as it encourages adaptation to web 2.0 thinking and platforms.
Perhaps it is all the more appropriate then to consider web 2.0 as ecological habits and habitats, since
the rhetoric constituting web 2.0 enacts a conservative, apolitical version of web 2.0 as ecology.
Chapter Four:

The Missing Piece of the Wikipedia Globe: Knowledge or Literacy?

Perhaps this is due to my colleagues’ knowledge of my interests, but each week a new email arrives in my inbox, invariably titled something like “you MUST watch this” or claiming that the link enclosed tells us of the “future of composition.” I enjoy watching these videos, typically published on YouTube, as they often become fodder for my teaching or writing. But what fascinates me the most is the way that such videos are speeding the distribution of scholarship. Academic scholarship itself is benefiting from the ecology of web 2.0 which does not require us to acquire publishers or editors. I’d like to begin this chapter with an example of such a video that was shared with me by a colleague and I use it both as an example of the way that compositionists are making themselves a part of the web 2.0 ecology but also the mental habits that we bring to it and what I believe those habits of thought imply about our future relationship with our fellow members of the web 2.0 ecology.

In the video “The Future is Now: Presentation to the Rutgers University Board of Governors” the Chair of the Rutgers English Department, Richard E. Miller, presents the board with a brief overview of the accomplishments of his faculty, the current climate of writing and knowledge within web 2.0, and a presentation on the Rutgers English Department’s actions in incorporating visual and multi-modal technologies into its vision of the humanities. Part of Miller’s claim for the necessity of the New Humanities, as he calls it, is the “Wikification of Knowledge.” His voice speaks over the image in Figure 10, asserting that despite how Wikipedia is often disparaged in the university, the Wikipedia globe symbolizes the way that our “read/write web” means that people are “actively participating in and contributing to the knowledge that is on the web.” Miller claims that this kind of read/write world requires a different kind of knowledge for success and that the humanities must be at the center of providing the tools for success.
Figure 10: Richard Miller’s The Wikification of Knowledge

Figure 11: The Missing Wikipedia Puzzle Piece
Miller’s reasoning as to why the humanities must be intricately involved in the read/write world is of particular interest to me. In Figure 11 Miller places the missing piece into the Wikipedia globe, and as the piece completes the globe puzzle Miller’s voice says that “sustained study and deep understanding” is the missing puzzle piece. Indeed, according to Miller, the missing puzzle piece is the knowledge and ways of knowing that the university excells in. In Figure 12, the globe of Wikipedia has disintegrated from around the puzzle piece that represents university scholarship. In light of my own reasoning throughout this project, the implications of Miller’s verbal and visual rhetoric are many: that web 2.0 ecology will not be fully functional or evolve as it should without the participation or intervention of the academy; that Wikipedia, or other web 2.0 sites, have a deficit or lack that the university must, as colonizer, fill with its own particular brand of knowledge. The way that the globe dissolves around the puzzle piece is particularly telling. Within this visual rhetoric, the viewer’s eye is left not focused on the globe – on the collective, the source of the collaboration – but on the elite group of academics as
inherently central to the project of a read/write web. In a way, the visual rhetoric of the images attempts to simultaneously colonize the other, as I discuss in Chapter 3, but also to ironically reposition the spotlight upon the specialized knowledge of academia. I cannot inherently disagree with Miller’s claim that the participation of the university is important in web 2.0, nor that a role of the humanities is to spur creativity in order to improve the quality of our world. I can, however, offer the critique that the rhetoric of elitism, privilege, and perceived higher quality of academic knowledge can lead to unknowing enactments of the role of colonizer. What’s needed here is something of a paradigm shift in the way that we think about those outside of the academy; if we are to truly be a part of what that Wikipedia puzzle symbolizes we must be part of the ecology and cannot continue to be set apart in the way that we have. As an ecological model reveals, participation shifts not only the habitat but the habits and behaviors of the individual as well. If our habits, and by that I also mean our ways of thinking and conceptualizing writers outside of the university, do not change, then we ourselves are not truly immersed in the ecology.

I do not want to assert my own meaning for the Wikipedia puzzle piece over Miller’s, for the depth of knowledge that he names is an asset that scholars can contribute. What I believe is missing from this puzzle is perhaps not the final puzzle piece, but might be thought of more as the glue that can hold it together. I think my following brief survey of emphases in rhetoric/composition reveals that the thinking and scholarly work that we have done has focused upon theories of action, engagement, and participation. These theories might enable us to construct a paradigm for web 2.0 participation that not only allows us to bring our particular type of knowledge to others but also to construct a paradigm for re-envisioning literacy in the web 2.0 ecology as a dynamic in which reflection is paramount. What I argue for is less a mobilization of the specialized, static knowledge implied in “deep study” but the way that rhetoric and composition can provide a concept of what literacies of writing action have been,
might become, and how an understanding of them may enable web 2.0 participants to more fully realize the potential of their “individual points of leverage,” as Nardi and O’Day call it.

**Considering Literacy as Praxis**

My project here is not to propose a “literacy of web 2.0” or even to outline a group of literacies that web 2.0 enacts. Doing so is a much larger project and I am concerned here less with the naming of literacies in web 2.0 than I am with a reflection upon the literacies that rhetoric/composition brings to an understanding and participation in web 2.0 and how the introduction of those literacies might be a useful contribution to the ecology. Web 2.0 literacies are far too multiple, fragmented, multi-modal, and ultimately fluid to attempt to fix in time and name a “literacy.” Diane George and Diane Shoos emphasize the following about postmodern literacies:

> Although the notion of process may be in danger of becoming a critical and pedagogical cliché, we emphasize literacy as a process for two reasons: first and most obviously, if literacy is henceforth linked to technology, it is by definition changing and changeable as technologies evolve […] it entails an ongoing re-evaluation and reformulation of the cultural and textual terrain as that terrain itself, including the positions of readers, shifts. (124)

Though George and Shoos do not utilize an ecological model for their work on intertextuality, their use of terminology such as “evolve” and “terrain” fits well with my own work on web 2.0. Web 2.0 literacies are linked to technology, and with the machine of the internet changing as rapidly as it does since participants uploading of content changes the terrain at a speed that is incomprehensible, web 2.0 literacy practices are process without product. Literacy becomes about action and in-the-moment meaning making. As the web is remade each moment, so are the users, and by extension, their literacies. I hope to draw together the disparate threads here that I have carried throughout this project to show that while an analysis of web 2.0 cannot start with literacy, it may ultimately end there. The
ending is not, I believe, a new literacy to add to our list but perhaps a way of conceptualizing and theorizing the hyper-literacies of web 2.0 participants.

I propose a theory of literacy as action, much as Cooper names writing as action. Anne Wysocki and Johndan Johnson-Eilola have considered the “bundles” of meaning that the term and framework of “literacy” brings to our reading of any reading/writing situation. As they outline it, notions of literacy are indelibly tied to cultural experiences of the printed book and of a linear notion of time and space. Online and hypertextual literacies though, collapse time-space and deny static meaning. Meaning-making becomes an act of negotiation of many possible relationships between information that can be understood as “movement among (and within) sign systems” (italics mine; 365). This movement between and through sign systems means that information is experienced and rewritten at the same time. Wysocki and Johnson-Eilola draw upon articulation theory, which I have described briefly in Chapter 2 as highlighting the contingent nature of connections between hyper objects, to name the literacy practices of an individual in hypertextual, read/write spaces. Though they wrote before the rise of web 2.0, their ideas are incredibly relevant:

With the notion of connection, in articulation, comes the notion of potential disconnection. Literacy here shifts away from receiving a self to the necessary act of continual remaking, of understanding the ‘unity’ of an object (social, political, intellectual) and simultaneously seeing that unity is contingent, supported by the efforts of the writer/reader and the cultures in which they live. (367)

What literacy is becomes about not only connection but disconnection, not only about reception but also action. The act of understanding is inextricable here with the way that the recipient remakes the meaning in their own way, through connection and disconnection. Understanding comes through the act of creating with connection, not just through passive reception. What this means for literacy in a
web 2.0 ecology is that the literacy practices of reading and writing become entwined as they interact and entwine with use of the technologies themselves.

What this literacy-as-action leads me to is the formulation of an understanding of web 2.0 literacy as not only fluid practice, but thoughtful fluid practice. In his work on the way that reading practices have changed amongst hyper-text, James Sosnoski claims that we do not need a single “THEORY” of hyper-reading” but that we do need to theorize hyper-reading. He uses comments from his reader Gail Hawisher, who draws on James Porter’s *Internetworked Writing* to argue for a praxis of hyper-reading. The following is a note from Hawisher that Porter embeds in his text:

I envision ‘praxis’ as being somewhere between practice and theory – actually a thought-ful form of practice. Let me quote Porter here. He writes, ‘Praxis is more than a simple addition of or compromise between theory and practice […] It is a practice, conscious of itself, that calls upon 'prudential reasoning' for the sake not only of production but for 'right conduct' as well. It is informed action, as well as politically and ethically conscious action that in its functioning overlaps practical and productive knowledge. (qtd. in Sosnoski, 173)

For Sosnoski, Porter, and Hawisher, praxis is the bridge between practice and theory, or action and meta-discourse. As the bridge between these poles, praxis enables the individual to both act and reflect. What these three scholars highlight is the inextricable nature of meaning and understanding with action. The end goal for them, however, is not simply thinking about the action taken, but thinking about it in order to take “informed” and “right” action. Considering web 2.0 literacy as a praxis – a kind of thoughtful and self-reflective action that is geared toward right action – might reintroduce the question of ethics and political action into the collective intelligence that O'Reilly and others have named as web 2.0. Of course, it would be hyperbolic to claim that all users of web 2.0 are, or even ought to be, constantly ethically and politically conscious. But I contend that literacy in web 2.0 may be
closer to Sosnoski, Hawisher, and Porter’s notion of praxis for its elements of action that are understanding and writing at the same time, than it is to traditional notions of multiple literacies which may have difficulty, as theories, accommodating the fluidity, connection and disconnection of the web 2.0 habitat.

Allow me to refer to, and perhaps recuperate, Richard Miller and his presentation video here. Along with his claims about the role of the university in the wikification of knowledge, Miller also argues that the Humanities in general has “somewhat lost its way in becoming overly concerned with critique.” His reaction to the problem is to argue that the humanities’ role is to “engage in the act of creativity, moment to moment, to improve the quality of the world we live in.” The acts of creativity he speaks of are multi-modal and multi-authored compositions. I think, however, that the field of rhetoric/composition has continued to engage in studying creativity and action along with critique. I want to argue here that rhetoric/composition can, and must, serve as an integral (perhaps leading) role in drawing the

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<td>Critical Literacy</td>
<td>Computers as cultural artifacts</td>
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We now have awareness that literacy is a cultural practice of production, rather than consumption, enacted in everyday life, outside of academia or pedagogy. (Trimbur, 2001)

While the disciplinary boundaries of English studies are in dispute, the field can be a crucial site for both political critique and production of texts (Berlin, 1996).

Writing teachers focus on texts' materiality (physical components and sign systems), acts of production and consumption and how situated people both form, and are formed by, such texts (Wysocki, 2004)
Humanities into the web 2.0 ecology in a reflective way that not only engages us but shifts our habits and paradigms for praxis, as well. Consider the short list of theories and methodologies that those involved in rhetoric have posited in the last 12 years or so, found in Figure 13. What I hope to draw attention to with the brief sampling in Figure 13 is that studies of rhetoric -- with the integration of consumption and production, critique and composition that we have emphasized, studied, and practiced -- positions us as a crucial part of moving English studies, and the humanities more generally, into the ecology of web 2.0. We are equipped, not with a THEORY, but with theories of writing as action, rhetorical production of texts through acts of consumption, of the complex relationship between writers, readers, and the levels of mediation between them. Perhaps, more than anything, this focus on praxis can enable us to see the “wikification of knowledge” as a natural extension of our field rather than a threat to it, or as a space for intervention or object of colonization.

**But we do have a few roadblocks to overcome…**

Of course, positioning rhetoric/composition as an integral part of the web 2.0 ecology and a source of tested praxis cannot be as easy as simply saying it is so. Outlining a program of action is larger than I can take on here, but I would like to propose just a few challenges that I see and potential solutions, perhaps as a model for how these challenges might be more fully unpacked and taken on. One of these challenges comes not from the field of rhetoric/composition or the web 2.0 ecology itself, but rather from the larger cultural climate. Just as we face a disciplinary struggle for definition and control in the face of new media, the new media creates a larger economic conundrum that brings up struggles of power. Gunther Kress claims that during the era of mass media the control of publication was in the hands of a few elite. Though this power is no longer truly held by those in control of mass media, it is a power that still functions “in principle,” that those with control of disseminating information
also hold the power. Kress reveals that though this power functions only as a principle, it is a principle that will not be easily abolished:

> It is not likely that that power will be ceded easily and without contest by those who have it now to those who do not have that power. In other words, the potentials of these technologies imply a radical social change, a redistribution of semiotic power, the power to make and disseminate meanings. (17)

I find a striking similarity between the unwillingness of those in control of mass media to cede power and the often less-than-positive reaction to internet technologies of those who control “knowledge” in the traditional university structure. Unlike literary studies and its relationship to canonical works of literature, rhetoric/composition has never “owned” writing, which may put us in a unique position to question traditional university structure. Perhaps in this instance, the lack of content that has often lead to the devaluation of our field means that we do not necessarily carry the history of power that would lead us to fear and question and hold tightly to our disciplinary integrity.

In fact, in recent years many have made claims about the necessity of “reframing” or “rearticulating” what the discipline of rhetoric and composition entails (Hesse, 2005; Boland, 2007). According to Douglas Hesse, words such as “writing” and “composition” ultimately frame our discipline in ways that put as at a disadvantage, for the first connotes the act of putting words on a page, while the second evokes a “school subject” that must typically be gotten out of the way early in a college career (345-6). If we need to reframe the way that our discipline is seen, and the way that it sees itself, perhaps the solution is not, as Mary Boland suggests, “writing ourselves in(to) the academy” but rather writing ourselves out of it. It seems as if we might see the changing nature of the “warp and woof of writing” as Wysocki puts it, as a wonderful time in which to reframe our discipline in terms of the intersections of writing or composing done inside and outside the academy.
Another struggle we face, however, in reframing disciplinary boundaries through a relationship with the web 2.0 ecology is our history of relating to those who represent the non-academic: our students. According to research done by Marguerite Helmers, students who enter courses in the discipline of rhetoric and composition are typically constructed in one of two ways: as suffering from an essential lack or deficiency or full of some bestial, alien excess. Either way, students are seen as individuals whose identity conflicts with the aims of the field. As Paul Heilker summarizes the terminologies used to describe students at the 1994 Conference on College Composition and Communication, students are imagined as being “egocentric, ignorant, unprepared, lost, […] uncultured, uncouth, irresponsible, immature […] who become] texts to be read, as stories to be rewritten, as clients, and as products” (226). In the end, the student is always the Other. If rhetoric/composition is going to help solve issues of power both in and outside the university, to realign our discipline as about more than simply inscribing words on a page, if we are to look outward instead of just inward, we must begin to structure a new paradigm that sees our students not as alien Others, but simply others. We need to begin to recognize the potentials, the achievements, the knowledge that our students and others outside our classroom have to add to and enrich our “sustained study and deep understanding.”

Perhaps the solution to this is, at some level, simple enough that it evades notice. The solution may be to move outside of the model of excess or deficit in the way that we evaluate students and their writing acts. One example of how this may be done is Johndan Johnson-Eilola’s analysis of weblogs. He writes that “Although, at first glance, weblogs appear to be a trivial genre – a laundry list of events and observations elevated to public spectacle – they exhibit some key characteristics that rhetoric and composition teachers frequently search for in writing and reading assignments” (214). Johnson-Eilola goes on to name several examples of rhetorical principles that weblogs enact, such as negotiating
complex rhetorical situations, combining multiple authors from various contexts, and reading, analyzing and responding to other texts. Such a framework for reading online compositions – for the moves that they make, for the way that they embody what we as rhetoric/composition scholars value – may be one way to fight against the tendency to evaluate non-academic texts, and individuals, in terms of lack. By reframing what our “content” is we may thus be able to also negotiate and begin to overcome the disciplinary tendency to colonize.

While these two roadblocks and reflections on solutions that I have provided are far from exhaustive, both in terms of the struggles that rhetoric and composition faces at this moment or in potential ways to address those struggles, I believe that they are representative of the way that web 2.0 ecology can, and will, indelibly imprint the face of rhetoric and composition with its influence. Web 2.0 has given us a culture of a writing public, a writing public that is emerging with literacies that are more effectively considered as praxis for the way that they collapse consumption and production, a writing public that is composing within multi-modal domains, and a writing public whose potential for challenging cultural constructions of authority and power is tentative, at best. Perhaps one of the key points about ecologies that I haven’t highlighted until now is the way that they interrelate, blur boundaries, effect and are effected by other, surrounding, ecologies. Web 2.0 ecology is an ecology of our larger culture, of the cultural kairos, of the university, whether we recognize it or not. As Marilyn Cooper describes ecology, it is limited only by its parameters – which are constantly shifting; ecologies are fluid forms that result from cross-breeding and recombination. Thus, though web 2.0 is a complex ecology itself made up of modes, writers, readers, and developers, its parameters are ultimately not contained to the internet or to the screen on which we view. The ecology of web 2.0, as we as both lay-participants and scholars move in and amongst its sign-systems, will change the other ecologies in which we act, and vice-versa. The web, on several metaphorical levels, reaches out beyond its
parameters and the strands will vibrate with each change, as Cooper puts it, whether we choose to be immersed and active participants or not. It’s a messy business, this collapse of literacy into praxis, reading and writing into a single act of simultaneous connection and disconnection through production, this writing that isn’t regulated or controlled but is pluralistic, fragmented, and constantly shifting.
Works Cited


Freedman, Aviva and Medway, Peter. “Locating Genre Studies: Antecedents and


