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The Value of Scholarly Writing: A Temporal-Material Rhetorical Analysis of Delivery in Google Documents

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THE VALUE OF SCHOLARLY WRITING: A TEMPORAL-MATERIAL RHETORICAL

ANALYSIS OF DELIVERY IN GOOGLE DOCUMENT

by

VALERIE ROBIN

Under the Direction of Mary Hocks, PhD

ABSTRACT

This project examines the impact that cloud-based writing has on scholars' material work processes and the temporal value shift that occurs as we write in an 'always-on' environment. It analyzes how interactive writing software (IWS) like Google Documents serve to forefront functions of interactivity between writers, and by doing so, reshape and create Western values surrounding the academic writing process that are uniquely post-industrial. Using James Porter's (2009) components of digital delivery as a lens, this project contextualizes the ways that the work of writing is performed online by looking at the features embedded in a Google Document. This examination confirms that the canon of delivery itself has undergone a shift. In arguing for different values assigned to the performance of scholarly writing, that decenter the autonomous writer free of material needs, this project illustrates the affordances and limitations of scholarly writing that is both developed and delivered in and through interactive writing software. This dissertation then offers readers a theory of temporal-materiality that creates a model through which to exact an in-depth exploration into the impact Web 2.0 tools have had on writers and writing.

INDEX WORDS: Rhetoric, Composition, Digital writing, Cloud software, Interactivity, Canons of Rhetoric

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VALERIE ROBIN

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May 2016

DEDICATION

To Charlie P. Frazier

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To arrive at a point where I realized that I have always been interested in material theory, took a lot of work. I have a lot of people to thank for helping me safely through. Most notably, I am grateful to my dissertation director and advisor, Mary Hocks, for being honest with me when I needed it, and drinking coffee with me in at least half of our meetings. I am further indebted to my dissertation committee members, Michael Harker and Ashley Holmes. It was in Michael Harker's independent study where I found my path, and to him I owe gratitude for steering me toward the majority of my readings on temporality. I thank Ashley Holmes for always having an open door, and being the most accessible professor I've known.

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1   EVALUATING THE KNOWLEDGE ECONOMY: AN INTRODUCTION

This dissertation is a pursuit to understand and discern value in writing production in a production-centric, Web 2.0 world. It is concerned with a complex relationship between a public ideal of time, labor-related materiality, and primarily circulation-based economics, and how all three culminate in the creation of values for American scholars. Further, it is an exploration into how values concerning composition are shifting as users force change via globalized production friendly web-capable internet. Western views of what counts as writing, who writers are, and where writing takes place, are changing in tandem with the tools we use to do the work of writing. My study examines how cloud-based writing is temporally and materially different from classic industrial writing practices many of us were raised to perform and esteem.

This project flowered in an independent study on Writing Program Administration (WPA). WPA theory, I quickly learned, has had plenty of concerns directly linked to quantity, quality, and duration of labor – a key material component of writing. Jeanne Gunner (2002) wrote "In our attempts to theorize our work in and as writing programs, as well as to articulate particular theoretical orientations for the writing instruction sponsored by our programs, a primary concern should be consideration of the social institution that writing programs materially constitute" (p. 7). This statement, and others like it, embodied an intersection of theory and action that enticed me to dig further. It says that theories of the social and the material, not only work together, but in tandem are worthy of greater exploratory attention. As I worked my way through WPA scholarship, which featured key words like 'ivory tower' and 'flattened hierarchy,' I saw social/material relationships addressed repeatedly. For example, "Writing programs that seek to invest students in the public goals of writing cannot help but be wary of the double bind we face: When we concern ourselves only with 'academic' matters, we are seen as disconnected

from other publics -- as 'anachronistic,' 'esoteric,' 'useless,' and 'elitist.'" (DelliCarpini, 2010, p. 193). Writing instruction has a material impact on everyone – students, teachers, and administration alike.

There appears to be a consistent disconnect, however, between work that takes place in the university, and work that occurs outside it. WPA has such a wide impact on laborers of all kinds, that I began to increasingly question the phrase 'in the real world,' as a binary opposition to the academy, where the majority of scholarly writing takes place. Because of its location in the academy and a recurring urge for some to mechanize writing assessment, WPA work is often implicated as not located in a 'real world' (DelliCarpini 2010; Estrem, Shepherd & Duman 2014; Haswell 2006). This sentiment also exists across popular publications and in casual conversation, and it is disturbing. When I entered 'real world' into the *Chronical of Higher Education* search bar at the time of composing this, 8,647 articles were returned with 'real world' in the title. Like blogger *Lesboprof* (2008), I too am irritated by continual "contrasting the university with 'the real world' (read: the capitalist corporate system)" (para, 2), both by other academic professionals, and friends and family. The phrase is irritating and ultimately confusing. When my teaching job is in a university system, is it less real than a teaching job in a K-12 school? If I write for a scholarly journal, is it less real than writing for a popular magazine? Is the money I make through the university less real than other money? Is the house I rent less real? And when did my life take on this 'non-real' status to those outside the university system? My instinct was that these issues are linked to cultural values and the way the work of writing in and for the academy plays out in a capitalist economy. This instinct is what lead me to recognize that values are heavily constructed, particularly the way we value adherence to work-time as we compose. Ultimately, that realization led me to this dissertation.

Since the scope of this project is large, my foci are multifaceted. I consider it both an exploration into how the phrase 'in the real world' gets constructed in our American culture, and an analysis of what I see as an imminent shift in the values emerging with Web 2.0. I show how values concerning the work of scholarly writing are constructed through a combining of theory on time, its relationship to the material, and the enacting of values through delivery as it is currently reimagined in a world where anyone with Internet access can produce content. To do so, I construct a theoretical lens of both cultural temporality and material theory through which an analysis of scholarly labor and communication could be conducted. I then use this lens to illustrate value shifts that occur through cloud-based writing software (called interactive writing software [IWS] by software developers) such as Google Documents. In further studies, I hope to analyze both writing and the teaching of writing, but for the scope of this project, I focus primarily on the work of scholarly writing as it is enacted in an always potentially interactive environment, amidst a world immersed in technological upheaval. Here, I focus on the development of writing as a professional tool and aim to create a unique space for temporality and materiality to come together as a rhetorical theory designed to mark time and task in a current iteration of interactive writing software. For writers producing in the cloud, my blending of two concepts into a theory of temporal-materiality could illuminate key topics that come together fluidly in IWS space, including virtual identity, access, collaboration, and interactivity. Using the approaches refined by recent computers and writing scholars, I use temporal-material theory to zero in on the rhetorical canon of delivery as a vehicle to enact an analysis of the labor of writing in an increasingly post-industrial era with an uncertain future.

The canon of delivery is a vehicle of study that can navigate the intricacies of all the writing practices into one theoretical lens that examines digital writing and the possible futures

of digital writing. Ben McCorkle (2012) stated, "The rhetorical canon of delivery functions as a technological discourse" (p. 5), meaning that many of the nuances of digital composition are nested in the canon of delivery. If he is correct, and I argue that he is, delivery is under heavy reimagining, remediation, and resuscitation because of the changes that are happening in digital technology, and as a consequence, cultural values are similarly being reshaped. It is up to scholars of rhetoric and composition – most notably computers and composition – to evaluate and explore where writing has been, and ought to be headed so that writers and their work can adapt to cultural changes. Delivery is classically situated in the physical through gesture, and tone, and remains there today, whether a speech is delivered in person, or digitally through video, or otherwise. Though gesture is largely lost in writing, delivery has a place in writing too, as rhetoric and composition scholars have shown (Welch 1999; Trimbur 2000; Yancey 2004; Porter 2009; McCorkle 2012), and thus a place in digital writing. Porter (2009) linked delivery with digital distribution and described "writing as involving labor, as being involved in an economic system of exchange as having status as a commodity with value" (219). It is this link that Porter makes between delivery, labor, and economics that is fascinating to the study of writing. All are connected both temporally and materially, and Porter provides an excellent departure point from which to examine writing practices emerging in a Web 2.0 environment.

In writing studies, talk of time often begins with the future. For example, Bezemer and Kress (2008) claimed, "For scholars interested in writing, developments in contemporary communication sharply pose questions about the present role and the likely future development of writing" (p. 166). For Bezemer and Kress, the answers lay in design, which to them was a focus on "writing within a broader interest in the relation between social environments and representation" (p. 166). However, this relationship is intensely value laden. The relationship

between design and multimodal composition that happens online exists because our culture has created a future facing aesthetic for this kind of composition based in a value system constructed around what is valued in labor in the Western world. Illustrating just such a value creation, Selfe and Selfe (1994) wrote "The objects represented within this [virtual world as a *desktop*] are those familiar primarily to the white-collar inhabitants of that corporate culture: manila folders, files, documents, telephones, fax machines, clocks and watches, and desk calendars" (p. 486). And today, over 20 years later, almost all these items are still in use in the most current desktop operating systems. But when social environments shift, what happens to the ways these are represented in a computer interface? In 1994, computing happened primarily at work. Today, the general user accesses content for entertainment. As a result, current applications seldom use the hourglass when marking processing time. Now, companies have developed their own ways of representing wait-time: the rotating circle being the most prevalent in video streaming. These design changes show that the way we represent time has shifted away from the archaic hourglass, to represent a more cyclical motion related to the rotation of a processor, or a clock. If the representations happening in interfaces are shifting with the culture of computing, what does this say for the future development of writing? This is one of the questions my study aims to answer in the chapters to come.

To know where the work of writing is headed, it is critical to look back to see where work has been in the development of the Western world. In 2000, Joseph Harris asked the seemingly simple question, "What social and material interests undergird our work as teachers of composition?" (p. 46). For labor in general, time has played a significant role in the construction of value both in and out of academic institutions of all levels. Public time is a material phenomenon. It is a manifestation of Heidegger's 'averageness' and Hardt and Negri's 'the

common,' which I will explain in detail in chapter one. Many of us think about time as though it moves in a linear fashion. We have a past, we are in the present, and the future is before us. This linear model shaped how we began to think about public time and it continues to form our naturalized social adherence to it.

Our adherence to public time is inextricably linked to the production of our material lives. Much of material theory is seeded in the industrial production of material goods and the effect their production had, and still has, on labor, social and socioeconomic class, race, gender and power. A few foundational works influenced the way I began to understand time as the crux in a study about values. Among them, Stephen Kern (1983) comprehensively broke down salient moments in the transformation of constructed time in the Western world in his book *The Culture of Time and Space: 1880-1918*. Kern described how "The introduction of World Standard Time created a greater uniformity of shared public time and in so doing triggered theorizing about a multiplicity of private times that may vary from moment to moment in the individual, from one individual to another according to personality, and among different groups as a function of social organization" (p. 33). World Standard Time, was developed in the late 19th century as a response to the growing needs of a more mobile world. Kern explained that "The most momentous development in the history of uniform, public time since the invention of the mechanical clock in the fourteenth century was the introduction of standard time at the end of the nineteenth century" (p. 11). This development occurred over the course of a series of events including the 1884 Prime Meridian Conference – the same year Karl Marx's posthumous *Capital Volume II* was published – and the coordination of railroads and telegraph services from Japan to Austria-Hungary, from 1888-1893 (Kern, 1983, pp. 11-13). According to Kern, the distinction between public time – that universal clock time on which trains and telephones operated – and private

time was critical for many thinkers. Definitions of time were unsatisfactory, from St. Augustine (354-450) to Henry Bergson (1859-1941) and the discourse on time has never been consistent:

> Contrasting views about the number, texture, and direction of time were complicated by the fact that generally two kinds of time were being considered: public and private. The traditional view of a uniform public time as the one and only was not challenged, but many thinkers argued for a plurality of private times, and some, like Bergson, came to question whether the fixed and spatially represented public time was really time at all or some metaphysical interloper from the realm of space (Kern, 1983, p. 33)

Private time was seen as a fluid thing, which could run parallel to public time, or "as capricious as a dreamer's fancy" (p. 34). Kern reported that many felt public time imposed upon their private time, the latter being responsible for creating their private experiences.

The concept of 'time' as I use it is not the Newtonian concept of absolute space-time which flows uni-directionally, but as a culturally constructed form of time that orders our perceptions of the motion of life and dictates the general order of our days. As I began to look further into the phenomenon of public time versus private time, I realized that time perception was not only akin to value creation, but might well be its main ingredient. While Kern used the history of how the culture of time developed, other scholars such as Michel Foucault (1975) discussed time, in *Discipline and Punish,* as it related to bodies performing disciplined labor motions. Similarly, Cathy Davidson (2011) described modern school rooms set up to enact the same values developed during the industrial age. According to Davidson (2011), "The biggest problem we face now is the increasing mismatch between traditional curricular standards of

content-based instruction and the new forms of thinking required by our digital, distributed workplace" (p. 76). Here, Davidson describes the U.S. school system, and the 'we' refers to educators and students affected by the problems she highlights. This mismatch of values is a symptom of a changing society moving from a culture that values the industrial way of marking time – publically, with watches, large wall clocks, punch cards, and structured working hours – to a culture where people increasingly work at home, in private spaces, needing only an internet connection and maybe a webcam, to conduct full-time business. Ilana Snyder (1998) described U.S. culture at large, and educationally, as "a culture that valorizes, even fetishizes, 'newness' at the same time as it extols the traditional and the old" (p. xxx). This is the kind of mismatch that Davidson discussed above. In 2010, the United States Census Bureau released an infographic detailing the numbers of home-based workers, home workers, a mix of these, and onsite workers, and the change in these numbers between 1997 and 2010. The Census Bureau defined a home-based worker as "a person who works exclusively or part time from home." The number of home-base workers rose by 4.2 million between 1997 and 2010, due to "Advances in communication and information technologies [which] have allowed for a more mobile workforce." These technologies have increased both number of spaces, and the rate at which U.S. citizens can labor. Further, it indicates a melding of public life (office work for which most people have a separate wardrobe) and private life, which suggests a melding of public and private time.

The study of constructed temporality in the Western world led me to conclusions about value creation, which in turn led me to examine how values play out in the work of writing. As far back as the classical period, around 200 years pre-industrialization, time regulation began to factor into labor. Foucault (1975) explained what he called "an important phenomenon: the

development, in the classical period, of a new technique for taking charge of the time of individual existences; for regulating the relations of time, bodies and forces; for assuring an accumulation of duration; and for turning to ever-increased profit or use the movement of passing time" (p. 157). Two key words stand out: 'regulating,' and 'duration.' Before this development, workers had never been disciplined as groups into time regulation for a specific duration for the purpose of "adding up and capitalizing time" (p. 157). For those of us raised in a society where time regulation is a virtue, the idea that this kind of behavior is completely constructed and militantly disciplined into us may sound strange. But, as Foucault explained, this is exactly what happened with the rise of industry. For industrial production to run smoothly, the labor force must be regulated. When labor time is regulated, it becomes commodified. Commodities were, as Marx (1867) explained, "our point of departure, the prerequisite for the emergence of capital. On the other hand, *commodities* appear now as the *product of capital*" (emphasis in original, p. 949). Once time became regulated and assigned as a duration of which a laborer labors, the labor could then be bought and sold, and the laborer paid a wage. Monetary wage compensation is the most recent form of payment for labor, though some standards of payment for labor are shifting with online consumer-driven tools like Yelp and Amazon, which rely on ratings, and community feedback as a form of payment.

Labor as a commodity is the point of departure in my study where time and materialism together clearly construct a value system that is measurable through an economic lens. My methodology then is to use my own temporal-material theory as a mode of inquiry into how we talk about economics in rhetoric and composition. To do so, I analyze how and when our traditional value systems were constructed in order to understand where these values may be headed. My aim here is not to construct new ideas about economics, nor to provide an extensive

review on material theory. Rather, I invite readers with an interest in how economics is both shaped by, and shapes, writing, and to explore the complexities behind the current shifts taking place in writing production and writing scholarship. For example, many readers may be less familiar with the close knit relationship between the construction of public time, labor regulation, and the rise of capitalism in the Modern era.

The modern era of capitalism began when Marx (1867) made the connections explicit: "Capital, therefore, announces from the outset a new epoch in the process of social production." Marx here indicated a footnote which read, "The capitalist epoch is therefore characterized by the fact that labour-power, in the eyes of the worker himself, takes on the form of a commodity which is his property; his labour consequently takes on the form of wage-labour. On the other hand, it is only from this moment that the commodity-form of the products of labour becomes universal" (p. 274). From this vantage point, it might appear that money capital is the departure point, when earlier Marx noted that commodities were the departure point. Marx (1867) explained that "Both money and commodities are elementary preconditions of capital, but they develop into capital only under certain circumstances. *Capital cannot come into being except on the foundation of the circulation of commodities* (including money)" (emphasis mine, p. 949). Neither money, nor commodities are the catalyst for capitalism. In this case, 'circulation' is key. Once money as capital (money capital) is invested into a system that will exchange money for commodities (labor, or goods) which are then put into production and sold again for a profit on initial investment, *then* the circulation of money capital occurs, the value of the initial money capital increases, and capitalism as a value producer is born.

When items circulate, whether it be because money capital was invested, or some other form like knowledge capital, or cultural capital, items move in constant motion producing and

reproducing a surplus for the investor – the capitalist. This kind of circulation of capital has served to create and regulate value, both measurable and socially powerful, throughout the industrial age of production and profit, and still has a hold on our major social systems, including the education system. As Pierre Bourdieu (1986) first described it, "Capital is accumulated labor… which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor" (p. 242). Bourdieu explained that those who can invest capital can also direct the social classes because investors have time to wait for capital accumulation – or what Marx labeled as surplus. Under the capitalist mode of circulation, time factors in again, as capitalist investors have time to produce a surplus, and laborers only have time to produce labor.

To view scholarly writing as labor that is both materially and temporally located is to place that writing in an economic context that factors in value creation and social position. In the "Openings & justifications" to *Writing New Media*, Anne Wysocki 2004, stated, "It is not that we find our selves in work that we do because there was a unified self that preceded the work and that only needed being made present somehow; it is rather that the work makes visible to us what and where we are at that time" (p. 20). Our very writing betrays what cultural values hold sway over us in any given moment or space. *Writing New Media* is aimed at both teachers of writing, and writers that find themselves involved in the production of writing through the interfaces of new media. The advent of internet technologies, and the emergence of Web 2.0, appear to have spotlighted current and future technological advances. These advances allow producers of compositions to shift the core values constructed by the capitalist and industrial ideologies away from the training many of us get in public schools and into something more fluid, and less adherent to set durations of time and space. Wysocki wrote her opening before

Web 2.0 emerged, and her need to define and justify new media shows a deliberate move toward incorporating new values inherent in writing with digital tools today. Ten years later, Stacey Pigg would write about mobile technologies and the work of writing. Pigg (2014) observed that "accessing 'good' material writing environments is not simply a matter of personal choice: it shapes and is shaped by cultural economic systems that are also implicated in constructing the discourses of productivity and time use that push composers into public places for work purposes" (p. 262). Pigg was after a writing environment that suited the physical needs of a writing space for writing laborers. She considered the parameters set up by newer mobile technologies that have pushed workers out of offices and homes into spaces apart from daily lives; spaces like coffee shops and cafes (p. 251) that were formerly escapes have turned into spaces for work that can be performed and executed online.

I return then to interrogating concepts of the 'real world.' When I work from home, is my job less real than if I work from an office because I don't commute? Or is it just as real if I remain subject to the same work schedule and digital punch clock as other employees that do commute? The way our culture talks about time, the material, and the values systems we have in place all create a rhetoric that can answer these questions. Rhetoric and composition scholars are already paying attention to economics and materialism, but need to be paying more attention to how time (not necessarily timing) factors into how we form our cultural values, which inevitably inform our writing because time is inseparable from the spaces, places, and actions of writing production and key to the construction of what we value in writing labor of all types.

2   MATERIAL TIME: A RHETORICAL THEORY FOR THE DIGITAL SITUATION

Time is material. It is inextricably linked to our social identities, and the way we process and perform our lives. We wear time on our wrists like jewelry, in the phones our pockets and purses, and hang it on our walls where we can watch it, and it can watch us. We often experience a lack of time, yet sometimes there can be too much of it, and we get to 'waste' it. Time affects us with its passing, causing us stress, sorrow, or healing. Many of us believe that time is somehow apart from us, somehow outside humanity, and cannot be commanded. But theorists have concerned themselves with time in ways that show, as Nedra Reynolds (1998) claimed in her article "Composition's Imagined Geographies", "it is important to challenge the idea of a single and objective sense of time or space, against which we attempt to measure the diversity of human conceptions and perceptions" (p. 19). In this chapter, I aim to challenge the idea of a single sense of time, and break apart an objective sense of what constitutes time spent laboring – particularly the labor of scholarly writing. Time and labor are linked, fluidly influencing our daily notions. In what follows, I explore the construction of values and examine ideas about
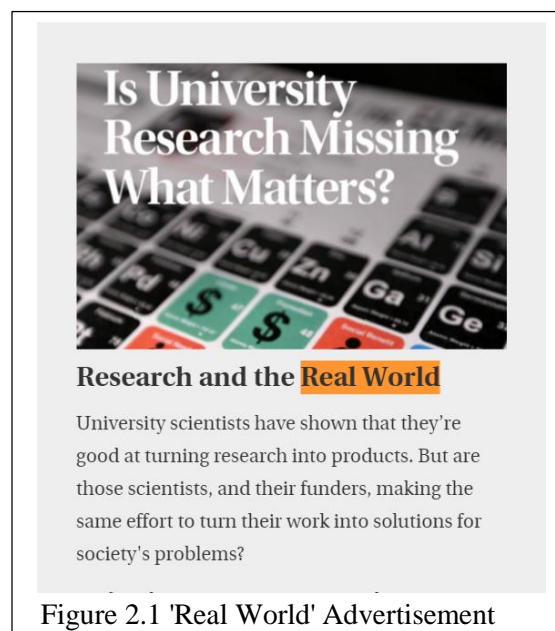
Figure 2.1 'Real World' Advertisement

work-related material lives that occur in service of an information-driven economy still rooted in a society that adheres largely to an industrially minded sense of time and space. Doing so will show that the way most American workers adhere to a schedule married to duration and repetition is not the only way, or the most valuable way.

My claims concerning time and the material have roots in the phrases, 'real world,' and 'real job' as they are sometimes used in reference to academic pursuits. In examining a possible link between these phrases and the way Westerners value work, I ran into ample evidence that people use 'real world' to indicate both 'outside the university,' and 'not theoretical – applicable.' For example, **Error! Reference source not found.** is an advertisement for an article titled "Is University Research Missing What Matters?" with a sub-heading that reads, "Research and the Real World." This indicates that university research is other than 'real world' research. In the text below, which reads, "University scientists have shown that they're good at turning research into products. But are those scientists, and their funders, making the same effort to turn their work into solutions for society's problems?" First, real world research means tangible products, probably for sale to consumers. Additionally, real world research should create solutions for society's problems. This implies that theoretical problematizing research might not count as 'real world' for many who share a sense of the colloquialism 'real world.' Perhaps a more interesting, and more conclusive find exists in Amy O'Connor and Amber Raile's recent article "Millenials' 'Get a Real Job'," which explores what Generation X and Millennials think of the meaning of the phrase 'real job.' And while O'Connor and Raile (2015) found a shift in the way these two generations define the phrase, they also found it mostly static. Generation Xers define the term with the following discourse characteristics in ranking order of importance: "money; utilizing education or potential; enjoyable; standard 40-hr work week, 8 –hr day; and

advancement" (p. 278). In comparison, Millennials characterized a 'real job' this way"
"Financial autonomy; College education; career; enjoyable; and benefits" (p. 281). The major
shift we see here is that full-time and regular schedule are less valuable than a job with benefits
for Millennials – a characteristic O'Connor and Raile attribute to the Great Recession. Altogether
though, the college students used as participants in the study largely agreed that a 'real job' is a
rite of passage. O'Connor and Raile reported one student wrote, "Ultimately, I associate real job
with real world which begins after college" (p. 282). This means that work that is done in college
that does not incur immediate financial capital, or easily detectible benefits of some kind, it does
not count as 'real.' Compositionists experience the struggle surrounding tenure and tenure
promotion guidelines. This is illustrated in the need for the updated 2015 "CCCC Promotion and
Tenure Guidelines for Work with Technology," but the connection that scholarly writing has to
benefit, promotion and financial gain are lost to those outside of academia. Writing does not take
place in a office, in 8-hour shifts, and most articles published in scholarly journals incur no
financial reward. To all the participants of O'Connor and Raile's study, this would not count as a
'real job.'

Computers and composition studies is uniquely situated to the study of the temporality
and materiality of the production of scholarly writing. It concerns itself with the complexities of
interdisciplinary theories intertwined with issues and problems facing the academy, and the ways
in which writing is swiftly and drastically changing as new technologies emerge and fluidly
develop to the demands of our culture. In the sections that follow, I begin by exploring our
emerging rhetorical situation which has its roots in studies concerning the compression of space
and time. I then illustrate the ways in which the social construction of time in Western culture is
materially fixed by reviewing why we view time and our own temporal habits as we currently

do. I follow this by explicating the material theory formulated by the field of computers and composition which influences and overlaps with more historical temporal theories. And I end by describing the impact a temporal-theory could have on writing labor and values rhetoric from a computers and writing lens as we attempt to explore how digital writing affects scholarly writing writ large. In doing so, I aim to establish a theoretical lens through which scholars of computers and composition, and beyond into the communications, could examine, and interrogate issues that alter writing practices like those Davis and Yancey (2014) label "the modalities of the age." In this new age, the Internet would compress time and space so intensely, that we would still be adjusting more than twenty years after its inception into our daily lives. It is so imperative that the field of rhetoric and composition, most specifically the field of computers and composition, grasp the implications that time and the material have on writing, that I suggest a new theory concerning the examination of our writing practices in new and emerging media, a theory which I call "Temporal-Materiality."

2.1   An Emerging Rhetorical Situation

Part of the reason the terms 'full-time' and 'regular schedule' fell down a rank in O'Connor and Raile's (2015) study on the colloquialism 'real job' for Millennials is because the emerging technologies have changed the ways young workers view their time and their space. Reynolds argued that time-space compression, a concept she took from David Harvey's 1990 book *The Condition of Postmodernity*, gives us the impression that space may be transparent, or even "no big deal," (p. 19) as she put it. But this impression is wrong, and could even be dangerous. As Harvey explained (1990), his term 'time – space compression' is complex:

In the capitalist world – the time horizons of both private and public

decision-making have shrunk, while satellite communication and declining

transport costs have made it increasingly possible to spread those

decisions immediately over an ever wider and variegated space. These

enhanced powers of flexibility and mobility have allowed employers to

exert stronger pressures of labour control on a workforce. (147)

Though Harvey did not point directly to this quote as the crux of his argument at this point in the

book, the compression of time and space in the capitalist world is so crucial to social production,

that Harvey dedicated a page just after the table of contents to highlight the importance of "'time

– space compression' in the organization of capitalism" (vii). For the duration of his IV part

text, Harvey intertwined the fluidity of eras with the impact time and space have on our material

lives in the Western world, which Harvey claimed that from the Second World War on, "What

was distinctively American had to be celebrated as the essence of Western culture" (37). Eras

defined by an 'ism,' which Harvey labels "aesthetic movements" (114), do not begin when the

preceding one ends. Modernism did not end to make way for postmodernism, but society

evolved to embrace social change that we now label as such. For economists like Harvey, and

rhetoric scholars like Reynolds, both time and materiality are central to any conversation

concerning itself with the human condition. It is this conversation which I join specifically

focusing on how emerging technologies in late capitalism are effecting the ways in which writing

scholars think and talk about, and value scholarly writing in an era defined by ever-increasing

speed.

Speed, as a general concept, implies both space *and* time in its meaning. Rather than look

at a dictionary definition however, I instead use a simple illustration: If a worker on a production

line wishes to increase her wages per unit, she must produce at a higher rate that she was

previously. In order for this to be possible, the worker must have a space within which to work

(her station, for example) and must be able to work within the confines of a demarcated system of time (by seconds, for example). Without both space and time, any rate of production is not possible. Thus, theories of time cannot exist without also acknowledging of theories of space, and vice-versa. For Harvey, "The general effect, then, is for capitalist modernization to be very much about speed-up and acceleration in the pace of economic processes and, hence, in social life. But that trend is discontinuous, punctuated by periodic crises, because fixed investments in plant and machinery, as well as in organizational forms and labour skills, cannot be easily changed" (230). I argue that the academic system is currently in such a periodic crisis, with scholars expected to regularly publish writing, but who live within a wide range of social expectations about speed and mode of production.

Space and time are often considered separately in rhetoric and composition scholarship, particularly in the last decade. Titles such as "Hacking the Cool: The Shape of Writing Culture in the Space of New Media" (2007), "Negotiating the Spaces of Design in Multimodal Composition" (2014), and "Teaching Composition Online: Who's Side is Time on?" (2005), were all featured in *Computers and Composition.* But a similar trend that singles out space exists in *College Composition and Communication* and *Composition Studies* with titles like "'Folksonomy' and the Restructuring of Writing Space" (2009) and "Black Spaces: Examining the Writing Major at an Urban HBCU" (2007). Though there are some exceptions to this trend, such as "Re-embodying Online Composition: Ecologies of Writing in Unreal Time and Space" (2013) (*Computers and Composition*), these exceptions are quite recent and very few (I found two in my search of titles *and* in-text). And while many of these articles 'challenge the idea of a single and objective sense of time or space' that Reynolds cautioned us to do, they often neglect the link between time *and* space that is necessary for materiality to function on any level. It's

impossible to determine the cause of the trend toward singling out space from time, or the concentration of one over the other. Harvey (1990) claimed that the Enlightenment tended to be time focused, but this focus on time transitioned to a focus on space and place with the advent of the modern aesthetic, perhaps because of the direct and obvious link between command of space and social power, and then the focus transitioned again during the fragmented aesthetic of postmodernity unfolded (pp. 255-258). Deborah Mutnick (2007) explained it this way: "The deep need for such historical recovery of space – what Bachelard calls 'eulogized space' (p. xxxv) – is intensified and sometimes thwarted by the 'time-space' compression of post-modernity and feelings of dislocation and transience that accompany it" (p. 631). Mutnick (2007) acknowledged the link, and even gave reason for it, but in her article "Inscribing the world: An oral history project in Brooklyn," she clearly addresses space and gives little attention to time. Whatever the reason, the trend exists.

The tendency toward favoring needs to be left behind, particularly as we move into theory that concerns itself with digital materiality. The rise of media technologies have been complicating the human sense of time and space for arguably more than a century. In her impetus for a Brooklyn-based oral history project, Mutnick (2007) argued, "Like the seemingly impersonal flux of economic development that shifts capital from one place to the other with little or no regard for its impact on people, the acceleration of time and collapse of space caused by new technologies and economic change heightens the need for safe, nurturing places to live" (p. 631). And while I don't intend to deny or minimize the importance of Mutnick's oral history project, I do address the significance of her connection between 'time-space compression' and 'new technologies and economic change.' With each new technology, social crises of a sort have arisen decrying the revision in thinking and practice that was needed to transition into a new

material practice. Harvey (1990) put it this way: "Innovations dedicated to the removal of spatial barriers in all of these respects have been of immense significance in the history of capitalism, turning that history into a very geographical affair – the railroad and the telegraph, the automobile, radio and telephone, the jet aircraft and the television, and the recent telecommunications revolution are cases in point" (p. 232), the last of which we can now read as 'the Internet and the World Wide Web.' Harvey published his writing on time-space compression and the human experience of time and space in 1990 – just four years before America Online (AOL) would go public, making the Web a topic of household conversation. As a result, the temporal-material lives of the American would shift gradually, but so drastically, many of us may not be able to imagine life without constant connection, buzzing smartphones, and the ability to recall information with minimal time or effort.

2.2   Time and Temporality

Time sped up in the mid 1800's, and the Western world has not shown any signs of slowing. New technologies like steam engines and telegraph machines, able to connect people across the globe, changed the very nature of travel and communication. Scholars such as Stephen Kern (1983), and David Harvey (1990), observed this change and connected it to the simultaneous rise of both modernism and industrialization. A professor of History at the time of writing *The Culture of Time and Space: 1880-1918*, Kern's (1983) work foregrounds the importance human perception of time has on the spaces and places we build and inhabit, focusing on the major developments in Western culture at the turn of the 20th century. Citing Kern extensively in his chapter title "Time-space compression and the rise of modernism as a cultural force," Harvey's (1990) book *The Condition of Postmodernity* is a macro-economic look at how culture shapes and is reshaped by the fluidly changing perception of space and time, a

perception which he called 'time-space compression.' Perceptions of time and space, according

to Harvey, involve "processes that so revolutionize the objective qualities of space and time that

we are forced to alter, sometimes in quite radical ways, how we represent the world to ourselves"

(p. 240). In this section, I aim to briefly illustrate materially, how these changes occurred.

Because in order to fully grasp the changes writing has both gone through, and must still go

through, we must first understand our fluid and constructed perception of time. Unlike Kern and

Harvey however, I choose labor related objects to show how intertwined our material work lives

are with the values we build in the Western world because of the ways we have come to perceive

and treat time and our temporal-material selves.

Time can be divided in many ways. A popular version of time is the Newtonian sense

that time flows in a linear fashion, existing in divisible ways as 'past,' 'present,' and 'future.'

Conversely, there exist a myriad of labels for time in business, time management, and even in

religion. But time has not always been the experience we take it to be today. There is also a

distinction between two larger, more general concepts of time: the ontological and the

phenomenological, of which linguistic ideologies concerning the makeup of time, are negligible.

Martin Heidegger (1926), perhaps one of the most influential writers on time in the 20th century,

discussed in *Being and Time,* the relation between ontology and phenomenology. In working

toward the more abstract ontological theory, Heidegger stated that "Being cannot be grasped

except by taking time into consideration" (p. 40). Essentially, our very existence as humans, or

our Being[1] (which is quite a bit more complicated than boiling the whole thing down to

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[1] My choice to capitalize both Being and World are translation choices from the German to retain Heidegger's original meaning. German nouns are commonly capitalized, but the capitalization of 'world' here into English maintains the idea that the 'world' addressed here is more than just the planet – it is the world in which we exist, so to speak. The translation notes in the edition of *Being and Time* executed by John Macquarrie and Edward Robinson are excellent in helping parse these translation issues.

existence) is wrapped up in, and even inseparable from, time. But this Being-ness – this existence – cannot 'be' without manifesting itself: "everything we talk about, everything we have in view, everything towards which we comport ourselves in any way, is being; what we are is being, and so is how we are" (p. 26). The manifestation, or appearance, of 'Being' Heidegger called phenomenology. 'Phenomena,' as Heidegger explained it, by taking the reader through something of an adventure in Greek language, is a science of Being, or observation of Being. Phenomena then, finds its roots in 'truth' and the uncovering of, or discovering' the Being-ness of an entity through objects. Heidegger, in Part II of his Introduction, explains the science of phenomena this way: "Everything which belongs to the species of exhibiting and explicating and which goes to make up the way of conceiving demanded by this research, is called 'phenomenological'" (p. 61). It is this exhibition, or appearance of time, that concerns me most. Phenomenological time then, must be constructed, since humans do not exist without bias and judgment of their surroundings, and the objects with which they come in contact.

Here then, I focus on a kind of socially constructed phenomenological time which can be divided two ways: public time and private time. Private time, according to both Kern (1983) and Harvey (1990), could not exist without first a sense of public time. And the development of public time was a rather arduous process: "The most momentous development," Kern explained, "in the history of uniform, public time since the inventions of the mechanical clock in the fourteenth century was the introduction of standard time at the end of the nineteenth century" (p. 11). Kern never pinpointed any specific year when a sense of public time was formed, because the change was gradual. Harvey does rely on Kern a fair amount, as do other time historians, such as Alexis McCrossen in her book *Marking Modern Times*. Though these scholars have differing perspectives, all agree that industrialization, which depended on a social regulation of

time, played the largest role in the forming of public time. Many emerging technologies during the height of modernism sped up the process of industrialization: steam engines, the telegraph, the telephone, and varieties of machines made to mass produce goods and materials. All of these technologies, of course, relied on a shared sense of time. As McCrossen (2013) explained, "The far-reaching implications of this profoundly important system of social regulation, whose emergence depended on public clocks, pocket watches and standard time, helped to define modern times" (p. 5). And though McCrossen's work focused on public clocks which were prominently displayed on the exteriors *and* interiors of buildings, her work paralleled that of Kern and Harvey, despite the enormous leaps in technology that have occurred between their publication dates.

In order to illustrate the fluid social and material nature of temporality in the West, I begin with the wristwatch: a common item that almost everyone owns. It is closely tied to the making of the modern aesthetic, which Kern explained "is characterized by the restless striving of the Faustian soul and is inherently temporal. It began with the discovery of the mechanical clock and eventually produced the pocket watch that accompanies the individual to remind him constantly of his temporal existence" (p. 105). At first, the pocket watch was a hand crafted item for the elite, often decorated with beautiful etchings and inscriptions, not meant for work-a-day use. But as manufacturing took hold and goods were mass produced, wristwatches became commonplace. In an article praising American-made elite watches of today, Keith Strandberg (2014) reported "In the late 1800s and the first half of the 20th century, American companies like Hamilton, Ball, Elgin and others revolutionized watch production with assembly lines, advanced production techniques, new materials, automation and more. Until the Americans came on the scene, watches were too expensive for the ordinary person" (p. 73). A journal like *Watch*

Journal, where Strandberg reported on the rising American watch industry, is a vehicle for touting the accomplishments and precision techniques of high-end watch making for elites. As such, it holds the assembly line and the rise of manufacturing is high esteem, regarding mass production as a revolution in human industry and labor design. Harvey described this kind of praise of the industrial machine as contributing to 'Industrial Time' which he described "allocates and reallocates labour to tasks according to powerful rhythms of technological and locational change forged out of the restless search for capital accumulation" (p. 202). The upper classes, such as the audience for *Watch Journal*, have ample reason to praise this kind of mass production. If Harvey is to be believed, the class who controls the power and the rhythms of labor, and thus the language we use to talk about labor. Strap a wristwatch on every worker's arm, and industrial time flows smoothly.

The exacting time pieces illustrate the need for workers (mostly men), to pay attention to these new rhythms of time, possessing a material representation on their bodies. Kern explained that in the last decade of the 19th century, "the new profusion of watches was a response to, as well as a cause of, a heightened sense of punctuality in this period, especially in urban centers" (p. 111). And while no one can pinpoint an exact year, or even decade that this profusion occurred, Kern, Harvey, and McCossen all agreed that it was the speed-up of life due in large part to the emergence of new mechanical technologies that put a watch on the worker's wrist. Time could now be divided for everyman, as it was becoming on the factory floor. In fact, watches and punch clocks are not separate in terms of labor. In 1893, an article titled "Recording Time of Employees" was published in *Scientific American* which showed an early punch clock that had been operable for three years. "The device," the articled reported, "is adapted for use in large offices and salesrooms, as well as in factories and establishments of all kinds, the record

tape affording such evidence of the time of arrival and departure of employees as to preclude all dispute" (p. 101). The implementation of the new punch clock device coincides exactly with Kern's claim that watches became prevalent in the last decade of the 19th century.

The connection between time and labor is bound completely and incrementally. Western perception of time, in its current state, formed as early as the 17th -18th centuries. Foucault (1975) detailed several instances of 'control of activity' throughout *Discipline and punish*, including an account of the Prussian infantry around 1743 in which he argued "the more time is broken down, the more its subdivisions multiply, the better one disarticulates it by deploying its internal elements under a gaze that supervises them, the more one can accelerate an operation, or at least regulate it according to an optimum speed" (p. 154). This process of speeding up operations eventually permeated the larger social society, including "the 'mutual improvement school'" which Foucault labeled a 'machine': "the rhythm imposed by signals, whistles, orders imposed on everyone temporal norms that were intended both to accelerate the process of learning and to teach speed as a virtue" (p. 154). This same kind of time division is what made up Taylorism and Frederick W. Taylor's 'scientific management' of time so that workers would be induced to produce at a faster rate. Similarly, Fordism used incremented time to produce more manufactured goods on an assembly line. Today, in the academy, we still mark time in increments dividing classroom time, and time between classes. What's more, we still divide our students into neat rows, and in blocks in accordance with efficient organization. Students are often recommended to divide study time based on arbitrary mathematical equations such as four hours of study for every hour in class, and there are still timed tests for both writing and other disciplines. Cathy Davidson (2012) explained that "most of the institutions of formal education that we think of as 'natural' or 'right' (because they are seemingly everywhere) were actually

crafted to support an idea of productive labor and effective management for the industrial age" (p. 165). And it is here, with an outdated sense of what is 'natural' and 'right' in education, that the academic system is running into large areas of discord.

New and emerging technologies are fluidly and constantly changing the way writers value work time. In the introduction to *Page to screen*, Ilana Snyder (1998) observed that "writing has never been and can never be separate from technology" (p. xxi). Even a pencil counts as technology in this explanation. So when writing scholars talk of technology, it is crucial that we describe what the technology is, and how it affects the changes taking place in writing practices. My insistence that work time for writers is changing is nothing new in rhetoric and composition. The New London Group (1996), in claiming that "With a new worklife comes a new language," for example, argued that "A good deal of this change is the result of new technologies," and they go on to specify these technologies: "such as the iconographic, text, and screen-based modes of interacting with automated machinery; 'user-friendly' interfaces operate with more subtle levels of cultural embeddedness than interfaces based on abstract commands" (p. 66). Twenty years later, these types of technologies are faster, more advanced, and capable of carrying out instantaneous communication in ways impossible for 1996 communication technologies. A simpler version of the Microsoft Word we know today existed then, but users likely did not imagine a version that could exist online where users from anyplace on the globe could work simultaneously and collaboratively in the same document. In 1996, the New London Group observed that,

"much of the change is also the result of the new social relationships of

work. Whereas the old Fordist organization depended upon clear, precise,

and formal systems of command, such as written memos and the

supervisor's orders, effective teamwork depends to a much greater extent

on informal, oral, and interpersonal discourse. The informality also

translates into hybrid and interpersonally sensitive informal written forms,

such as electronic mail." (p. 66)

At this historical moment, America Online had been a publically traded company for two years,

and many middle class households were plugging into dialup modems around the Western world.

According to the Pew Research Center, and the graph you see in Figure 2.2, only 23 percent of

American adults used the internet in 1996, compared to 87 percent in 2014. This figure covers all

use, including public computers, and internet cafes. Given this more than complete reversal in

Figure 2.2 Internet use over time
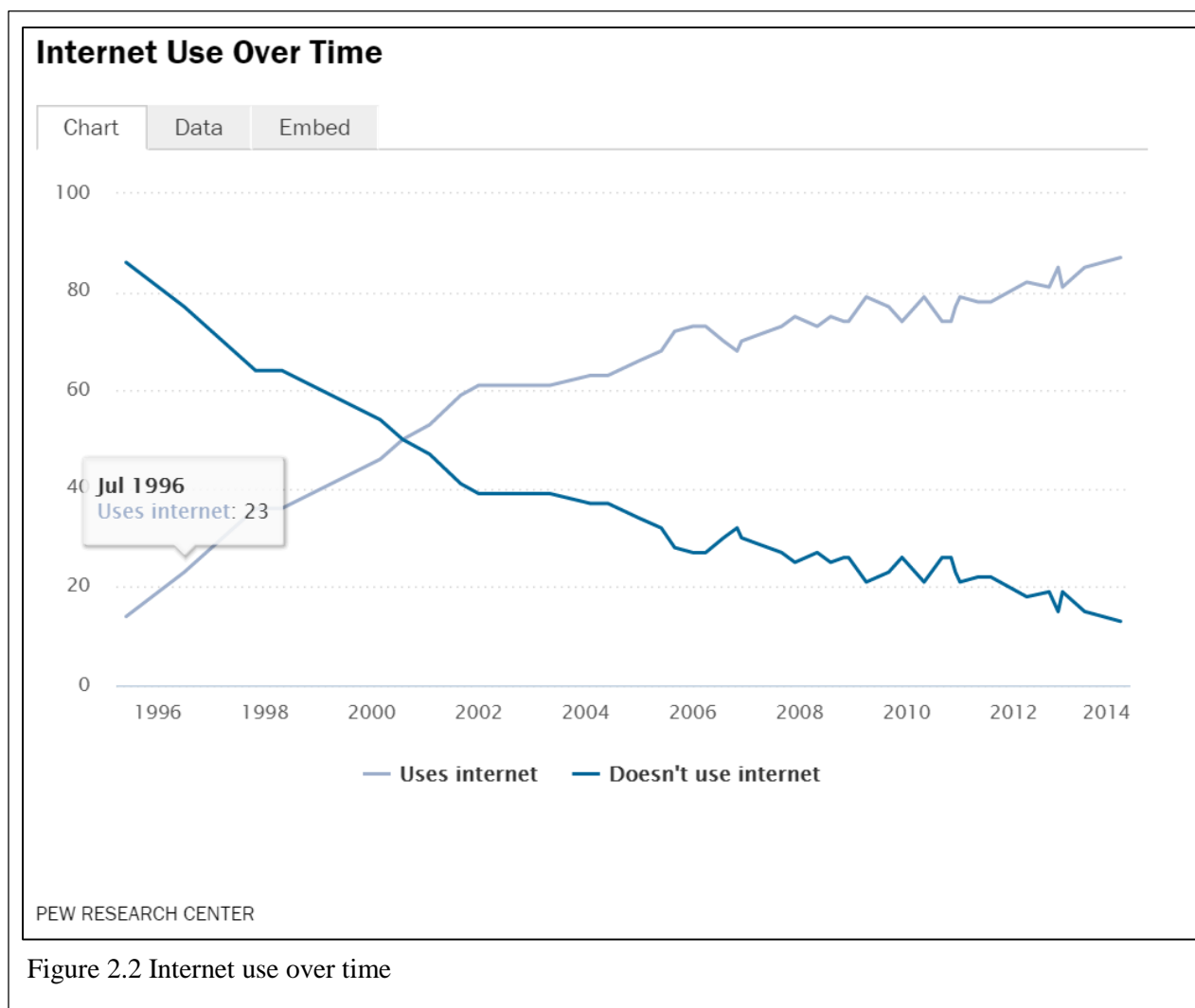
internet users to non-users, over the last two decades, it should be clear that internet based

technologies are influencing the ways in which we write, work, and even write about work.

As work becomes a larger theoretical consideration in the ways Westerners construct

time, it becomes increasingly important to examine theories of materiality that have arisen in

both rhetorical communication and composition around the same time internet use began to

affect Western life. In the next section, I explore several theories of materiality and link them to

theories of time and temporality that I have just discussed.

2.3   Theories of Materiality

Since the inception of the World Wide Web, (which in 2014 celebrated its 25th birthday),

the material lives of most of Western society have changed. Determining whether this change is

for the better, or worse, is not my aim here. Making clear its impact is. Both Kern (1983) and

Davidson (2012) have argued that the internet is one of the most significant inventions in human

history. Davidson claimed "in all human history, there have been only four times when the very

terms of human interaction and communication have been switched so fundamentally that there

was no going back" (p. 11). At some length, Davidson explained historian Robert Darnton's

findings which assert these 'four times' were "the invention of writing," "moveable type," "mass

printing and machine-produced paper and ink that made cheap books and newspapers and all

other forms of print available to the middle and lower classes for the first time in history," and

"our very own information age, the fastest and most global of all the four great epochs in the

history of human communication" (p. 11). If we agree with Davidson, then Western society, and

arguably the entire world, is in the midst of an upheaval in communication – most particularly in

producing and delivering composed information designed for digital spaces. In this section, I

seek to investigate rhetorical theories of materiality in order to make a strong connection

between time and materiality as 'worklife' (as The New London Group called it) perspectives

and values shift in an increasingly post-industrial Western world.

I replace the term 'space' with 'material' for several reasons. First, while space is crucial

to the social construction of many of our behaviors and expectations in the western world, space,

I propose, is the surface of a much larger material infrastructure. In looking at how 'space' is

used rhetorically in computers and composition, it became clear that 'space' is already a loaded

term. Walls, Schopieray, and DeVoss (2009) noted, in a comparison of everyday spaces with

classroom spaces, "Although we interact, socialize, and otherwise live lives in very flexible and

various physical spaces, our classrooms often remain inflexible spaces, typically based in

agrarian and industrial revolution era designs" (p. 271). Each space the authors described impact

identity construction, interaction, language use, perception, and a host of other components

affecting our material selves. Adjacently, our material spaces are affected by more transparent,

underlying factors such as political and economic decisions that go into the architecture of the

buildings in which we construct our social spaces. In moving away from traditional physical

space, Davis and Yancey (2014) described electronic portfolios as spaces that "layer the

modalities of the age – layout and design; word and image; video and audio; rendering and

voice-over" (p. 27). Each element mentioned is awash with complexities involving labor, social

order, money capital and trade – all making up what we know as digital 'space' today. For

example, 'layout and design' are very much influenced by the market trends of the interface. As I

write this chapter, the current design trend in digital portfolios involves minimalism in layout,

with clean lines and large white spaces, which I discovered while researching digital portfolios in

preparation for conducting a series of workshops on the subject. The layout and design of the

space of your personal digital portfolio can say a lot about who you are as a worker, a designer

(also involving labor), and your digital literacy – all of which is wrapped up in the 'space' of your portfolio. Because most of these infrastructural elements are not readily visible in our current use of the word 'space,' I choose instead to use the word 'materiality' to move forward on constructing a theory which examines scholarly writing practices in new and emerging media in online 'spaces.'

My focus here then, is in the labor involved in writing. In 2000, Joseph Harris asked a seemingly simple question: "What social and material interests undergird our work as teachers of composition?" (p. 46). Harris attempted to answer his own question and advised that administrators push to improve first-year composition teaching conditions, and have tenure-stream faculty teach the course as well. And while these were valid ideas, I contend that the social and material issues run much deeper than what Harris suggested. Bruce Horner, writing in the same year as Harris, claimed that "we need to rethink what constitutes traditions in composition" (p. 167). Horner addressed traditional writing theory and the way departmental work is doled out and bureaucratized, which made sense for 2000. But a combination of temporal and material theories of composition would argue that thinking about time in information-age related terms may have a great impact on our rethinking of our traditions of writing as digital writing evolves. Horner accused traditional compositionists of "fetishizing specific textual forms" and being fascinated with 'error,' and he was correct, especially as he linked these problems with "neglect of the relations of production [and] … until recently of the technological and human physiological demands of writing" (p. 219). In 1999, Cynthia Selfe described some of the aversion she had seen to technology talk among her fellow Conference on College Composition and Communication (CCCC) colleagues, saying "After all this time [17 years], however, I can spot the speech acts that follow a turn of the conversation to computers –

the slightly averted gaze, the quick glance at the watch, the panicky look in the eyes when someone lapses into talk about microprocessors, or gigabytes, or ethernets" (p. 412). This illustrates that Horner's address to traditional writing, despite the internet's very common presence in most people's daily lives, was appropriately timed for a 2000 composition studies audience. It is time to move forward and embrace the digital work happening in our field, and across scholarly writing.

Much of material theory is seeded in the industrial production of material goods and the effect their production had, and still has, on labor, social and socioeconomic class, race, gender and power. Foucault (1975) described in detail how both the factory and pedagogy worked together to produce workers disciplined to adhere to the structures of industrial public time. Workers are trained to work, sleep, and rest in intervals which maximize our production potential. Foucault called this 'temporal dispersal' and defined it this way: "Temporal dispersal is brought together to produce a profit, thus mastering a duration that would otherwise elude one's grasp. Power is articulated directly onto time; it assures its control and guarantees its use" (p. 160). By harnessing an efficient, and fast, temporal dispersal, worker productivity, in conjunction with new technologies, can speed up endlessly, connecting the worker with his or her labor tools in a way that cannot be separated under the eyes of the industrial machine. In *Capital: Volume 1*, Marx (1867) explained that "The writers of history have so far paid very little attention to the development of material production, which is the basis of all social life, and therefore of all real history" (286). While Marx's central theme in *Capital* was the industrial production of factory-made goods, he made a point that is valid for rhetoric at large, so much so, that rhetorical scholar Michael Calvin McGee all but repeated it in 1982: "If history matters at all to rhetorical theory, and I am convinced it does, it is material history, not the history of ideas"

(45). Foucault, in talking about space and power similarly stated, "The history of ideas and thoughts is useless" ("Space, knowledge" p. 253). All of these thinkers agreed that the production of materials, from goods to "ordinary discourse [as] a social discourse" (McGee, p. 27), are more crucial to a critical reading of history and rhetoric than are ideas. Given this evidence, an exploration of the materiality of writing production is necessary if scholars of writing are to understand both where scholarly writing has been, and where it is headed.

Rhetoric and composition scholars have made strides to cover material theories in a variety of ways. In relation to new media composition, Anne Wysocki (2004) stated: "If what is important to us is the possibility of agency within the varied and variably articulated structures within which we live, then attending to the particular material qualities of texts is yet another opening for shaping change in those structures" (p. 15). I take this to mean that we must pay attention to how the materiality of seemingly invisible structures, like temporality, affect our labor as writers. As material theory evolved into a subject of interest for rhetoricians, we can see scholars pay more attention to the production of social relations such as distribution of power. At first, "material theory in rhetorical studies [was] rare," according to McGee (1982), who stated that "the whole of rhetoric is 'material' by measure of human experiencing of it" (28). And most rhetoric and composition scholars would likely agree. Dickson (1999) defined material rhetoric this way: "Material rhetoric examines instead how multiple discourses and material practices collude and collide with one another to produce an object that momentarily destabilizes common understandings and makes available multiple readings" (p. 298). This kind of rhetoric is in contrast to discourse analysis. Material rhetoric, for Dickson, has an impact on the corporeal body, and affects how bodies are inscribed socially. And while she covers a specific instance of visual rhetoric, Dickson's definitions of the material work for my focus on labor as well.

Perhaps it is our attachment to the physio-material that urges many compositionists to think of traditional print as somehow possessing more value than new media texts. This is illustrated in departmental requirements for tenure across U.S. university systems. In his chapter titled simply, "Work," Horner explained how it is that we value production of writing over the act of teaching, stating that "*work* is used almost exclusively to refer to written texts" (p. 1), or the texts scholars write outside of their jobs as teachers. Later, he explained that "the value of the product of teaching is more clearly tied to material social conditions – which students, what class size, what school, what term, taught in what facilities and with what resources" (2). More prestige is attached to teaching we may do that is related to our expertise, gained in the writing process, which includes our research.

Words like prestige and value are sticky, particularly in terms of culture. And while value is commonly associated with money and wealth, it is the production of value in scholarly writing where I find the most interesting connections between the work of writing and emerging digital technologies. And it is in value, where time and the material intersect. In the next section, I will explore how a theory of temporal-materiality could be useful in future writing studies.

2.4   A Theory of Temporal-Material Rhetoric

Temporal-Material rhetoric is an inquiry into the connection between constructed public time and the labor practices of scholarly writing and how it shapes the way we talk about, and perform, the work of writing. It asks after the ways in which we experience time, which includes the way we communicate and adhere to public time, but also how we can chose *not* to adhere to it in academia and beyond. Therefore, it is important to pose questions about time's link to rhetoric and writing, in order to parse out the effect time-space compression has on the discipline. I ask then, not only where, but when and how do material theories of time and labor

intersect with digital literacies, interfaces, and online writing practices? I contend that public phenomenological time is shifting again out of an industrial model of segmented, controlled time measured by production, into a new kind of time, which we could call informational time – time without set characteristics or rules that does not adhere to a specifically factory-floor work ethic.

The work of both Marx and Foucault tell us that time is not valueless, but directly linked to production and power. It is this appearance of public time, and the way Westerners, particularly Americans, talk about, value, and move within and through time – time as invisible as a computer interface – that drives my argument and creates the means for a mode of inquiry. Heidegger, in pursuit of anchoring the ontological Being to the World, describes a 'they' character we can all surely relate to. It is the 'they' out there – the 'they' that creates information on which we are not well informed. For example, "'They' say that people only use the Internet for entertainment" is a phrase not uncommonly constructed in casual conversation. This 'they' is distilled into a distanced entity outside of ourselves, yet connected to us, that shares in creating what Heidegger (1926) called 'averageness': "Thus the 'they' maintains itself factically in the averageness of that which belongs to it, of that which it regards as valid and that which it does not, and of that which it grants success and that to which it denies it" (p. 165). Hardt and Negri (2004), in *Multitude* referred to this concept same of 'averageness' as 'the common' claiming that "our communication, collaboration and cooperation are not only based on the common, but they in turn produce the common in an expanding spiral relationship" (xv). Much of this 'averageness,' or 'common,' are what make up 'publicness' for Heidegger. "Ways of Being for he 'they', constitute what we know as 'publicness' ["die Offentlichkeit"]. Publicness," Heidegger explained, "proximally controls every way in which the world… get[s] interpreted, and it is always right" (p. 165). The 'they' is a constructed convention that exists alongside the

Western sense of Being, creating a sense of value to which we measure ourselves, our activities, and even the way we send our time. And this applies to the way we view our time spent laboring both privately and publically with technology. In her article "Bringing Forth Worlds" in which she explains the fundamental ways in which we invisibly value language coupling with technology, Marilyn Cooper (2005) explained that the affordances and facilities we give to media, "may appear to be shaped by the technologies of modes and media are in fact… choices that have been naturalized by centuries of conventions" (p. 33). Because of the conventions we have built around time in the West, our 'averageness' places a powerful value on time spent, time enacted, and means of production that must be examined. The work writers perform using emerging digital technologies is not subject to many of the same rules that govern a 'real world' worker subject to segmented time in dispersed durations, but diverges from the public construct of the industrial averageness.

The 'averageness' must be located in time, as Being is, and linked to who we are and how we labor as writers, at this moment in the material historical situation. Foucault stated, in "The Subject and Power," that "maybe the most certain of all philosophical problems is the problem of the present time, and of what we are at this very moment. Maybe the target nowadays is not to discover what we are, but to refuse what we are" (p. 216). Foucault was right in stating that our notions of present time are a problem. But they are a seldom addressed problem. And while I'm uncertain we need to completely refuse what we are, I do think we need to uncover and challenge the appearance of what we are in relation to how we think, talk, and write about temporality. Adam Banks (2011), in his book *Digital Griots,* brought up the phenomenon of "the 'back in the day' narrative" to illustrate the current tensions he felt about the hyper-attention paid to the present. "The 'back in the day' narrative," Banks told us, "not only is a form that reflects

generational tensions and community's anxieties about a difficult age but also is a form that represents powerful collective memory at work that helps point the way forward into that new age" (p. 87). Both Foucault and Banks positioned our need, over the last several decades, to somehow puzzle out our perceived time in order to see, and even discover, ourselves. But phenomenological time is much more complex and embedded in our cultural consciousness than Banks gave it credit for. As long as the way most of us value time, with particular emphasis on our working lives, is largely invisible, we will have little agency over the way the 'they' or our sense of 'the averageness' steers us. Marilyn Cooper (2011) claimed, in her article "Rhetorical Agency as Emergent and Enacted" that:

> neither conscious intention nor free will – at least as we commonly think of them – is involved in acting or bringing about change: though the world changes in response to individual action, agents are very often not aware of their intensions, they do not directly cause changes, and the choices they make are not free from influence from their inheritance, past experiences, or their surround" (p. 421).

Again, there exists reference to the influence from outside – the 'they' as Heidegger put it. But even though these influences are seemingly invisible, they still hold a sway over our public consciousness, and are subject to the current narrative occurring in constructed public time.

Public time is a material phenomenon and a manifestation of Heidegger's 'averageness' and Hardt and Negri's 'the common' built on the structure of temporal dispersal and duration. Most of us think about time as though it moves in a linear fashion. We have a past, we are in the present, and the future is before us. This is how we can begin to think about public time and our social adherence to it. Our social adherence to public time is inextricably linked to the production

of our material lives. I contend that a new type of public time is emerging and it hinges on the intersection between temporal-material rhetoric in general, and the digital work-force. In defining the multitude in their book *Multitude: War and Democracy in the Age of Empire,* Michael Hardt and Antonio Negri (2004) claimed that "the industrial working class no longer plays a hegemonic role in the global economy, although its numbers have not decreased worldwide" (p. xv). The nature of all work, both in and out of the academy is shifting. Everything from agriculture to automotive work is digitally aided these days. In O'Connor and Raile's (2015) study on the colloquialism 'real job' we see a shift in the very meaning of the problematic phrase for Millennial college students who view temporal dispersal differently than their older counterparts. It is possible this shift in view is due to the acceleration of interactivity and collaboration over the Internet.

2.5   Experiencing the Cloud

A rhetoric is material by way of our bodies experiencing it. Our experiences help determine interpretations of features such as objects in space, tool utility, the quality of artifacts, speeches and writings, and many other forms of communication with which humans come into regular contact. Our daily experiences of time are constructed. We are disciplined to adhere to it so that it is a naturalized part of our routines, and therefore not an experience we problematize as often as perhaps we should. But as the value of labor changes, all the way down to the colloquialisms we use to describe it, the experiences laborers attach to time also shift. Anyone paying attention to the economic shifts that have occurred since the mid-1990s when the Internet became a household topic, knows that all labor has shifted. People work from home in ways they never could have before the Internet. And what once was a message delivered through the inter-office mail, can now be checked via email on a smartphone from a moving vehicle. And as the

breadth of labor has been shifting, so has the labor we exact as writers of academic scholarship. Perhaps, because scholarly writing does not fall under the description of a 'real job,' by the standards of Gen Xers or Millennials, we must fight harder to win a place of legitimization in the rhetoric of the very age groups with which teachers of writing have the most influence. By examining the bearing of academic writing in digital spaces, scholars of writing have an opportunity to unmask the outmoded system of time and temporality that influences the experiences of Western bodies at work.

The next chapters are an inquiry into what we must pay attention to as we navigate the ways in which phenomenological time has shifted over the last few centuries, moving into the future. It asks how the ways we think and talk about time affect our new modes of materiality and labor as we move through a world no longer firmly situated within the more traditional capitalist mode of production. Further, it asks how a temporal-material literacy of online interactivity, such as Google Documents, might alter our practices of knowledge making, writing, the ways we think about writing, and the way we teach writing. A theory of temporal-material rhetoric might guide computers and composition scholars as we navigate a field that changes as fast as Google updates its interfaces.

To begin, it is important to understand the role that the rhetorical canon of delivery plays in a temporal-material rhetoric, and why Google Documents is a useful artifact to examine toward an application of a theory of temporal-material rhetoric. In the chapter that follows, I explore the fluidity of the definition of delivery over the big changes in technology, and justify its addition into an analysis of Google Documents in the shift of the future of academic writing.

3 DELIVERY IN GOOGLE DOCUMENTS: THE FIFTH CANON MEETS THE CLOUD

Writing practices changed swiftly with the emergence of affordable household computers. Typing in an editable word processing document would save typists and composers hours of work, and miles of correction tape. When the Internet became a viable mass consumer commodity, the canon of delivery was forever changed. With it, the language of work changed. Phrases like, "send me an email," and "download the PDF," became regular parts of everyday speech. These phrases would have sounded like a foreign language before the 1990's. They also illustrate ways of delivery we didn't previously have. These new ways of delivering, instantly, over the Internet to our always growing number of devices, have assisted in compressing both time and intensity of labor for everyone in the connected world.

Delivery is a complex piece of the composing process that deserves thorough and deep investigation from computers and composition scholars working on current projects. In this chapter, I aim to explicate the significance the role delivery plays in a theory of temporal-material rhetoric applied to cloud-based software. Until the cloud emerged as a viable tool for information labor, workers needed to download software onto their hard drives, and to take care to save their work often and in multiple locations. When working in the cloud, this is no longer the case. Cloud-based work can be easily shared, which is a piece of the complex delivery process. Not only that, but workers can now simultaneously collaborate within the same digital spaces without being in the same room. The time and space needed to exact collaboration of any kind are now so compressed in cloud software as to be nearly instantaneous. I argue that cloud-based interactive writing software (IWS) transforms even what we know about digital labor, shifting the nature of the entire field of writing and what is feasible in process and production.

To deliver a piece of writing involves material considerations writers must face, like access to delivery methods, knowledge and the gaining of knowledge needed to effectively distribute that piece of writing, and constraints (and affordances) writing teachers face when we attempt to instruct students in the complex options involved in delivery today. In this chapter, I examine the relationship between digital writing and the material through the lens of computers and composition's move to redefine delivery. I do this in conjunction with my overall insistence that there is a value adjustment taking place in the United States coinciding with our rapid technology shifts. The reexamination of delivery is an important part of values about writing and writers that accompany industrial models of both material wealth (money capital), intellectual thought, and cultural capital. The values we place on our rhetorical choices play into this economics, colliding with our identities which we preform each time we make a choice. Therefore, our values must also shift as we consider digital writing a critical part of delivery discourse, and an extension of the choices to which we are no longer limited. Ben McCorkle (2012) explained how, "the connection between design/medium and delivery is indicative of an important change in how our culture has come to view texts as performative objects roughly equivalent to the speaking body. *It also signals a fundamental change in how we conceive of the human subjectivity that drives the speaking body*" (italics mine, p. 144). I italicize this last sentence to direct attention to the current shift in values away from the physical body and onto an accepted virtual body which can be represented in a number of way. Here, there is vast potential to re-examine materiality in varying ways as we connect design/medium, delivery, and performance.

As digital technology becomes increasingly integrated into everyday writing practices, there is a paradigm shift, moving writing away from industrial values into a new age. As

computers and composition scholarship focuses increasingly on delivery, I noticed several trends

emerge. These trends are not hierarchical, but work overlap and connect together in many

different ways that other scholars could easily take up and examine. I call the first trend "A move

beyond speech" because the nature of delivering content to the open web does not depart from

earlier definitions of delivery in the spirit of Aristotle. Instead it moves beyond the confines of

speech into another realm of delivery. The second trend I call "An interrelation of canons" which

considers delivery's move beyond speech as it relates to all of the canons simultaneously,

showing that each canon is not a step, but more of a piece of a network. And the third trend, I

call "An interconnectedness with new media," which relies on the fluid culture of the web and its

users to guide our attention to remixed, reappropriated, and recreated spaces online where

delivery seems new, complex, or even is labeled as problematic. And though I make claims here

about value shifts, I am careful not to make moral judgements concerning these trends or values.

In the final part of this chapter, I explore a specific IWS called Google Documents. In order to

explain why Google Documents is a current and viable artifact for this project, it is necessary to

understand the hand computers and writing scholars had in IWS creation, and the impact Google

Documents as a popular software now has on the ways scholars are able to practice writing,

whether they chose to write in the cloud, or not. Ultimately, the role of time in digital writing

spaces and practices is undergoing such a remarkable shift, that to ignore it would be folly for the

entire discipline of computers and writing.

3.1   Delivering the Fifth Canon

In the past fifteen years, rhetoric and composition scholars have given the revival of the

canon of delivery some favorable attention. In computers and composition specifically, much

attention has come to delivery through the examination of digital writing and performance online

(Brooke 2009; Lanham 2006; McCorkle 2012; Porter 2009; Trimbur 2000; Wysocki 2005; Yancey 2004). From 2004-2006, for example, Marvin Diogenes and Andrea Lunsford (2006) implemented an emphasis on style, memory and delivery in their composition courses in order to "deliver an enlarged, enhanced definition of writing" (p. 146). They called out for help revising a "definition of writing [that] has been implicitly evolving for some time in our field" (p. 144). Since then, attempts at redefinition of writing, and with particular emphasis on delivery, have been emerging in conjunction with the examination of new technologies.

But first, let me step briefly back and touch on how much delivery changed even before computers were in the public imagination. Delivery has a definition seeded deep in the history of rhetoric. In his third book of *On Rhetoric*, Aristotle (4 B.C.E.) defined delivery as "a matter of the right management of the voice to express the various emotions-of speaking loudly, softly, or between the two; of high, low, or intermediate pitch; if the various rhythms that suit various subjects" (p. 195). His emphasis was completely on speech performance, in particular, volume, pitch, and rhythm, which are used to convey emotion. Aristotle admitted, later on in the passage, that delivery was not an elevated subject, and even went so far as to claim "we must pay attention to delivery, unworthy though it is, because we cannot do without it." Yet during the rise of the print book, delivery of print became so standardized that it was virtually invisible, as Diogenes and Lunsford (2006) noted:

> With the rise of print culture in Europe, writing increasingly meant black print on white or cream-colored paper, printed left to right, top to bottom, filling the space with text. This regularization process of standardized formats and mass production – served the growing

educational apparatus well by making writing itself less and less visible as

a technology and more a transparent means of assessment. (quoted in

Connors and Crowley, p. 142)

For a couple of decades, computers and composition scholars have been pointing to computer

interfaces that have become so standardized as to be invisible (Brooke 2009; Hocks 2003;

Lanham 2006; Selfe 1999; Wysocki 2005), and discussing the political implications this

invisibility has on communication via these interfaces. Margins, fonts, even white space, have an

effect on how readers view a piece of writing, both in print, and online. For example, in her

article "awaywithwords," Anne Wysocki (2004) argued that "constraints of communication

materials are often social and historical; to ask after the constraints as we teach or compose can

help us understand how material choices in producing communications articulate to social

practices we may not otherwise wish to reproduce." She went on to explain that "space between

words has not always been a function of written texts in the West" (p. 56), a function that is

naturalized in the majority of readers and writers. The ways in which writers chose to adhere to

functions we now think of as standard, or not to adhere to them, have material meaning. Neither

our books, nor our digital media are neutral, and their presentations have a lot to say about how

we use effectively use delivery to create a standardized product.

In our current Web 2.0 world[2], an inquiry into the redefinition of delivery as it relates to

digital writing has turned up some interesting moves to position delivery as an integral part of the

rhetorical canon. In 2009, Colin Brooke announced in *Lingua Fracta*, that "we are rapidly

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[2] William Wolff (2013) explained the origin of Web 2.0 in brief. He pointed to Tim O'Reilly's (2005) radar.oreilly.com report titled "not 2.0?" and followed it up with Bradley Diliger's (2010) *Computers and Composition* article exploring "the origination and controversy over the definition of Web 2.0" (p. 217), for further explanation of the term.

approaching a time where we can dispense with prefacing discussion of delivery by bemoaning

its neglect" (p. 170), and stated later that "It may no longer be a question of neglecting delivery,

but we still have work to do to recognize its constitutive powers" (p. 171). To say that delivery

has power is important. When Aristotle claimed that delivery was not worthy of elevation, it

likely set the stage for delivery's treatment for centuries. But more current scholars like Colin

Brooke are re-appropriating what it means to deliver information in a digital age, bringing

delivery into the forward as a relevant rhetorical category worthy of re-evaluation. All the canons

work together to form something like an ecology – each depending on the other for full rhetorical

function. Brooke specifically highlighted circulation and performance as valuable constituent

parts of the whole as he worked through this ecology of the canons: "The value of the canons, as

an ecology of practice, lies in their ability to help us distinguish… various uses and to imagine

yet others" (p. 58). As technology changes (adding writing to speech in Aristotle's time, and

Internet access in ours), the functions of the canons shift, and delivery is a part of that rhetorical

mass.

Computers have certainly opened up a whole world of various uses for the study of the

canons, particularly recently, as production has become more widespread online. Web 2.0 was

not a singular event we can pinpoint, rather the move from a passive-audience-as-norm Internet

to one of active production develops sometime between 2006 and 2008. Even before this,

computers and composition was moving to redefine delivery in the context of the web. In 2000,

after 'bemoaning its neglect' when he said "In writing instruction, however, delivery has been an

afterthought at best" (p. 190), John Trimbur (2000) declared delivery as "inseparable from the

circulation of writing and the widening diffusion of socially useful knowledge" (p. 191), which

he attributed to "democratic revolutions of the modern age," public forums," and "popular

participation in civic life" (p. 190). In 2000, Trimbur was not actively addressing participation on

the web, probably because most people did not yet produce content online as they do today.

Instead he discussed distribution of content such as newspapers and magazines in print, sent

physically to offices, institutions, and news racks (p. 209). Even so, Trimbur opened up a

discussion about delivery as circulation in 2000 which applies today to active web participation

every bit as much as it applied to print distribution and circulation then. In her 2004 CCCC's

Chair's Address, Kathleen Blake Yancey explained "my options for delivering texts have

widened – from page to screen to the networked screen and then back to the page anew" (pp.

316-317). Here, Yancey acknowledged the possibility for delivery taking a new, expanded role

in the study of writing. What is crucial here, is an acknowledgement among these scholars of the

importance of materiality to delivery.

3.1.1   *A Move beyond Speech*

The rise in print media is largely responsible for the departure of delivery away from

performances including voice, rhythm, and gesture, and computers are now making new

directions in delivery possible, including a return to speech. Trimbur defined delivery as

formerly having a central role in oratorical education of the Elocutionary Movement, "with its

emphasis on the physicality of speechmaking… and the correct pronunciation of words" (p.

190). James Porter, in his 2009 article "Recovering Delivery for Digital Rhetoric," wrote that "In

classical rhetoric and through most of the history of rhetoric, delivery referred to the oral/aural

and bodily aspects of an oral speech or performance" (p. 207). But, Porter insisted, delivery is

now, more than ever, intertwined with production. He claimed that "when writing enters digital

spaces, we need to reconceptualize writing from the point of view of production, consumption,

and exchange" (p. 219). Here, Porter cited both Marx and Trimbur in linking delivery to labor,

economy, and trade. And these links were not without performative elements. Brooke also acknowledged circulation as important to delivery online, when he stated that "Trimbur's notion of circulation provides a corrective to an emphasis on medium. Attention to circulation involves asking about more than medial features" (p. 176). Brooke cited both Richard Lanham and Peter Lurie for warning us that technology could be "reduced to mere instrument" (p. 181) and argued for a strategy that "sees both circulation and medium gathered under the idea of performance" (p. 176). In this way, Brooke acknowledged both circulation and medium as a type of performance. Every act of initial distribution, and then subsequent circulation of digital materials can be construed as performance. A tweet, for example, is a performance in brevity designed to entice other users to perform further circulation in brief, to keep a message moving along. Of course tweets often do not work this way, so the composition of the tweet matters heavily to this distribution/circulation performance.

For Brooke, the implicit labor involved in the production of writing is a performative act, and as we have seen, not absolutely tied to a certain technology. Anne Wysocki, in her 2004 introduction to *Writing New Media* reminded us that "Technologies are not responsible for texts, we are" and continued "My reason for defining new media texts in terms of materiality instead of digitality is to help us hold present what is at stake: to look at texts only through their technological origin is to deflect our attentions from what we might achieve mindful that textual practices are always broader than the technological" (p. 19). What this means for delivery of digital texts is multifaceted. First, it requires writers to consider the material constraints involved in delivering a text through a variety of mediums. Who is the audience? What sort of applications might this audience access most? What is the most effective way to present this information to that audience? In this way, writers must consider the potentials of circulation of

their text *and* their own performance on the medium of choice. With the potential in Web 2.0 to embed video, mp3, and hyperlinks to other user created websites, or even to a live Google Document, the considerations necessary for successful delivery are far beyond volume, pitch, rhythm and even gesture. But these early elements of speech delivery are still not excluded from our move toward a redefinition. They exist literally in video, or metaphorically on sites that force truncated communication, like twitter does.

The choices writers make concerning delivery online are complex, involved, and worthy of continual evaluation and study. In 2004, in their article "Why Napster Matters to Writing," Danielle DeVoss and James Porter delved into many of the ways digital delivery was complex during Napster's large contribution to online culture. "Writing is no longer alphabetic text," they explained, "writing is also audio and video. And writing is also hypertext and the delivery of multimedia content via the Internet and the Web" (p. 179). Since then, Napster is no longer, and giants have arisen such as Netflix, Google, and reddit – venues that have changed the way we watch television, write documents online, and share bites of information, respectively. But the message remains the same: writing has changed fundamentally and much of that has to do with the moves writers make beyond speech, in terms of delivery. DeVoss and Porter focused heavily on digital distribution in their article, though they do not cite Trimbur, which is interesting given their alignment with Trimbur's ideas of the link between distribution and culture. In a discussion on the distribution of print media Trimbur wrote, "The process of production determines – and distributes – a hierarchy of knowledge and information that is tied to the cultural authorization of expertise, professionalism, and respectability" (p. 210). Later in the paragraph, he explained "that we cannot understand what is entailed when people encounter written texts without taking into account how the labor power embodied in the commodity form articulates a mode of

production and its prevailing social relations" (p. 210). Though Trimbur limited his argument to tangible products (magazines and newspapers), it is important to take into account the labor power that Napster embodied in terms of design, production, implementation, and distribution – all which go into producing an 'intangible' digital product.

Even labor that plays out completely in an online environment is a type of performance. Every time I write a review for a product I bought, or give feedback for a hotel I stayed at, I am laboring – without compensation – and laboring as a consumer. It is a performance that is only a part of my identity. Diogenes and Lunsford put it well when they asked "In this milieu, is it any surprise that students are increasingly performing their writing, in digital networks, in spoken word collectives, in poetry slams, and so on?" (p. 143). This question was published in a 2006 collection, and the context is still relevant. Its relevance has since increased, given the popularity of YouTube videos, Vines, and the ease of video embedding into social media. It is now possible to deliver poetry slam-style over YouTube, and many people do. All of the considerations that go into online performance are also considerations of labor, and therefore of material interest, value, and worthy of a discussion about how economics plays out in our rhetorical choices. When a writer decides to create a project with online components, she must take into consideration several factors, such as where her audience will go to access work like hers. This then becomes a question of distribution – a topic I will explore deeply in a later chapter. Distribution is part of the performance and labor context. Porter explained rather succinctly that, "as pertains to delivery, the *topos* of economics includes issues of rhetorical economics – that is, motivation and exchange value: determining what information context, strategies, designs, architecture, etc. will likely encourage the participation of desired audiences" (p. 220). What is new, is the expected audience participation in online delivery. The performance in a Web 2.0 environment is

delivered in order to gain audience participation in the form of likes, comments, and even newly created or remixed responses.

The departure away from process and toward product-as-part-of-delivery has heavy implications for delivery and the way we value writing in computers and composition. Further, it changes how we have thought about performance, both now and before Web 2.0. Like McCorkle, Brooke pointed to a shift in values, though not as overtly. "It is rare," Brooke tells us, "to speak of delivering without an object that is being delivered" (p. 170). Brooke believed that when we add medium, the very use of the word delivery can be altered: "We need to think of [delivery] in terms of an intransitive, constitutive *performance*, rather than transitive or transactional delivery, when it comes to new media" Transitive, Brooke explains, is the everyday practice of delivering an object, like a pizza. A delivery as a performance, then, is intransitive (pp. 170-171). In this way, Brooke signaled a move toward a new way of thinking of delivery that exists in a performance driven environment, directly involved with a material physical one, but capable of allowing humans (users) to deliver content in ways vastly different from before the Internet.

3.1.2 An Interrelation of Canons

As we move beyond the reaches of previous attempts to define delivery as limited to speech, and into a Web 2.0 world of digital delivery, the interrelation of the canons becomes not only more transparent, but necessary knowledge for the effective dissemination of information. In her 2004 address, Kathleen Yancey announced

As my options for delivering texts have widened – from the page

to the screen to the networked screen and then back to the page anew –

I've begun to see the canons not as discrete entities… but, rather, as

related to each other in much the same way as the elements of Burke's

pentad are related: the canons interact, and through that interaction they

contribute to new exigencies for invention, arrangement, representation,

and identity. (pp. 316-317)

Here, Yancey was relaying her experience with the canons and applying them clearly to an

interface environment, or a series of interfaces, from page to screen and back. She clearly

invoked the shift in values as she illustrated her own ideas on the relationship of the canons to

each other, linking this even to Burke's pentad, which saw a breaking down of structural values

even in the first half of the 20th century. This is not new, however. In 1989, Richard Lanham

declared that "The textual surface is now a malleable and self-conscious one. All kinds of

production decisions have now become authorial ones" (p. 267). Lanham recognized early on

how the production of malleable textual surfaces/interfaces made possible by digital text places

delivery in the authors' hands. Furthermore, Diogenes and Lunsford (2006) use Lanham to

describe a divide between 'academic' and 'mediated' writing: "academic writing can be said to

have a distinctive style – what Walker Gibson terms 'stuffy,' Winston Eaters associated with the

linearity of Grammar A, and Richard Lanham referred to as 'CBS style'(clarity, brevity,

sincerity) – the 'mediated' writing of the Internet age favors immediacy, quickness, associative

leaps, and ultimately a more fluid and flexible sense of correctness" (p. 143). If knowledge of the

needed style of writing is necessary in order to gauge possible audience perception, then I can

hypothesize that delivery, style, invention, and arrangement are all happening simultaneously for

any writer thinking about audience.

The planning of writing, which at the very least consists of invention and arrangement

stages, absolutely relies on foreknowledge of the intended delivery of an end product. The

canons then are a fluid set of principles that move, sometimes through, and sometimes in conjunction with, one another. In defense of the revival of delivery, James Porter (2009) argued that "The point of reviving delivery is not to demonstrate the enduring truth of classical categories. What matters is developing useful rhetoric theory" (p. 221). And I contend that part of that theory is an insistence that the canons are not separate, and should not be viewed as such. Instead they are networked, without clear dividing lines. Four years after Porter's article on delivery appeared in *Computers and Composition*, a group of authors, Chanon Adsanatham, Bre Garrett, and Aurora Matzke (2013) used Porter's ideas to guide students through a multimodal production. As they walked readers through their case studies, they explained that "Delivery occurred more as a series of micro-processes; delivery moments surfaced at various pivotal times," which they later called an "interconnectedness" (p. 319).

Interrelation has never been a secret, but because delivery is crucial to successful writing online, continuing to compartmentalize the canons could be harmful to the study of writing in the cloud. If we do as Adsantham, Garrett, and Matzke did with their classes, and make the interrelationship between canonical elements transparent both to the students we teach, but also to ourselves as writers and scholars of writing, perhaps we can begin to move away from a tradition of hierarchies and toward one of interconnectedness and fluidity.

3.1.3 An Interconnectedness with New Media

If we accept Lanham (2006) when he said "all text is digital in origin" (*Economies* p. 80), then delivery is irrevocably and integrally changed because writers can (and do) compose exclusively within new and emerging media. Even if we don't believe Lanham, the first two trends I have noted are enough to prove the ways we value delivery's involvement in writing are shifting. Yancey (2004) implicated the digital in her own shifting values more than once:

"Richard Lanham," she explained, "has argued that with the addition of the digital to the set of media in which we compose, delivery takes on a critical role, and I think that's so. But much more specifically, what a shift in the means of delivery does is bring invention and arrangement into a new relationship with each other" (p. 317). It isn't just an interrelationship of the canons that I am arguing for here, but new relationships that form and comingle as digital media evolves with and expands the possibilities of composing.

Even early on, the possibilities of digital media created questions for composition scholars that we are still tackling in a world where the Internet is a consistent part of daily life. In "The Electronic Word," Lanham (1989) questioned the distribution of textbooks over the early Internet. He asked "If 'textbooks' are distributed via local area networks, telephone lines, or more capacious broadband conduits of some sort, how will we protect the intellectual property of those who have created these works?" (p. 280). Lanham questioned the very use of 'textbook' to describe what we might now call an EBook, *and* he posited material questions concerning what we know see was an early online distribution of highly controlled intellectual products. And he did this before many scholars would acknowledge the Internet as worthy of any attention at all. Before this, delivery issues like the ones Lanham addressed weren't something that most scholars had even imagined. And though many digital books are not more than PDF versions of print texts, many now contain hyperlinks, videos, interactive data, and many other features that Lanham almost certainly did not foresee. After describing similar technological advances, Diogenes and Lunsford (2006) pointed out that "Many argue that these changes in the technologies of writing are as or even more momentous than those associated with the complex move from a primarily oral to a mixed oral-literate culture" (p. 143). Just as Aristotle struggled to find ethical meaning for writing in his own world view, many scholars today, across

disciplines, are still struggling to come to terms with Internet technology in recent years. Cheryl Ball's 2004 article "Show, Not Tell" is a fitting example, when Ball described the paradox that is writing about new media publications, but not doing it using new media: "I understand I have created a paradox… New media scholarship is so new to humanities fields that I wanted the evidence of this linear article to point toward the exploration of new media texts as directly and conventionally as possible" (p. 404). Though digital composition and pedagogy are increasingly relevant, much of our texts concerning digital writing, or multimodal composition are still in a very traditional format, and our discipline struggles to keep up.

The interconnectedness of delivery with new and emerging media has deep and complicated implications for the ways writers value the work of writing. What exactly these implications are remains to be seen. They will continue to change, as technology rapidly unfolds and expands. The web is already a very different environment than it was when Ball was writing her critical piece on new media scholarship. But the attempt at redefining delivery is a step toward understanding how writing is evolving, and even how it may change in the near future.

3.1.4   A Look at Porter's koinoi topoi

These moves toward a redefinition of delivery are what inform my study of how computers and writing scholars value writing in the cloud. Among them I focus on James Porter's move, in 2009, to divide delivery into even more manageable and general heuristic from which we could potentially examine and analyze digital communication. James Porter's five categories of delivery lend me smaller categories from which I can analyze using Google Documents as my artifact. Porter's dissection of delivery serves as a means to depart from delivery's earlier definition as a speech performance, and toward a means of examining the transmission of ideas across our expanding digital landscape. Porter's article began by stating

that his aim was "to resuscitate and remediate the rhetorical canon of delivery" (p. 207). He

accomplished this 'resuscitation' and 'remediation' by breaking delivery into what he calls "a

theoretical framework for digital delivery consisting of five components" (p. 208), which are as

follows:

- *Body/Identity*

- *Distribution/Circulation*

- *Access/Accessibility*

- *Interaction*

- *Economics*

Each component fits well with both Brooke's (2009) and McCorkle's (2012) positions on

delivery concerning technological transitions and the performance needed to successfully

navigate and execute action involving digital forms of writing. Brooke, for example, pushed for a

deeper delineation between hardware and our various interfaces: "It is debatable whether new

media exist outside of performance, whether we can even speak of such media as objects in the

same way that we refer to books or videotapes" (p. 181). For Brooke, the way the medium

worked depended largely on how user identity is embodied and their actions are performed in

digital space. And though they do not cite one another, McCorkle seemed to agree with Brooke.

McCorkle claimed that "it is indicative of an important change in how our culture has come to

view texts as performative objects roughly equivalent to the speaking body" (p. 144), making it

that much more important to expose and examine the complex ways that delivery is enacted

when we compose digitally. At this point in our transition between ages (what Bolter (1991)

called the late age of print and the digital age) we have ceased producing a discourse of

technological prevention sometimes seen in hypertext theory with statements like, "as we look

up from our computer keyboard to the books on our shelves, we must ask ourselves whether 'this will destroy that'" (Bolter, p. 2). For example, we are less asking whether Ebooks will destroy print books. Instead we are moving toward a discourse of adaptation with arguments like, "technical knowledge is integral to the art of rhetoric and to the canon of rhetorical delivery in the digital age" (Porter, 2009 p. 208), with questions about the affordances and limitations of Ebooks versus print books.

Porter's schema coincided well with the trends I have found in the redefining of delivery in computers and writing. In sections like *body/identity*, and *interactivity*, there is ample room for a move beyond speech performance delivery and into a digital realm of performance more complexly dependent on actions like embedding video and live chatting. Porter insisted that rhetoric is an art which is not mechanical, does not follow set rules, and cannot be copied. Instead, it can be "taught and practiced as a form of knowledge involving a critical understanding of the purposes and effects of the art on audiences and the practical know-how to achieve those effects in new discursive situations" (p. 210), like those we encounter when we compose online. Further, as we work through the *topoi*, as Porter called them, it becomes clear how deeply interconnected the canons are with one another, particularly in relation to the ways in which writing processes can play out online. It is important to note however, that Porter's *topoi* are broad, and not intended to be a final say in how delivery works online. Porter told us in his conclusion that "to maximize their generative or productive power you must put them into dynamic interaction with one another and with other rhetorical topics" (p. 220). As I work through the *topoi*, I ask after what might not work as we apply them to writing in the cloud, and what might be missing, or even extraneous. And though I am not implying that Porter's categories for delivery are the only solution for defining delivery and analyzing its rhetorical

importance, it is a comprehensive and well positioned analysis for our Web 2.0 world. In the

section that follows, I examine Google Documents as a viable artifact upon which to apply

delivery's *topoi* as an analytical tool.

3.2   Google Documents as Artifact

It took several years, and sixteen drafts for the National Institute of Standards and

Technology (NIST) to define cloud computing to their own satisfaction. This definition and its

subsequent 'essential characteristics' have had a lot to contribute to a discussion centered on

writing in the cloud. The "Final Version of NIST Cloud Computing Definition Published" was

released in 2011, it stated that "cloud computing is a model for enabling ubiquitous, convenient,

on-demand network access to a shared pool of configurable computing resources (e.g., networks,

servers, storage, applications and services) that can be rapidly provisioned and released with

minimal management effort or service provider interaction" (para. 2). Two concepts are salient

here: 'ubiquitous' and 'minimal management effort.' Writing that happens in the cloud stays in

the cloud: it is ubiquitous. It can be accessed at any time, from any device, as long as the device

is internet capable and runs the necessary application. A writer need never make a copy of her

writing to share with a colleague. She need not print, and she cannot forget a document at home.

Instead, she can manage her documents with minimal effort from anywhere at any time. She

need only keep her files organized as she would on any off-line computer. Further, she only

needs an email address in order to share her documents with others. The features listed are many

reasons why a writer might choose a cloud-based system on which to compose. But when I

investigated into how we address cloud computing in computers and composition, I was

surprised to find out that, while some scholars mention it, there is not only no definition, there is

very little past a few mentions of cloud computing. For example, in her article "Green lab:

designing environmentally sustainable computer classrooms during economic downturns,"

Meredith Johnson (2014) used cloud computing three times in her short article, but she did it in

passing. The most detailed example assumes the audience already fully understands the

definition of cloud computing: "The proliferation of cloud computing and mobile devices has

inspired several strategies for optimizing client side transmissions and minimizing spotty server-

side performance" (p. 6). But because so few of us in computers and composition are talking

about cloud-based computing or writing directly, though many are using cloud-based

technologies in our own lives, it becomes crucial to give it more direct attention. By examining

Google Documents as a representative of writing in the cloud, I set out to answer the following

question: What can Google Docs tell computers and composition scholars about the work of

writing in the cloud?

Google Documents, one of the many applications made by the Google Corporation, is a

useful writing tool that operates in the cloud. Much of the writing I do is through Google

Documents, both personally and professionally. For example, at the time that I am writing this

chapter, I am the senior editor at the all-online journal *Hybrid Pedagogy*, and we do all of our

editing through the Google Docs interface. Sometimes it is necessary for editors at *Hybrid*

Pedagogy to give some instruction to writers in the use of Google Docs, but most of the time,

writers already have previous experience with the application. Further, editors collaborate

together to write articles, share ideas, and even keep the agenda at our weekly meetings. Apart

from this, I occasionally use Google Documents in my composition courses to complete various

tasks with my students, and I use it in my personal life to collaborate on a variety of projects

unrelated to any of the above. I have met other scholars with similar interests by using a

publically shared Google Doc to brainstorm and take notes at tech-related conferences like

THATCamp[3], and Computers and Writing Conference. Because Google Docs have played such an important role in the development of *Hybrid Pedagogy* as a journal, co-founder Jesse Stommel contributed an article called "Theorizing Google Docs" in which he offers strategies for collaborating in this way. In reflecting on his work with co-founder Pete Rorabaugh, Stommel (2012) wrote "We contribute ideas synchronously and asynchronously, writing together at specific times and taking turns in the document on our own. Our collaboration runs so deep that single sentences are usually co-composed, our cursors occasionally blinking in unison within a single word. While I still recognize the texture of my own language and the idiosyncratic turns of my writerly voice, I don't take ownership of my own writing the way I once did" (para. 2). For people who know and/or have worked with Jesse Stommel, it is easy to see why he chose to use Google Docs as an editing tool in a journal he founded. Collaboration is key in *Hybrid Pedagogy*, where we treat our authors as a part of our community, rather than visitors or outsiders. Since everyone involved in *Hybrid Pedagogy* and our various activities live all over the United States, and even in other countries like Taiwan and England, Google Docs is a great place to meet since the cloud is ubiquitous and easy to manage through the Google Drive application. Though while Google Documents is easy to use and becoming quite commonplace, it didn't just pop up out of the blue. What we now call interactive writing software (IWS), came from writing scholars interested in computer-aided collaborative writing. Because of this rich and interesting connection to the field of computers and composition, it is important, not only to acknowledge IWS roots, but also to discuss its implication and impacts.

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[3] THATCamp is an acronym for The Humanities and Technology Camp and can be found at thatcamp.org. THATCamp is considered an 'un-conference' Konni Sheir and Benjamin Higgins (2012) explained the unconference and how it works in their short article "The unconference: Perspectives of two school media graduate students at infocampsSC 2011

3.2.1 Interactive Writing Software History

Interactive writing software has existed in some form for longer than many users might expect. Six years before Tim Berners-Lee's 1999 *Science Friday* interview, Paul LeBlanc (1993) told us, in *Writing Teachers Writing Software*, that "how a tool gets built, and who is building that tool, will have important implications for how that tool looks and works" (p. 7). LeBlanc argued that if we writing teachers will have any say in the functions of writing software, we need to be the ones to create it. In the early 1990's, as LeBlanc was researching and writing, writing teachers were, in fact, writing software. In his book, LeBlanc introduced us to several who were developing software either mostly alone, or in small groups. The Daedalus Group, for example, was a design team following the model that LeBlanc called an 'Entrepreneurial Design Group,' one that is made up of programmer English teachers out of Texas A&M University. The Daedalus Group is responsible for developing a program called *Interchange* which "Is a real-time or synchronous conferencing program that allows simultaneous text-based discussion in a networked computer classroom" (p. 156). And though it didn't run on the early web, *Interchange* was a leap toward Berners-Lee's 1999 vision of a moldable interactive web.

Because a collaborative writing program like *Interchange* was developed over twenty years ago, it may be surprising that collaborative writing software (CWS) for the open web (what programmers now call interactive writing software) did not have a public interface until the mid-2000's. Collaborative writing software taking a long time to hit the open web may be in part because we have almost completely stopped collaborating to write software as teachers of writing. Given there are rhetorical scholars and compositionists who code, (for example, Kristin Arola wrote about her experiences with HTML and CSS in her article "The Design of Web 2.0"), I am unaware of any who actually write collaborative or interactive writing software, like the

Daedalus Group members of the 90's did. Instead, as Annette Vee (2010) explained, "Writing and web-editing software may be robust enough now to deter us from designing our own from scratch; however, programs we can customize such as OpenOffice Writer can make us code-authors; writing applications through the Firefox extension Greasemonkey, for instance, can help us manipulate our online writing environments" (p.180). But in the last five years since Vee wrote her article, things have changed even further. Now, companies like Google dominate the development, design, and circulation of interactive writing software. I discovered from several Google sponsored websites and blogs, that Google Docs was released in October of 2006 (Benzinger 2005; Mazzon 2006; *Our History,* sec. 2006). At the same time Google launched "Apps for education," which was deployed to Arizona State University: a university with strong rhetoric and composition and writing administration programs. All this happened just seven months after Google acquired a software called *Writely* and its developers from its parent company Upstartle. *Writely* had existed for only five months before Google took it over. Former Upstartle employee Jen Mazzon wrote on her official Google blog on March 9, 2006 that "everyone told us it was crazy to try and give people a way to access their documents from anywhere – not to mention share documents instantly, or collaborate online within their browsers. But that's exactly what we did. And since we launched the Writely beta in August 2005, many thousands of people have registered" (para. 2). By August of 2006, Google had a waitlist for people wanting to access its Google Docs beta version, according to Mazzon (para. 3). Google did what collaborative writing software couldn't do in the 1990's, and created a web-capable, user friendly writing software. As a result, it may be a reasonable claim to say that Google gave the World Wide Web a pretty big push into Web 2.0, orienting computers even more firmly in the corporate world.

3.2.2   Implications of IWS

The implications of interactive writing software on writing in a Web 2.0 world are complex. In 1994, Cynthia Selfe and Richard Selfe gave an analysis of computer interfaces suggesting problems of colonialism and discrimination as important issues for humanists to examine. They argued that the computer interface had a corporate orientation in the ways it is set up visually and is "ideologically associated with capitalism" (p. 487). They explained the association with capitalism by illustrating how "the raw material of information is gathered in databases and files, stored in folders and on hard drives, accumulated within artificially expanded memory spaces, and finally manipulated and written in the form of documents that acquire their own authority and value within a capitalist economy" (p. 487). They highlighted author 'ownership,' password protection, and even explained the monetary cost of public internet (p. 487 - 488). It has been over 20 years since Selfe and Selfe made this connection between computers and capitalism, and it is still relevant. There are three main IWS developers: Google, Crocodoc, and Ethernet, all require an internet connection, which someone pays for monthly (the private user, the coffee shop owner, the university, etc.), and a device on which to access the application. If you have ever heard the Apple vs PC debate, you already know that technological devices are currently major players in the system of capitalist production of goods. Further, though IWS documents exist in the cloud and do not require a desktop or an operating system (Google Chromebooks don't even have an operating system), these applications still operate much the same as Selfe and Selfe described computers in 1994 – with folders, artificial storage space in the cloud, and an 'owner' assigned to documents. And though IWS no longer use outdated icons like the hourglass or the floppy disk (though Etherpad does still use a floppy) to

indicate processing, or saving respectively, they still allow users to prioritize and manage information the same way physical hard drives did in 1994.

Class privilege still dominates among cloud-based products like IWS. In order to create software that does what a Google Document does, with comparable design and ease of use, there must be a worker who writes code – a person who has had regular computer access and some training in computer languages, in order to work as a programmer – a privileged job. Writing code is a skill that most people do not have the time or means to learn, and so access is denied to more than it is permitted. As early as 2003, Jeff Grabill pushed for an examination of class in conjunction with the digital divide. Grabill stated "it might not be possible to talk about the technological without talking about class. This understanding of class must be situated within culture and be attentive to the ways in which race, gender, ethnicity, and other issues of identity and difference operate in a given situation" (p. 459). In the years leading up to Web 2.0, access issues primarily centered on access to an Internet connection and Internet capable hardware, but today, we must also concern ourselves with the knowledge and time it takes to learn to operate software, and even to code our own software, when this is appropriate to the work we do as scholars of writing.

Even when a user *can* code, most corporate owned applications do not grant general users any access outside of consumption-based relationship. This means that even if writers and writing teachers have the coding knowledge to customize writing software to fit their specific needs, they can't. Vee (2010) explained that "the existence of software patents means that even access to the code provided by open-source software fails to guarantee our right to customize our writing environments" (p. 180). Google, for example, grants no access to changeable code with which users can alter the look, feel, or function of a Google application. Instead, Google has

created a culture which promotes cross-application use of its own products which are easy to manage, and always accessible online. But Google is unique in the way it plays across applications. Crocodoc and Etherpad are available for free to users, but unlike Google Documents, Crocodoc and Etherpad (which is open-source) are IWS makers only and do not support the kinds of social networking capabilities and other applications (such as Google+, Gmail, among others) that Google does. Google users are part of a Google culture – one of privilege that Google created, promoted and distributed largely through people already positioned to regular internet access and use.

Google Docs problematize writing beyond what Selfe and Selfe could have imagined in 1994, mainly because of the expansion of the network. Users have grown used to sharing files for free, quickly, and without having to meet in the same room. In 2006, DeVoss and Porter were already writing about "Why Napster matters to writing" and how it affected students: "The attitudes and expectations students have learned in digital filesharing environments enter our classrooms, influence students' production and understanding of print texts (not to mention electronic texts), and affect their conception of the rhetorical situation" (p. 179). Napster no longer exists, and today, users share files without much thought of the implications. And while most people aren't sharing music via Google Doc, they are sharing their own writing, storing files in folders accessible by multiple parties, and even sharing out files they don't own, but have been granted access to. The complex world of ownership, distribution, and circulation are so crucial to the future of writing that it is necessary to analyze an IWS in detail.

3.2.3   Impact of IWS

Google Docs is already impacting the study of composition the future of writing, which needs to be explored in ongoing and greater depth. Computers and composition scholars aren't

talking explicitly about Google Documents, or any IWS. Instead, we are discussing devices like smart phones (Monty 2015; Pigg 2015; Stranz 2015), or the value of innovating our writing processes (use innovation articles here). In 2008, Jeff Bezemer and Gunter Kress claimed that "for scholars interested in writing, developments in contemporary communication sharply pose questions about the future of writing" (p. 166), which is what I do when I question how delivery works through the lens of the Google Document. Bezemer and Kress went on to say that "the questions posed are about *design*, that is *principles of composition*" (p. 166). And while I don't disagree that design is an important factor in all types of writing, I do find that this statement misses many factors now a part of writing in the cloud: factors like filesharing, high-speed circulation and attention that is unique to online environments. John Jones (2014) noted that "computers and writing researchers have shown how networked writing, by highlighting the role of the audience and privileging collaboration and interaction, encourages writers to embrace the complexity of writing situations" (p. 23). When we write using cloud-based software, audience, collaboration, and interaction automatically become more complex than they were when users could only work alone in a document, could only share by email, or print.

LeBlanc could not have envisioned the current direction of writing software as he was composing *Writing Teachers Writing Software* because it is so much larger and more complex than anyone writing in the 90's imagined. It is improbable that we can envision the future of writing in the next 20 - 30 years either. But it is possible to use an artifact like Google Documents in order to analyze how writing in the cloud may be shifting the way we think about the work of writing in computers and composition. Labor connected to the way software is developed and who gets to own the code to the software have already shifted into the hands of corporations (as in Google Docs and Crocodoc) and those with the skills to devote all their labor

to writing code (as in Etherpad). This means that the interactive writing software available now has a value set tied to capitalism as Selfe and Selfe saw it in 1994, but also in ways specifically linked to cloud computing. The features I cover in this dissertation are specifically linked to the ways cloud computing effects delivery when writing in a Google Document. I will not be covering every feature available in a Google Document so that I can focus on those that are unique to online writing, such as Google's avatars, synchronous writing and chat bubbles, and sharing features. These are features that would not be possible without the World Wide Web, and applications that have had thousands of labor hours spent on their development. Most scholars in rhetoric and composition spend many hours working on research, writing, teaching, and assessment, and have few, if any, extra hours to donate to learning to write software – much less software that could compete by today's standards. But if we are to stay relevant, it is imperative that writing scholars examine online software that writers actually use. To understand how writing in the cloud is unfolding is to understand where writing may be headed.

3.3   Delivering Ahead

Computers and writing scholars need to continually evaluate and examine the canons as tech moves into the future, with special attention paid to how closely connected delivery is to the economy of rhetoric as it is enacted in the cloud. Writing born digital is a performance just as much as any writing before the Internet facilitated such vast change. But because of the seemingly infinite expansion of the web, we are able to move beyond the earlier parameters of delivery as it was related to speech and gesture only. And with moves to redefine and resituate delivery as a powerful force in rhetorical discourse, interrelationships among canons become more clear and transparent, as does delivery's inextricable link to the digital.

By exploring delivery using Porter's *koinoi topoi* as entry points for analysis, I move to contribute to the discussion toward a redefinition of delivery. Ben McCorkle has already conducted a "historical recovery through reinterpretation," (p. 3), with an emphasis on how technology has impacted delivery in various historical moments in his recent book. Continuing in this vein, I focus on how delivery works with writing in the cloud, and how cloud based writing does and does not move beyond current definitions, as well as the ways in which we are discussing computer-aided writing in general. Continuing the conversation from Yancey, and Lunsford, Colin Brooke re-envisioned delivery from a specifically new media standpoint, even going so far as to rename delivery 'performance.' Like Brooke, I reexamine how delivery works in new media, but I extend new media into the cloud through Google Documents. And like Brooke did at the end of his "Performance" chapter, I question where our values are headed in terms of writing (p. 192). I also extend the conversation to include Porter's *topoi* and move to re-examine the impact Trimbur's (2000) work in delivery as circulation applies to current modes of writing in the cloud.

We are in the midst of an exciting historical moment when the Internet is expanding rapidly, largely in part due to user production. It is no longer sufficient to define delivery in terms of performance only, but we must include more economically based terms like 'distribution' and 'accessible' to our parameters. If delivery is to play a legitimate role in our rhetorical theory, we must not allow it to become neglected again, or for its definition to fall stagnant. As long as our means of transmitting writing continues to change, our examination of the rhetorical canons must also. Delivery, as we can see, holds a place of power, which can influence value, in a Web 2.0 world as long as users have the freedom to participate in, publish on, and share out information however they chose.

4 CHALLENGING THE LANGUAGE OF CAPITAL: ECONOMICS, DISTRIBUTION, AND CIRCULATION IN DIGITAL RHETORIC

In a recent article titled "When Writing Becomes Content," Lisa Dush (2015) argued "that the word *content* highlights important aspects of composing in the digital age that existing and popular language – such as *digital writing* or *multimodal* – do not" (p. 174). Dush made four characteristics of the word 'content': "*conditional, computable, networked,* and *commodified*" (p. 174). Dush saw that writing that professionals are often asked to create can often be seen as just filler, having little value, or at least much less value than it had pre-content-as-digital-writing days. Like Dush, I see new words emerge all the time, as well as transformations in the way words are applied to work in the cloud. When words transform in the way Dush implies, they alter the way we value the work of writing. But because I observe little change in the way scholars of writing talk about time and the material, I propose a deeper look at the way terms seeded in industrial capitalism get used.

The words 'distribution' and 'circulation' have deep roots in traditional capitalist modes of production. In conversational discourse, these words are often associated with tradable goods and money. I might even go so far as to claim that they are a link to the 'real world' outside academia. Marx (1884) claimed that because money-capital is often the first ingredient in any production process, then "It also shows that the capitalist production process is conditioned by circulation, trade. The circuit of money capital is not just commodity production; it only comes into being by way of circulation, and presupposes this" (p. 140). Marx refers to advanced money as "the first and pure form of value advanced" (p. 140), meaning that capital is the first ingredient in the wheel of circulation in motion. The conversations in rhetoric and composition surrounding delivery often imply that both writing and the teaching of writing are primarily

capitalistically driven endeavors, similar to the seemingly simple way Marx privileged the production process. Scholars must write to join a conversation, and in so doing, by investing knowledge, gain it back through the writing process, hopefully with a surplus knowledge. This practice, as many scholars in rhetoric and composition have noted (Horner 2000; Welch 1999; Wysocki 2004) is not a material free practice. But what began as a look at the ways rhetoric and composition scholars discuss and create a discourse around materialism has, for me, turned into an investigation in how we treat capitalistically driven language and grant words like 'circulation' power in the discipline. For example, John Trimbur (2000) stated in his article introduction, "I use delivery and the Marxian notion of circulation interchangeably in this paper" (p. 190). The Marxian notion of circulation, as we will see later in this chapter, is the base on which industrial capitalism rests. Similarly, James Porter (2009) boldly claimed "Writing – *all* writing, I would say – resides in economic systems of value, exchange, and capital" (p. 218). Porter believed this so wholeheartedly that he repeated it nearly verbatim from a 2006 article he wrote with Danielle DeVoss: "Writing – *all* writing, we would say – resides in economic systems of value, exchange, and capital, and we want to recommend that rhetorical theory take up questions regarding 'economies of writing'" (p. 194). I question then, what kind of power we grant the language of quantitative capital when we apply it to writing in these economically based ways.

It has been argued (Lanham 2006; Porter 2009) that rhetoric also has an economics, and consequently, 'distribution' and 'circulation' must be implicated in the process of the rhetorical canon of delivery. Intrigued by Porter's claims that writing resides in economic systems, I investigated how writing online and how a Web 2.0 environment aligns with the language of capital as computers and compositionists have used it. DeVoss and Porter (2006) claimed that

information online is exchanged, "to interact, to share, to play, and to help others" (p. 203). If capitalism is driven by speed and the creation of a surplus of materials and labor, then is the prevailing mode of writing production today really capitalistic in nature? Web 2.0 was emerging as DeVoss and Porter wrote their article featuring Napster, and their infinitives define the uses on the open web well. DeVoss and Porter advised, "*Teach not just a rhetoric of audience and purpose, but an 'economics of rhetoric' in conjunction with a theory of digital delivery*" (italics theirs, p. 202). And while I by no means disagree with this pedagogical advice, I contend that the ways compositionists use industrial-style capitalistically driven language to refer to the work of writing may be setting us up for an outdated discourse in digital delivery.

The emergence of the computer, word processing, digitized and easily searchable information, interactive writing software, and increasingly Web 2.0 production and complex distribution overall, are all altering the production process enough that any attempt to deny the shift in the valorization of knowledge capital endangers not only the study of writing, but the Humanities as a whole. In this chapter, I use Karl Marx's (1884) explanation of the circuit of capital from *Capital Volume II*, the seldom read volume of his foundational work, to show where this language originated, to explain ways it works when applied to writing in an industrial culture, and when its application fails in a Web 2.0 environment. I show how the current use of the words 'distribution' and 'circulation' in computers and composition have roots in Marx's descriptive language, and are no longer always appropriate when applied to a Web 2.0 environment. To illustrate the shift in value and show the potentials for interruption in current notions of both distribution and circulation of writing, I turn to Google applications share feature used throughout Google Drive applications. The share feature options allow a discussion of the potentials in reframing distribution and circulation in a Web 2.0 environment. My aim here is to

complicate the language composition scholars currently use, and insist our assumptions about the way the economics of writing works get more attention than they currently do in our composition discourse.

This argument is both timely and important because as compositionists concern themselves with writing, computers, and the Web, if the language we use is convoluted, or rests on an outdated system, our theoretical work may not connect with anything outside our discipline. Earlier in their article, in a footnote following the repeated claim that delivery is an old term, DeVoss and Porter (2006) wrote, "Rhet/Comp theory was implicitly a theory and practice of print delivery. And maybe there's nothing particularly wrong with that; maybe delivery only needs to be an issue when new technologies emerge" (p. 194). Around the time computers and composition began to emerge as a strong sub-discipline, we can see the canon of delivery also begin to see a revival (Jamieson 1988; Reynolds 1989; Welch 1990). In 1999, as the Internet made its way into everyday households, Kathleen Welch wrote that "We all reside in rhetorical HUTs, households using television (the demographer's term), and the machine's ubiquity has changed rhetoric. Ninety-eight percent of United States households have televisions; forty percent have personal computers" (p. 101). Welch then discusses screens and the distributional changes screens have on human perception of oralism and auralism. Here is where 'distribution' and 'circulation' become a larger piece of the puzzle. In his later article, Porter (2009) states, "when writing enters digital spaces, we need to reconceptualize writing from the point of view of production, consumption, and exchange" (p. 219). In a television dominated society, distribution is outward – toward the general public – to be consumed passively, with advertisers supplying information about what we should purchase, like, or value. But as computers gained traction in households, as Welch noted for us in 1999, and then as Web 2.0

emerged between 2005 and 2008, regular people began to have the power to distribute content out to whoever else had the power to operate a computer. What is happening then is a loosing of the tight grip print artifacts (a tangible, tradable product) has over our culture.

4.1   Caring about Economics in Computers and Writing

Economists study social behavior much the same way that scientists study the natural world – through the scientific method, where only one variable changes, while all others are held as constant as possible. Throughout the explanation of the circuit of production, there must be assumptions made about the constants of the circuit. As he deconstructed the parts of the circuit of production, Marx (1884) had to make some assumptions about it. He stated that in the production circuit, "we must disregard all technical revolutions in the production process which may devalue the productive capital of a particular capitalist" (p. 186). Marx's assumption here has to do with what rhetoric and composition scholars might refer to as access. In order to discuss the circuit of production in a simplified form, as I have just done, he had to assume that all parts of the process were constant and all capitalists, laborers, or machinery involved in the process, were on the same plain. This means that no party suffered from any issues of access to equipment, energy, or any other imaginable inequity when compared to any other party. It also assumed that no revolutionizing technologies were to arise to alter the potential of the endless reproduction of the circuit.

The problem we face at this situated moment in history, is that we cannot ignore the Internet and all it has done to help transition humanity into a new age, disrupting our traditional notions of Capitalism along the way. Cathy Davidson (2011) claimed that "Because we're in a transitional moment, most of us aren't aware of how structurally different our life has become because of the Internet" (p. 11). She then went on to explain historian Robert Darnton's

distinction of "four times when the very terms of human interaction and communication have been switched so fundamentally that there is no going back" (p. 11). These times, according to both Davidson (2011) and Darnton (2008), are the invention of writing, of movable type, mass printing, "And then there's now, our very own information age, the fastest and most global of all the four great epochs in the history of human communication" (p. 11). This is a technological revolution that we cannot ignore – even in terms of studying Marx and his intricate and involved circuit of production.

The language of capital is attached to a public time that needs to be called into question. To ignore the Internet and its effect on production would be to succumb to what Lynn Worsham (1998) warned against: "a rather dogmatic return to classical Marxism, [which] ignores the historicality of Marxism as well as the historicality of capitalism" (p. 218). Using the language of capital as though scholars are still writing in an industrial mode of production assumes the writing that takes place online resides under the same rules that govern print production in the age of industry. As DeVoss and Porter (2006) have noted: "Print publishers have a vested economic interest in in slowing and controlling the distribution of information. Their identity and capital are invested in the maintenance and control of the pipeline between writers and readers – in making sure that information is scarce, that information flow is regulated in their favor, that they operate the pipeline, and that in order for you to gain disciplinary capital (knowledge), you will pay to access that information" (195). But as the Internet emerged, first as a public entity, and now as Web 2.0, print publishers have begun to lose the kind of control DeVoss and Porter describe above. As early as 1989, Richard Lanham saw what was to come in terms of digital distribution when he argued that "All this fuss [over the physical labor of consulting volumes of texts] could be avoided if scholarly journals were 'published' as on-line data banks upon which

individual scholars could draw at will" (p. 283). Lanham foresaw a relief of the physical material involvement in research, but his placement of 'published' in quotations also tells readers that Lanham saw that publishing online would involve some complex issues. Whether he was unsure whether digital publishing could continue to be called publishing without paper and binding, or whether he saw a much more problematic issue at hand, is not included in his reference to 'published journals.' As we know now, anyone with an internet connection can 'publish' online to a 'public' audience – two concepts that need to be examined further in an exploration of how an industrial circuit of production is enacted in a Web 2.0 writing environment. Otherwise, compositionists may miss the chance to reimagine classical Marxism and the language of capital which grows out of it even as our very notions of writing and delivering writing are altered in a revolutionary way from which 'there is no going back.' I use temporal-materiality to prove that the values we constructed during the rise of industrialization hold today and are reflected in our language and scholarship concerning an economics of writing. By glimpsing at the share feature of Google Documents which serves as a current circulation model, I point to an emphasis an outmoded model of production that is anchored in public time quickly becoming outdated. To support this, I begin with a look at several instances of scholars and suggest that capitalistically driven terms commonly used in rhetoric and composition are not always fully understood in order to prove that language seeded in the old formulations of capital do not account for the new way writing moves in a collaborative-rich environment. When rhetoric and composition scholars recognize that updating the way we discuss an economically rich topic like delivery, we can begin to alter the discourse to better fit the direction writing production is heading right now, and in the future.

4.2   The Language of Capital

Research into material theory in rhetoric and composition will yield words like 'capital,' 'use-value,' 'exchange,' 'production,' and 'commodity.' Bruce Horner (2000), who wrote extensively on the nature of labor in composition stated, "Labor is commodified when the value of the product of that labor is identified as an objective property of the product itself (see Marx, Capital I, 153-54). In the academy, intellectual labor, in the form of 'scholarship,' is deemed to be one's *own* work, treated as divorced from material social conditions, a product of the autonomous scholar. It is thereby commodified, simultaneously with commodification of the scholar herself" (p. 2). Horner made clear the distinction of 'work' in the academy several times. Only a page later, he explained, "The peculiar relegation of *work* to designate only the production of academic texts, far from being restricted to Composition, is endemic to discussions of academic activities within the academy" (p. 3). His use of words closely associated with that of the industry of capital were purposeful and loaded with capitalistic critique. Horner even paraphrased from Marx's chapter "The Commodity" in *Capital Volume I*, a chapter which is a crucial part of the circuit of capital later in *Capital Volume II*, to aid in explaining the current traditional mode for scholarly work. For something to be a commodity, according to Marx, it need only be, "an external object, a thing which through its qualities satisfies human needs of whatever kind" (*Capital Vol. I*, p. 125). Anything of value to some other person can be labeled a commodity. What Marx was after then was, "the discovery of these ways and hence of the manifold uses of things in the work of history" (p. 125). Horner explained that scholarly labor is part of the capitalist system of circulating values. These values were strong in the university system in 2000, and they are strong today, despite current events, such as large amounts of

adjunct labor, and the slow elimination of tenure track employment, which suggest shifting values in the post-secondary structure.

Horner was not alone in calling on the language of capital to support his argument: many other rhetoric and composition scholars called on capitalism in ways both overt, and implicit. Oft cited for interfaces as upholding capitalist ideologies, Selfe and Selfe (1994) implicitly nodded to capitalism when referring to the distribution of cultural information product through interfaces: "it is important to identify the cultural information passed along in the maps of computer interfaces – especially because this information can serve to reproduce, on numerous discursive levels and through a complex set of conservative forces, the asymmetrical power relations that, in part, have shaped the educational system we labor within and that students are exposed to" (p. 485). The both the labor system and the first graphical user interfaces were built on the capitalist model – a model which Horner (2000) spent time categorically analyzing through the lens of composition. For Selfe and Selfe, the early computer interface was one such lens, and provides one of multiple lenses through which computers and composition scholars can use current technologies to view the values of our system. It is reasonable then, to assume that at least some of this work, from Selfe & Selfe to Horner to DeVoss & Porter, has had an influence on the language used in the discipline of computers and composition.

While use of capitalistically driven language may have been appropriate for scholars in 1994, and 2000, it served to fuel a tradition of referring to *our* work as uniquely situated in this capitalist tradition enough that some later composition scholars have warned against. In an early questioning the position of writing in the composition classroom, Horner (2000) described consequences when, "Texts are treated as commodities whose effect is seen as independent of the conditions of their production, distribution, and consumption. Discourse and its meaning are

treated as fixed, hence the question becomes whether that meaning is 'delivered' in a way that suits the consumer" (p. 112). If meaning is believed to be fixed, then the rhetorical choice to use the language of capital is subsequently value-fixed. And while he wasn't questioning the language as much as the practice of treating writing as a commodity to be traded, Horner understood the dangers of the language he employed throughout his book. In a critique on class in composition labor, Harris (2000) cited a "clumsiness of trying to use the traditional categories of class analysis – of capital and labor – to describe our work lives as professionals" (p. 46). 'Clumsiness' was an excellent word to use here, which Lanham (2006) picked up on in his own work, and which I employ throughout this chapter. Lanham examined 'capital' in his own writing on the 'attention economy' and found that "we might locate 'capital' in this new economy in the literary and artistic imagination… what we might also ask, constitutes 'productivity' in an attention economy" (p. 9). But if imagination works as capital in the attention economy, how is it invested to generate consumable commodities? Lanham's questions are important, and quite timely, considering 2006 can be cited as a crucial year in the turn from Web to Web 2.0. Once in the full swing of Web 2.0, computers and composition scholars like Colin Brooke (2009) overtly warn against thinking about writing as a capitalist mode of production: "the danger of relying on Marx's formulation is that exchange as [Trimbur] conceives it is primarily an exchange of what Lanham (2006) calls 'stuff,' the exchange of currency for some physical object that has been produced and distributed and will eventually be consumed" (p. 174). Brooke had a valid point here – information and 'stuff' are not necessarily the same, and perhaps shouldn't be treated as such. But what Brooke did not say is that compositionists, particularly computers and compositionists have not yet analyzed Marx's

formulation of the circuit of capital in any real depth. This ultimately leaves economically based and capitalistically charged language wanting.

The next logical step is to revisit the mode of circulation to which scholars of composition tend to refer, sometimes unknowingly. Merely citing instances of the language of capital does little to show the awkwardness of its use in a Web 2.0 world. By taking a look at the source of the language, my aim is to shed light on both applications and misapplications of this language at work in composition scholarship. While rhetoric and composition scholars have cited Marx's work relatively often, we need to apply Marx's circuit of capital to the field of writing.

4.3   The Circuit of Capital Revisited

In *Capital Volume I*, Marx (1867), chose an example "from outside the sphere of material production" (p. 644) to illustrate how valorization shares a direct link with social positions of labor. Marx described it this way: "a schoolmaster is a productive worker when, in addition to belabouring the heads of his pupils, he works himself into the ground to enrich the owner of the school. That the latter has laid out his capital in a teaching factory, instead of a sausage factory, makes no difference to the relation" (p. 644). It may be tempting for some scholars then to look at the labor of teaching as a commodity as Horner (2000) did in *Terms of Work for Composition*. However, because of the addition of compulsory education laws during the industrial era America, it is important to remember that the only schools Marx's description still applies to are private schools who make a profit on the capital they have invested and returned through their private systems. If we apply public and non-profit education to this logic, we get (to use Harris's word) 'clumsiness' in application of Marxian language, succumbing to Lynn Worsham's (1998) "dogmatic return to classical Marxism" (p. 71) While I do not pretend, in this section, to uncover all the nuances of Marx's circuit of production, or even to provide a comprehensive look at the

multiple readings of Marx's first two volumes of *Capital*, I do give a general examination of the circuit of production which Marx lays out in *Volume II* and then apply it to the work of scholarly writing and the ways in which circulation play out in current writing production. I make this move because I see a return to classical Marxism a necessary as the world hurtles into an era of virtual space. "What would Marx have thought of the Internet?" is a recurring question in my studies of cloud-based writing, and one I may come back to examine in detail in later work.

If DeVoss and Porter were correct and delivery is a higher stakes canon when new technologies are emerging, then exploring the circuit of production from multiple angles of capital – and from Marx's point of view – should call into question application of the language of both circulation and distribution to writing in a Web 2.0 environment. In 2000, circulation steadily became an integral part of the writing delivery discourse. As I searched through many pre-Web 2.0 texts, I found that not much attention was paid to the concept of circulation, even when the scholar referred to it implicitly. It's not until Trimbur (2000), stated that "the circulation of writing should figure much more prominently in writing instruction" (p. 190), that I began to find more overt references and discourse concerning the topic. After Trimbur's (2000) call for the prominence of circulation, he noted that "delivery can no longer be thought of simply as a technical aspect of public discourse. It must be seen also as ethical and political – a democratic aspiration to devise delivery systems that circulate ideas, information, opinions, and knowledge" (p. 190). Several scholars agreed, and henceforth we see references to Trimbur's work in several articles and books. Diana George (2002), in exploring the importance of design to the work of teaching writing cited Trimbur's (2000) article saying, "In his most recent scholarship, Trimbur examines the 'materiality of literacy from the perspective that writing is a visible language produced and circulated in material forms' ('Delivering' 188). This attention to

the production of text as visible language… is one that links literacy practice with production and distribution of text and to the history and theory of graphic design" (p. 25). Yancey (2004) also cites Trimbur in her discussion of circulation as a means of production in *Made not only in words.* And again, we see Trimbur cited in reference to circulation, and increasingly so, in 2009 by scholars like Colin Brooke and James Porter, and Gries in 2013. As applications emerge, from Napster to today's social media (Facebook, twitter, Instagram, Pintrest, etc.) and more work oriented cloud storage (Google Docs, Dropbox, OneDrive, etc.), applications have shifted the way scholars conceptually treat distribution and circulation, so much so that it is important to pay attention to the year in which article and book authors have made statements, claims, and observations about the Internet, the Web, and now, Web 2.0. What one scholar observed pre-Web2.0, for example, may no longer be a relevant observation after the popularization of YouTube.

As I researched the language of capital computers and compositionists use when discussing production, I began to notice trends involving both 'distribution' and 'circulation.' Before Porter (2009) explained the distinction between distribution and circulation, many scholars distinguished between these concepts in brief, or not at all, bypassing any discussion of the separable concepts of the piece of the mode of circulation (Brooke 2009; DeVoss & Porter 2006; George 2002). Yancey (2004) described the circulation that happens in school as having "to do with the variety of academic texts that students create, with the places in which these texts are created, and distributed, and with how *this circulation* contributes to student development in writing" (p. 315). Here, Yancey includes distribution as part of the circulation of knowledge, and doesn't include distribution of a final product. In a similar description, Trimbur (2000) claimed that delivery debaters, at the time he was writing, were guilty of "foreshorten[ing] the delivery

system, the circuits of production, distribution, exchange, and consumption through which writing circulates as it takes on cultural value and worldly force" (p. 194). While the two fore examples were not 'incorrect' in their terminological use, they illustrate a tendency scholars of composition have had in exacting the language of capital without overt knowledge of the motion of knowledge capital within a circuit of production. These examples show that distribution is often discussed as part of the overall circulation process. And as I am about to show, this is an accurate conflation – if one is talking of writing as part of the circuit of production as Marx described it in application to factory production, but it is not correct when we apply it to the more common reference to circulation as a cultural diaspora of information by and through audience. In order to examine the individual modes of the circulatory process, which our examples above include as part of the delivery system and thus part of the motion of capital, the best place to begin is with Marx's detailed analysis of the circuit of production, as it is the root of all post-Marxist criticism and interpretation.

The circuit of capital is always in motion. In *Capital Volume II*, Marx (1884) disassembled the circuit and explored its functions in multiple ways. On the whole, Marx explained it as "a movement, a circulatory process through different stages, which itself in turn includes three different forms of circulatory processes. Hence it can only be grasped as a movement, and not as a static thing" (p. 185). It is important to note here that in *Volume II*, Marx brought little to no political belief into the analysis – he did this in other books such as *The Communist Manifesto*, and the *Grundrisse*, but in *Volume II*, we are working with analysis largely free of political charge. David Harvey (2012), in his lectures on *Capital Volume II*, described the circuit as "Capital as a process, rather than capital as a thing." He noted that once the circuit is in motion, the individual capitalist cannot control it: "It doesn't matter what the

individual capitalists do, they have to submit to the law of value." Value, according to Harvey, is "constituted through individual behaviors so that it acts as an aggregate force." This is a significant distinction in value creation because it shows that value is constructed, but not easily controlled or measured.

The parts of the circuit as Marx explained them in *Capital Volume II,* are more complex than in *Capital Volume I* and more useful for our purposes to identify the complexity involved in circulation. Early on, Marx labeled the circuit "The means of circulation" (p. 198) and focused on the circuit as it begins with commodities in the exchange process: $C - M - C$ where C stands for commodity and M for money capital. In *Volume I,* Marx (1867) introduced readers to "The metamorphosis of commodities" within the "process of exchange" (p. 198). The metamorphosis generally refers to the trade of capital for commodities and vice-versa. This approach was critical to Marx's analysis because he ultimately chose the laborer as the central actor in his work, reflecting the moral standing he took in other works. "The division of labor," Marx remarked "is an organization of production which has grown up naturally, a web which has been, and continues to be, woven behind the backs of the producers of commodities" (p. 201). Marx's concise definition of division of labor reads this way: "The totality of heterogeneous use-values or physical commodities reflects a totality of similarly heterogeneous forms of useful labour, which differ in order, genus, species, and variety" (p. 132). Without labor, production would not happen. Because of its overriding importance, Marx went into great detail describing the division of labor as a social necessity at work, which I will not go into here, as the analysis of labor is not my aim. Instead, I focus on the language use involved in the circuit itself and leave the details behind its motion for further study later on. In the simplified $C - M - C$ circuit, it is clear that a commodity is exchanged for money, which then gets circulated back into the system to make

more commodities. Even though "Things which in and for themselves are not commodities,
things such as conscience, honour, etc., can be offered for sale by their holders, and thus acquire
the form of commodities through their price" (p. 197), Marx was careful to differentiate between
"magnitude of value and its own expression in money" (p. 197). Value and money in the form of
price are not synonymous; price is more commonly associated with money. It is because of this
differentiation that we can assume that the commodity (C) in this case is a tangible product
which can be bought and sold at market, such as a book, or a package of pens.

Figure 4.1 shows Marx's cyclical equation representing the circuit of production in
Volume II. This equation, which Marx (1884) began by calling "the circuit of capital" (p. 109), in
its simplified form without the arrows to MP and LP, originally M-C-P-C′-M′, was so called
because it began with money capital at the beginning of the circuit. Marx then explained that the
circuit could begin at any stage, for example with commodities it would be called the circuit of
commodities. For my purposes, I will refer to all forms of the circuit, from all possible starting
points, as the circuit of production. This is partly because, as Marx (1884), pointed out, "The
circuit of productive capital is the form in which the classical economists have considered the
circuit of industrial capital" (p. 166). For classical macro-economists, production is the key piece
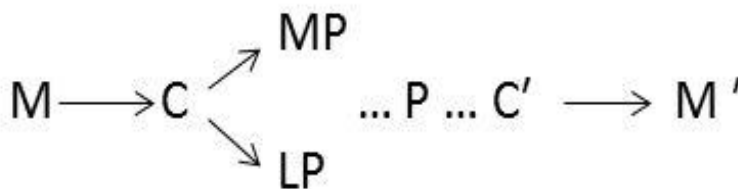of the circuit responsible for the most concentrated value production. Further, as Bruce Horner

Figure 4.1 Marx's circuit of capital equation

(2000) pointed out, "Composition's history of fetishizing textual forms, illustrated by its fascination both with 'error' and with experimental textual forms, gives ample evidence of its neglect of the relations of production, as does its almost complete neglect until recently of the technological and human physiological demands of writing" (p. 219). By targeting referring to Figure 4.1 as the circuit of production, I acknowledge the trend emphasizing production, and I place emphasis on the production process as many scholars of writing do when they explore the canons. Even though the equation featured in Figure 4.1 starts with money capital, and technically should be referred to as the circuit of capital, the circuit is fluid and can be examined from any entry point. For the sake of simplicity in analysis and consistency, I shall refer to it as the circuit of production.

The components of the circuit of production are on the surface, rather simple. In *Capital Volume II*, Marx (1884) explained each piece of the circuit you see in Figure 4.1 in great detail, showcasing its importance, the different revolutions when one begins with capital (M) versus when one begins with commodity (C), and gives examples for each kind of circuit and its consequences. I recommend reading at least the first half of *Volume II* to get all of Marx's detail. Here I describe the basic terms used in the circuit to show how closely related the language of capital used in composition studies is to the circuit of production. The M, as we know from *Volume I*, represents money capital. It is important to remember though, that capital can be anything. Marx (1867 & 1884) used money capital for what David Harvey (2012) explained as a simple reason: "Non-money capital cannot be measured in its surplus form… Money capital can be easily measured." While M is specifically *money* capital here, one could substitute it for all manner of other types of capital and see how it holds up in the circuit, which I demonstrate in the

next section. The C is the commodity being produced, and then the circuit gets more complex. In Figure 4.1, the commodity transforms into two factions: means of production (MP) and labor power (LP). The arrows indicate that commodities become, or split into, separate means of production and labor power, but in fact, commodities are made up of both concurrently. This part of the circuit shows that money capital is used to purchase both means of production and labor power. The holder of capital (the capitalist) has the agency to decide on these commodities at the beginning of each revolution of the circuit. For a writer, means of production could be anything from a book, to a computer, to the gas used to write at the coffee shop down the street. The labor power then acts as the commodity to be bought and sold in the form of the laborer, which in the case of writing is everything that is involved in authorship. I use authorship here to emphasize the fact that writing is not a solitary activity and draws on the labor of many for discussion of concepts, feedback, proofreading, and so on. About labor power and means of production, Marx (1884) noted that "M-L is not simple commodity exchange, but the purchase of a commodity L that is to serve for the production of surplus-value, while M-MP is only a procedure that is materially indispensable to the accomplishment of this end" (p. 154). Labor power can be used over and over, with the laborer needing (or wasting) fewer resources (MP) as he or she gains experience and speeds up production with the increased honing of skills. Most often, when making a consumable product, means of production (MP) can either be used only once, or will need repairs or replacements – as with machinery.

Once pre-production commodities are purchased using money capital, the production phase may begin. LP and MP have become "a component part of P" (Marx 1884, p. 169), and can then be used to transition raw materials that may be a part of MP into a finished commodity that may then be sold. Marx (1884) explained that

the production process, the function of *P*, interrupts the circulation of

money capital and appears only as mediator between its two phases M-C

and C′-M′, here the entire circulation process of industrial capital, its

whole movement within the circulation phase, merely forms an

interruption, and hence a mediation, between the productive capital that

opens the circuit as the first extreme and closes it in the same form as the

last extreme, i.e. in the form of its new beginning (p. 144).

Several complexities arise when the circuit begins with P, but for my purposes, P represents the

interruption, as Marx explained it above, the (…) included in this interruption. In fact, (…)

represents an interruption in production time when the production process must come to a halt.

This could happen for any number of reasons depending on the commodity in production – aging

of a wine, for example, or in writing terms, letting an idea sit before revision, or even the time

commodities can sit in storage before they are ultimately sold.

The last phases of the circuit may look like the beginning, but they are arguably the most

complex of the equation. C′ stands in for commodity-prime, which is the produced commodity

ready to be sold. M′ then, stands in for money capital prime, which is the money capital that is

gained when the finished commodity is sold for its new price value. This scenario, of course, is

assuming that *all* units of the finished product will be sold for the asking price. The prime (′)

however, indicates that there is a surplus commodity, or surplus money capital, involved in this

portion of the circuit. At the continuing risk of being reductionist, the prime distinction can be

thought of as the surplus that is left over after production is finished. The surplus may contribute

to the reproduction of the circuit which is currently under discussion, put away to be hoarded by

the capitalist, or any combination of these. In an efficient circuit, all available capital is put

quickly into reproduction and the circuit continues. Marx spent some time in *Capital Volume I* discussing the intricate nuances of surplus, which I will not go into here, as my aim is not to explain how surplus-value works in the capitalist system. Instead I focus on the motion of the circuit, which is the basis for the general concepts of circulation, illustrated earlier. Capital must stay in motion within the circuit, ending in items with surplus attached as part of their renewed value, or as Marx (1884) explained it: "It is only through this constant renewal of its body that the exchange-value maintains itself" (p. 206). Without the constant renewal process, the circuit would collapse, and the circulation of goods, labor, and capital, would not function as we know it in the United States. For writing, it is crucial that knowledge capital circulate so that the reproduction and communication of past discourse into the new knowledge base leads to the production of new discourse into the future.

4.4   Substituting Non-Measurable Capital

Before I can interject a current Web 2.0 example into the circuit of production to show the various ways publishing on the web has changed writing, it is critical to establish how writing worked within the confines of the circuit of production before Web 2.0. Marx used money capital partly because it was easy to measure, and partly because money is the stand-in for the beginning of the circuit of capital when the capitalist intends to produce a material good that can be bought and sold at market. To look at writing in the circuit then is to substitute the capital input so that the commodity prime output is easily classifiable as writing – words on a printed page. Figure 4.2 shows a new circuit of production in which substitutes the money capital in Marx's (1884) original equation for knowledge capital (K). I chose knowledge over other potential choices of capital, such as cultural, or social, because knowledge is the strongest potential capital input if the expected outcome is discourse specific scholarly writing in any

discipline. Depending on the nature of the writing, social or cultural could arguably be used, and I invite readers to do so. When the capital input is non-measurable, as any of these are, they outcome will be largely the same.

$$K \longrightarrow C \quad \nearrow \quad MP \atop \searrow \quad LP \quad \dots P \dots C' \longrightarrow K'$$

Figure 4.2 Circuit of knowledge capital
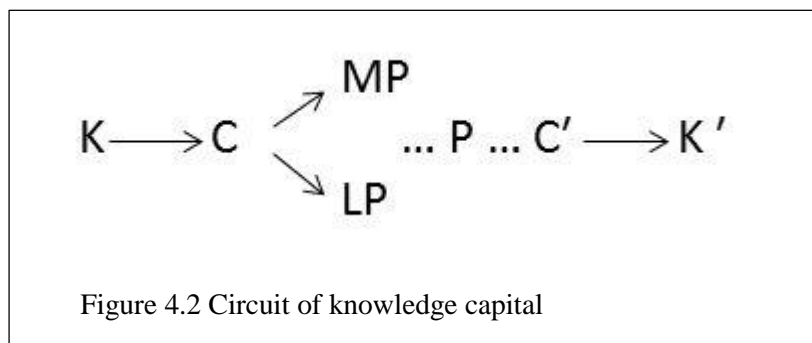
In examining the circuit of production as it illustrates the motion of the production and reproduction of writing, I use the following general examples which I hope are relatable to any scholar of writing. To begin the circuit, which is to assume that this is the writer's first investment into the industrial print circuit, knowledge capital (K) must be used to purchase both means of production (MP) and labor power (LP). Already this sounds clumsy, because we are forced to consider knowledge as the capital that must be invested in order to work the tools of writing. We could assume that knowledge capital buys the writer *the ability* to purchase the writing tools necessary, and to exact the labor of writing in an efficient way. A more accurate way to think of this is that the writer serves both as knowledge capitalist and as laborer. But because material goods cannot be purchased with knowledge, we cannot actually assume that the capitalist in this scenario invests in her own work using knowledge alone. The money she makes as a knowledge worker (either from a publisher, or the university where she works, who are in turn operating their own circuits of production) is what allows her to buy means of production (MP) and use herself as laborer (LP) in the pursuit of writing. At this point in the circuit, there is a joining of circuits wherein the money capitalist, likely a publisher who is fronting money for a book contract, or a university who is investing money into the scholarly advancement of the

writer in question, has purchased the writer as a laborer. Because of this, the writer's circuit of production could begin with the commodity, and end with the commodity, but because knowledge is also a form of capital unique to the skilled writer, it serves logically to being with K and assume that some M′ capital from a different circuit has also been invested into this circuit.

As the knowledge capitalist, the writer is in a unique position to invest in her own labor and tools which can be referred to as her commodity capital. Once the knowledge capital is invested in the production circuit, the knowledge capital invested stays within that circuit until the writer is finished with all phases of production, even those represented by the '…' such as waiting for an idea to germinate, or for a publisher to read a manuscript before notifying the writer that a sale will be negotiated. The MP purchased and featured in this circuit belongs to the writer, not to her employer, and thus, any C in this equation, can be assumed to be the property of the writer. Once the MP and LP are purchased, the production phase begins. Marx explained (1884) that "during its circulation time, capital does not function as productive capital, and therefore produces neither commodities nor surplus-value" such that "the closer the circulation time comes to zero, the more the capital functions, and the greater is its productivity" (p. 203). In an industrial capitalist market, time spent working must continually speed up to decrease the capital needed to invest in production, and increase the commodity output. Perhaps because the writing time spent in the production phase tends to be multifaceted and rather long, it is possible the myth of the starving writer might originate within this system, especially since money capital is not overtly a part of this circuit. The production phase involves many more tasks besides writing time, as any writer knows.

Once the piece of writing is 'finished,' and ready for sale, the production process halts and the piece of writing enters into the commodity prime (C′) phase of the circuit. Earlier, I mentioned a surplus involved in this phase of the circuit, and it exists even with writing. When the piece of writing has been sold to the publisher, there exists commodity capital that is 'left over,' that can be used in later reproduction, such as equipment (computers, printers, research tools) that may be used for the next circuit, or labor momentum that can be used writing another article. The publisher has entered fully into the circuit of this print-centric model at this point in the circuit. The publisher is the merchant to which the knowledge capitalist (the writer) has sold the product, the publisher still operates in its own circuit of capital, usually with money capital as its input, rather than knowledge capital. Once the piece of writing is sold to the merchant, the return the knowledge capitalist gains is also multifaceted and difficult to measure, since it is not a numerical entity like money. Instead, the knowledge capitalist has gained more knowledge during the circulation of their initial investment. This could be experience, or knowledge about how a successful circuit works so that the writer may reproduce the circuit endlessly, knowledge that was not useable in this article or book, but may be useful in the next one, investing knowledge and getting out more each time. It could also be credentials toward a tenure-track job, or some other form of career advancement, which is a way to measure knowledge within the system.

In both circuit examples, I have examined some basic classical Marxists analysis of the circulation of capital: Circuits which may at first appear to be unrelated to the delivery concepts I have been addressing. The circuit of production is always in motion, often operating alongside other circuits. Because money capital must be invested in the writer as laborer, it is clear that some other circuit, belonging to the writer's employer, must be running parallel to the writer's

knowledge capital circuit, interacting with each other when trade occurs. Much like these circuits, the canons of rhetoric are fluid, not separate or hierarchical, and interact with each other often. When the writer efficiently invests knowledge capital, she is doing so with the audience predetermined, even before she invests in her initial commodities. As the writer decides how to invest, she is determining who she will write for, and by what distribution means (a journal who publishes articles, or a chapter in a book, for example). Even though the writer has agency in the purchase of her means of production, she is still the labor commodity in someone else's circuit. In the classical Marxist circuit of production, the value of the writing rests, once again, almost completely in the hands of the money capitalist who pays for both labor production and distribution of the final commodity product.

The circuit shows the *economic* model of capital, production, and commodity circulation, but it does not show how infinite-use goods like information are circulated *once they leave* the circuit of production. Instead, the circuit of production in all of its many forms is the illustration of distribution. Distribution is accounted for in the invention/investment process, and involves agency where circulation does not. Agency, in this case, is what Marilyn Cooper (2011) called "individual agency [which] is necessary for the possibility of rhetoric, and especially for deliberative rhetoric" (p. 426). The investment of capital is a rhetorical choice – one that requires individual agency to create value within the circuit of production. Refer back to Figure 4.2 and note the way knowledge capital (K) is invested, is a choice made by the investor – the knowledge capitalist. The time spent in production is also largely the choice of the knowledge capitalist, who also serves in the role of her own labor power. Finally, agency exists in deciding how and where to distribute the final commodity product (C′). In identifying distribution as part of circulation, but not *as* circulation, Porter (2009) explained "Making [a] distribution decision

requires understanding the relationship between my article and possible audiences, and knowing which publication venue is more suitable given the focus of the article and what kind of impact I want it to have and *when* I want to have it" (p. 214). As technology advances, this decision is anything but simple.

When the Internet in its current state is introduced as a means of production in the circuit, agency in the Marxist model shifts and the continuous motion takes a turn in value creation. Much of the writing that occurs in the Web 2.0 environment is done without a traditional publisher (like that which Porter alluded to), and often does not count toward scholarly career advancement. It alters the possible means of production in more complex ways than just introducing the World Wide Web as a tool. As web technologies emerge, there exists an endless array of applications which allow users to code, design, drag and drop, etc., their way to producing all sorts of new compositions both exclusively text based, and multimodal. In direct proportion, labor time is affected by these technological changes. Much of the writing can now speed up because of the short amount of time it takes to move a piece of writing to a reader, or reviewer, and get it back. Costs are down in terms of printing, but up in terms of necessary equipment needed to construct this new means of production. All of this can alter the writers plan for the movement of information into circulation. Unlike the scenario in Figure 4.2, writers may now produce and design writing quickly, and distribute widely, without the guaranteed addition of monetary capital, which was absolutely necessary for similar scale distribution before Web 2.0. The initial investment becomes the sole movement of the writer and need not be traditionally backed by money capital. The knowledge capitalist may act alone in deciding to publically distribute her work at any phase of her production, for any reason.

4.5   Distribution via Google Documents

Google Documents is a word processing application with collaboration features and a variety of distribution options. An example of the complex network of Web 2.0 distribution options available exist in various forms online, but Google Documents is widely used. In a 2013 article titled "Will Google Docs kill off Microsoft Office?" Covert reported that "Google recently disclosed that there are 120 million accounts using Google Drive (which houses the Docs services), and 5 million businesses and institutions using the Google Apps platform (the latter is not a free service)" (para. 10), a number which has since grown. The person who first creates a document inside Google Docs is called the 'owner,' and is listed as such in Google Drive on the first page a user sees after logging in. The language of capital designates the owner as knowledge capitalist because the owner has invested in a Google Doc as a means of production, and done so with intent to distribute. Distribution inside a Google app can be synonymous with 'sharing', and are often used interchangeably. I explore the link sharing feature in the app and illustrate its effect on distribution in a Web 2.0 environment in this section.

At first, it may seem the language of capital still holds, but as I consider more complex issues involved in sharing, the language rhetoric and composition scholars have used to describe distribution and circulation issues begins to sound increasingly clumsy. The same year Porter (2009) stressed a distinction between distribution and circulation, Colin Brook was thinking along similar lines. Brooke did not make the distinction however, which can be seen in phrases involving sharing: "Napster and other filesharing platforms undermine the centralized control by permitting widescale *lateral* or peer-to-peer (P2P) distribution" (p. 172). Distribution as Brookes used it here is conflated with cultural circulation, rather than distribution. Napster relied on a traditional music publisher for distribution of music products, but circulated these cultural

products in a P2P platform. In an opposite move, Laurie Gries (2013) argued for a circulation studies, and proposed that "scholars investigate not only how discourse is produced and distributed, but also how once delivered, it circulates, transforms, and affects change through its material encounters" (333). Gries separated circulation from delivery in this description, which sets her study apart from delivery as both Porter and Brookes have described it. David & Yancey (2014) proposed that "Electronic multimodality promises a network of distribution, a Benjaminian mass distribution of the single text, one unavailable to one-of-a-kind scrapbooks, unless of course they are digitized" They then asked, "Does that matter?" (p. 14), in terms of teaching multimodal texts in the writing classroom. It absolutely matters because this kind of distribution happens in a Web 2.0 environment frequently, and should not be conflated with circulation. In their article, Davis and Yancey were on a search for validity in writing assessment – a concept which is value-laden to the extent that a discussion concerning validity is also a discussion concerning value systems. Just as Davis and Yancey found different values enacted in physical portfolios versus digital ones, composition for a print era economy has different values than composition for a digital one.

One such value has to do with the agency of the original author of a collaboration-ready document. Inside the circuit of production, the owner has sole agency to share the document how and when she chooses. In questioning the validity of multimodality, Davis and Yancey (2014) also proposed that "Texts are intended – aren't they? – to facilitate some interaction. In other words, any text responds to a recurring situation" (p.14). Davis and Yancey are still addressing a finished product ready for distribution. Unlike a product moving through the circuit of production model, a composition built inside a Google Document may be shared to anyone at any time during the process of production. The link sharing feature allows the owner of a

document to distribute a piece of writing in a variety of ways through the Google Docs interface.

Figure 4.3 is a screenshot of the basic choices the link sharing feature Google Document allows

(all other Google Drive apps share this feature). There are three modes of link sharing. The first

is 'Public on the web' which means it is searchable and accessible to anyone with an internet

connection. For now, assume accessible indicates that any internet user may view the document,

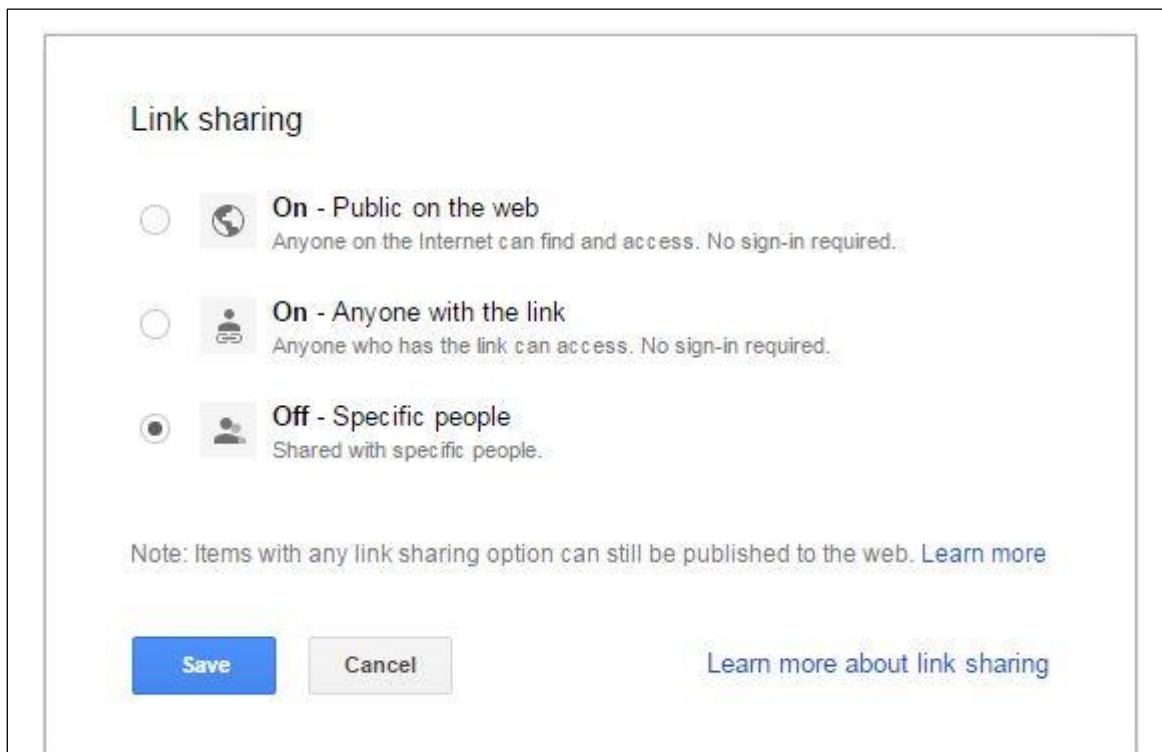at any phase of its production. The owner may also share the document to 'Anyone with the

Figure 4.3 Link sharing inside a Google Document

link,' which means that it is not searchable, but is still publicly available to anyone who can

obtain link access, regardless of means. For example, if the owner distributes the document via a

tweet, and one of her followers retweets the link, any of *their* followers now has access to her

document. By this route of distribution, a document shared to 'Anyone with a link' is also open

to public access, but through a lower access route. In the last option, the owner may share with

'Specific people' only. This option involves a new window where the owner can search for other users, or directly type in an email address. The invitation must then be accepted, and new users may view the document.

Options to share complicate the circuit of production and shift agency in several ways. First, distribution can happen before any other labor begins, happening in the commodity (C) phase. Figure 4.4 shows the pop-up window when the owner selects the option to 'share with others.' In this phase of sharing, several choices become available. At the top of Figure 4.4, this owner has already chosen to share the document as 'Anyone with a link' and 'can view' options – and below that is a partial link to the document. Further down is a box where the owner can input another username and select one of three options from the dropdown menu. The 'can edit' option allows invited users the same control over the document that the owner has. The 'can comment' option allows the new user to comment using bubbles, and the 'can view' option allows the new user the power to view only. By allowing another user access to edit or comment, the writer is allowing this new user access to the authoring process, and can do so at any step of the production process from C-C'. Marilyn Cooper (2011) stated that "recognizing both speakers and listeners as agents in persuasion, as people who are free to change their minds… defines responsible rhetorical agency" (p. 441). Cooper was talking about the classic print era speaker/listener dichotomy in her definition, but responsible rhetorical agency is also applicable to the collaborative composition process. It adds a new layer to rhetorical agency: one that must account for multiple authors working in the same space at the same time, sometimes without ever having met in person. Each participant in an online document has equal power with the 'owner' who originally opened the document. But now, the new user, if granted access to edit, may invite other users in as well. This alters the power the owner/investor has over labor production (LP)

and puts the ultimate choice to distribute the product in the hands of several, giving more people

responsible rhetorical agency as author/audience participants. This factor alters the motion of the

circuit of production completely. What was the implicit idea that distribution has classically

belonged to the person holding the capital, whatever type of capital may be, is no longer the case

in Web 2.0. Instead, Cooper told us that "recognition of an other as someone capable of agency,

someone capable of making a difference, is important in persuasion, but rather than creating

agency, it is how a rhetor becomes responsible, how a rhetor enables real persuasion" (p. 442).

When an author (or owner) choses to included another rhetor during the commodity investment

(C) process, Cooper's ideas concerning responsible rhetorical agency are applied in compounded

ways. The first author is recognizing that others can be a part of the writing process before
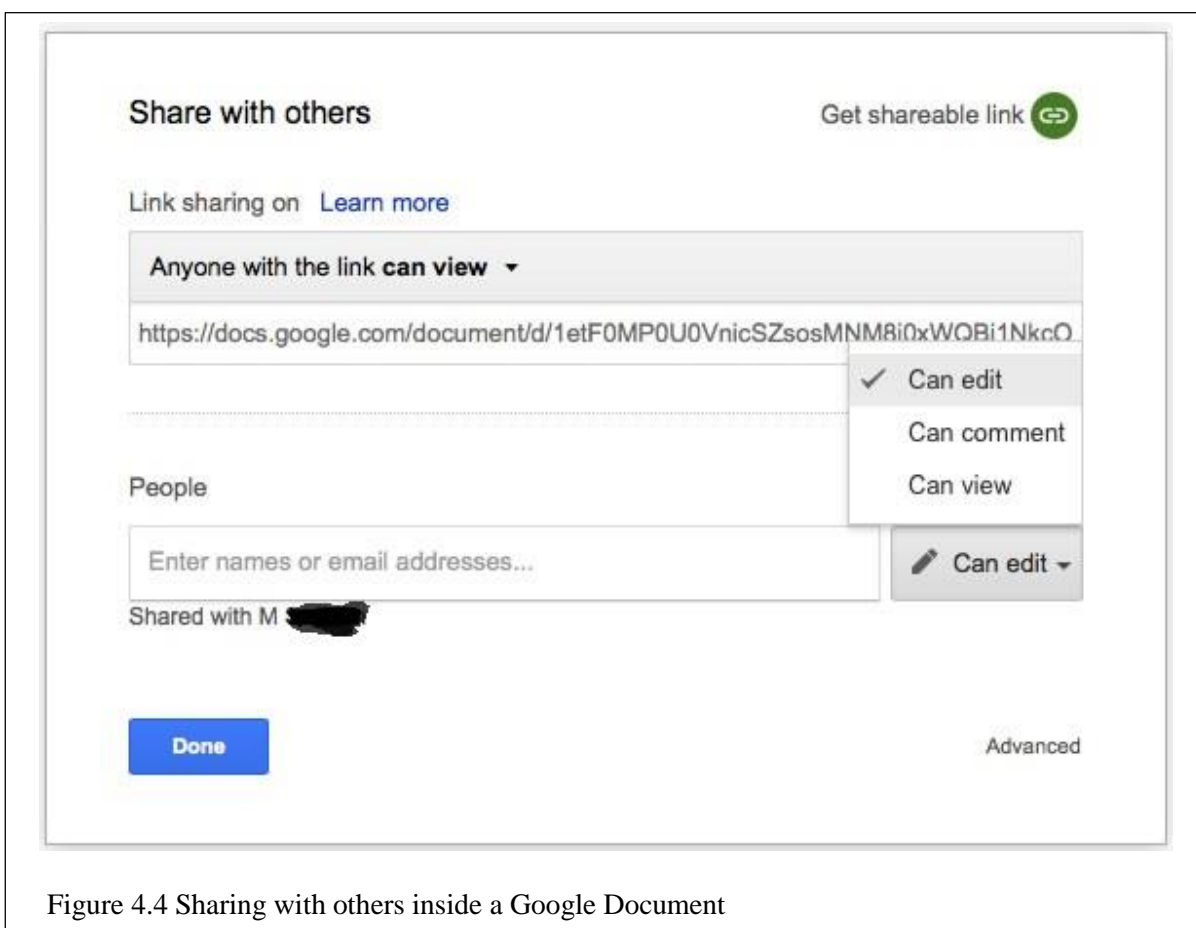

Figure 4.4 Sharing with others inside a Google Document

writing is complete – even before the review process. This action opens up a new kind of space

in the circuit: One where the purchase of commodities becomes a crucial phase in a more communal style of production than what Marx illustrated.

Sharing and distribution need not always be synonymous in terms of the motion of a communal-style circuit. Often, when we speak of distribution, the product to be distributed is ready for consumption. The very notion of distribution changes when complex sharing options become available. Even though the owner can choose to 'distribute' her document to others before or during the production phase, this is not distribution in the same sense as delivery scholars discussed it; it is not distribution ready for consumption. Instead, sharing often takes place in an earlier phase of the production process. When the owner shares for purposes of collaboration, or review, for example, it is part of the process of production phase. Marx would have represented this with ellipses (…), but in terms of Web 2.0, many of the traditional phases of production can be layered or networked with other phases. The possibilities for further distribution beyond the motion of the circuit of production are compromised because ultimate distribution of an end product (C′) is no longer implicitly linked to ownership of the document. Laurie Gries argued that "the methodological framework and research methods necessary to study rhetoric in motion still need to be developed and distributed" (p. 346), citing circulation studies as 'emergent.' I contend that the circulatory motion of the circuit of production needs to be accounted for in circulation studies, but in such a way that it supports the new spaces that exist in a Web 2.0 environment. Since anyone who can edit a document is granted permission to share the document when they are invited to edit, the document may go into circulation early on, free from the responsible rhetorical agency of the original owner. This creates a second new space in the communal-style circuit of Web 2.0 production, distribution and circulation. The

potentials for circulation wrapped up in distribution-as-sharing need to be examined, named, and tracked, as internet writing software (IWS) use becomes societally prevalent.

4.6   Going Beyond Classic Industrial Values

Community and collaboration are not classic industrial values. Factory floors reflected the circuit of production in its segmented, hierarchical structure, and it is this fading structural value that is still upheld in schools, and in offices. Our desks are in neat rows, our cubicles are like production pods, with the bosses on the outsides, and each worker on the inner portion like an automaton.[4] Yet cloud-based IWS like Google Documents allow people to work communally, upsetting the motion of production and spreading the choices and actions across multiple authors. Users may distribute at any phase of production, and do so with anyone with internet access. This kind of work values sharing over withholding and it is because of a growing trend toward communal composing that I argue that the language of capital needs revision to match these new developing values.

In this chapter, I demonstrated how distribution and circulation are rooted in the circuit of production. Scholars like Bruce Horner and John Trimbur have employed the language of capital to explain labor and circulation in rhetoric and composition, and done so in the spirit of Marx's classical language of capital. In 2000, before Web 2.0 began to emerge, this language appropriately reflected the print culture world at the turn of the 21st century. But as the Web has come to play a larger role in composition production, the study of circulation has broken from the classical Marxian tradition illustrated by the circuit of production, and now more commonly refers to cultural circulation of non-tangible ideas, rather than of capital in the system, or goods

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[4] Cathy N. Davidson (2011) explicates a connection between factory floor and Taylorism in her book *Now You See It*. Her chapter "The Changing Workplace" details the rise of Taylorism and it's mirror in public schools.

in trade. Laurie Gries has coined the term "circulation studies" and seeks to formulate a methodological framework for studying how cultural artifacts circulate. Circulation however, is not independent of distribution, as Gries language suggests, but is the outcome of a planned distribution during the production phase. Production is in constant motion, but with the substitution of non-measurable capital and the introduction of revolutionary technology, the circuit is upset, and new possibilities in distribution and thus circulation become viable that weren't available previously.

A fore-fronting of rhetoric and composition's roots in capitalist economic models is important in the continuing discovery that not only are values are shifting, but how and why. Though knowledge is not quantifiable in the same way that money capital is, it may be invested nonetheless, but even this concept is altered inside interactive applications that promote collaboration since the knowledge cannot be pinned to any single author inside this kind of writing space. Scholars can, and should, apply economic concepts and models in order to study the way writing changes as computers allow all those involved in authorship a responsible rhetoric of agency in all phases of production. To write is to set ideas, knowledge, and even culture, in motion. To apply an understanding of economic language and modes is to uncover the decision making processes writers make in production in a Web 2.0 world with spaces previously unavailable in a print-culture society.

5   TIME AND LABOR IN THE CLOUD: AN ANALYSIS OF GOOGLE DOCUMENTS

In a scathing response to the phrase 'real world,' Alison James (2015) wrote in *Times Higher Education*, "Describing life outside the university as 'real' assumes that life within one is not. As far as I am aware (I have seen *The Truman Show*, so I appreciate I could be wrong) I do not work in a pretend world" (para. 5). As a scholar of digital writing practices however, I am

additionally familiar with 'real world' in opposition to virtual or digital worlds, as in the article

title "Do World of Warcraft (MMORPG) Players Experience Less Loneliness and Social

Anxiety in Online World (Virtual Environment) than in Real World (Offline)?" But sometimes,

'real world' can refer to a material application of a theoretical concept. In this chapter, I will

employ the last meaning of 'real world' to apply a theory of temporal-material rhetoric to a 'real

world' cloud software application familiar to most Internet users: Google Documents.

Cloud applications are current and mobile. Analogously, smartphones are tiny computers

that can access documents from anywhere, as long as those documents exist in the cloud. Stacey

Pigg (2014) explained that "Writing with mobile technologies is enabled not only by servers,

cables, Wi-Fi networks, and histories of development and labor, but also by how users make

places for devices in everyday practice" (p. 252). Pigg examined the composing habits of

students writing in a mobile culture, and while she tends to focus on what hardware devices

afford mobile writers, her work on "mobile, networked technologies and the global economy" (p.

253), opened up an exciting discussion about the cloud-based software that must be functioning

in order for mobile devices to function so that students (or anyone) can write anywhere that has

Internet access. Pigg, referencing Guy Merchant (2012), stated "I am not alone in calling for

materially situating mobile literacies" (p. 254). To do so, both Pigg and Merchant "link…

physical and virtual spaces" (p. 254). This link is necessary and important, but is not my aim

here. Instead, I link virtual spaces, specifically cloud space, with the material labor practices of

writing in an Interactive Writing Software (IWS) space, rather than in physical spaces, as Pigg

did.

Mobile applications are as relevant as hardware, and those that have existed for years,

like Google Drive and all its feature applications, are worthy of intense and varied analysis. A

temporal-material rhetoric of delivery can help uncover the way value is constructed within digital spaces like these. An examination of computers and composition scholarship on the intersections of temporality, and materiality, applied to Porter's remaining categories of delivery can help digital rhetoric scholars make sense of the effects our digital writing tools have on our own writing, as well as that of those we interact with in digital writing environments. In the sections below, I connect the theory I have outlined in previous chapters to rhetorical concepts of identity, interactivity, and access and apply them inside spaces that make up a Google Document. I show that the ways compositionists have traditionally discussed writing are shifting in such a way that to ignore cloud-based interactive writing softwares (IWS) would be to ignore the direction that writing is ultimately headed.

5.1   Connection to Temporal-Material Theory

In her book *Now You See It*, Cathy Davidson (2011) pointed out that "a computer is not like any other piece of office equipment. Most machines in the workplace were designed with a single primary function. A typewriter types, a copy machine makes copies. A computer computes, of course, but it is also the repository of all of our work all the time, plus a lot of our play" (p. 168). And while Davidson was not entirely correct (a copy machine is also often a printer and collator, for example), she made a valid point that computers are capable of an incredible amount at once. As I type this section, I am using my computer as a word processor which is also saving my work to the cloud automatically; it is playing some background music; it is my thesaurus and dictionary, and it is connecting me to my social world, all at one time, and all on one layered screen. I see this as a metaphor for the canon of delivery as well. Delivery, as I established in Chapter 3, is no longer just the performing of a speech for a live audience, as it was in Aristotle's time. Today, delivery is a part of every production stage of writing, all along

the way. As we compose, we must think about how we will distribute our work, and then how it might be circulated once we have released it to the world. The potential implications of any part of delivery are complex and multifaceted. Several computers and composition scholars have tackled the theory behind each of the areas of delivery as James Porter (2009) categorized them: *economic, distribution/circulation, body/identity, interactivity,* and *access/accessibility* (Carnegie 2009; Grabill 2003; Welch 1999; Wolff 2013; Wysocki & Jasken 2004). For the purposes of this chapter, I focus now on the last three, as I have already applied the first two to *economic,* and *distribution/circulation* in chapter 3.

Body and identity have been the center of deep discussion in the computers and composition sphere for some time. In his section on *Body/Identity*, Porter claimed that "the body does not disappear in virtual space" (p. 212), that it is instead constructed in representative forms that still identify users as possessing specific markers like gender, age, and so on. Porter used several helpful examples such as the possibility of performing a gesture using an emoticon, and provided readers with a comprehensive literature review of scholars who have "explored the bodily aspect of virtual space" (p. 212), which are many. What interests me most about bodies, identity, and virtual spaces are the mechanisms of invisibility that accompany the meeting of people and screens. Porter was correct in claiming our bodies do not disappear, but it is often easy to overlook the influence screens have on our identity formation. As early as 1999, Kathleen Welch, in her book *Electric Rhetoric* observed, "screens accompany us in an even more profound way. They have come to constitute, in part, our intersubjectivities, our language interactions with others and within ourselves including identity formation" (p. 4). This can be seen in common phrases like the old 'Candid camera,' or the more recent 'throwback thursday' in which people post old photos of themselves on social media. Screens are so prevalent, that

many of us can't see when our identities are limited or constrained in digital spaces, like the way

our physical selves are embodied, designed, or represented in tiny icon boxes, or as avatars, by

us, or by others. Wysocki and Jasken (2004), in their article "What Should be an Unforgettable

Face," argued that "interfaces are about the relations we construct with each other – how we

perceive and try to shape each other – through the artifacts we make for each other" (p. 33). With

Web 2.0, came the ability to easily create or remix media, producing new or mashed-up

multimedia productions that we could share across interfaces online. At first, it might be difficult

to discern what Wysocki and Jasken meant by implicating interfaces in the relations we conduct,

but later in their article, they asked, "How could we design computers that allowed two people to

work together at the same time at the same screen, that truly encouraged real-time, face-to-face

collaboration?" (p. 45). Google Documents did not yet exist in 2004, but it appears that Wysocki

and Jasken had already imagined interactive writing software, plus a version that allows bodies

to work on the same physical screen at the same time – technology that does not yet exist. The

current conventions in place when working with and within cloud-based IWS disrupt much of

our material labor norms by allowing writers to realize some of the implications Welch,

Wysocki, and Jasken imagined. IWS alters industrial norms through promoting synchronous

collaboration in a writing project. It affords a new way for our bodies to interact in an interface

that simultaneously hides some aspects of our identities, and displays them for other users to

interact with as they choose, in a way that writing collaboration (either in print, or in a word

processing document) does not.

Computers and composition scholars have also concerned themselves with interactivity

discourse for some time – a word that implies some forms of embodiment, yet also causes some

invisibility concerns. According to Porter (2009), "The fundamental principle of interaction is

that different types of computer interfaces and spaces enable different forms of engagement –

and the digital writer has a wide range of interaction options" (p. 217). With the popular use of

IWS, access to cloud computing brings with it a field of interactivity between both interface, and

humans, upping the general value of the object(s) we can produce as distributable objects. In her

2009 article "Interface as Exordium," Teena Carnegie explained that "the interface is a place of

interaction whether the interactions are between user and computer, user and software, computer

and software, user and content, software and content, user and culture, and the user and other

users." Later on the same page, Carnegie claimed that "popular approaches to designing user

interfaces frequently argue that the interface should be invisible" (p. 165), which she followed by

several examples. Increasingly, computers and composition scholars are participating in a

conversation urging writers to consider what it is we haven't been paying attention to (Arola

2010; Carnegie 2009; Selfe & Selfe 1994; Wolff 2013; Wysocki 2005). In studying the various

online spaces in which we ask our students to compose, William Wolff argued, "that we, as

scholars and teachers need to pay more attention to, first, the interactivity that is embedded in

and afforded by Web 2.0 applications and, second the processes that are invisible to the

composer" (p. 212). Again invisibility becomes a factor in what we need to pay attention to in

new media. As examples, Wolff cited games, comics, and electronic literature as media that ask

users to "focus on the interactivity and invisibility embedded in their texts" (p. 212). And so I

wonder what is invisible when Google Documents users interact within this IWS interface.

Because temporality is different in a cloud environment like Google Docs, with users able to

work from anywhere, whenever they choose, at the same time as other users, or not, the way we

collaborate when performing the work of writing is facing a sea change.

With technology transforming so rapidly, access to the knowledge it takes to keep up with technological programs, and even technological discourse, becomes a monumental issue for writers. Porter (2009) put access and accessibility together in his delivery *topoi*, but defined them separately. For Porter, access was "the more general term related to whether a person has the necessary hardware, software, and network connectivity in order to use the Internet" and accessibility was "the level of connectedness of one particular group of persons – those with disabilities" (p. 216). For the purposes of this analysis of Google Documents, I will not cover accessibility, with the exception of knowledge accessibility, which is synonymous with knowledge access here. Stuart Selber (2004) pointed out one of the foremost problems in emerging technologies: "Although interfaces have been reconfigured in dramatic ways, one implication for users is that they readily encounter the lingo – and territory – of several different industries and the numerous perspectives that inform them" (p. 486). One consequence, of course, is that our work becomes excitingly interdisciplinary when writing comes in contact with the telecommunication industry outside the academy. Another is that writers can quickly become lost in the lingo of the technological world, leaving us scrambling to keep up, and remain relevant. In his book *Digital Griots: African American Rhetoric in a Multimedia Age*, Adam Banks (2011) highlighted Annette Harris Powell's 2007 study of a middle school technology camp by claiming that there was still "work we have left to do in equalizing access [that] challenges us to rethink exactly what we mean by access; [Powell's] rethinking of access leads us to understand that everyday performances, rhetorical practices, and acts of writing lie at its (grass)roots" (12). In his introduction, Banks laid the groundwork for addressing basic access to dominant technological language and knowledge, similar to the way Selber did in addressing functional literacy in terms of industry-led language. Today, with the addition of mobile

technologies and cloud software, these access issues expand. In 2003, Jeff Grabill wrote about a concept called the digital divide and argued that "The 'digital divide,' of course, has considerable social, political, and intellectual currency" (p. 459). The digital divide is a complex access issue implicated in the race for capital of all kinds. Those with more time and material wealth on hand have more access to the digital sphere. Computers and composition scholars have covered digital divide alongside topics such as literacy and social media over the last decade (Pandey 2006; Ruecker 2012; Vie 2008), and the concept pops up embedded in other texts as well. Stacey Pigg (2014), in observing how students use physical spaces to compose in mobile environments, stated that "accessing 'good' material writing environments is not simply a matter of personal choice: it shapes and is shaped by cultural economic systems that are also implicated in constructing the discourses of productivity and time use that push composers into public places for work purposes" (p. 262). Pigg's research shows that the temporal and physical material needs of the work of writing are shifting bodies to access ever different material environments made possible through the use of mobile devices.

The transformation of the work of writing is broad and complex, hinging on the intersection of constructed time and naturalized industrial labor practices in Western culture. In the sections that follow, I provide an analysis of the Google Documents environment through the lens of a theory of temporal-material rhetoric and the canon of delivery. I explore affordances the software provides, and its limitations, which often include what is invisible to most users. As the analysis unfolds, it is my hope that some layers of an economics of digital rhetoric become transparent to readers alongside the more clearly marked temporal-material aspects it is my objective to point out. At this current moment in computers and composition scholarship, the

economics of rhetoric is an open field, ripe for further exploration. My analysis is an entry into that discourse.

5.2   Analysis of Delivery in a Google Documents Environment

As soon as a user opens a document in Google Drive, it exists on the Internet. This means that by simply creating the document, (equivalent to taking out a sheet of paper, in print culture), the user has delivered her document into the cloud drive hosted by Google. Any interaction with the cloud is essentially an exercise in delivery in some form. Some of the interactions we perform in the cloud may not readily appear as a part of the action of delivery. The features of a Google Document have many embedded layers that serve as indicators which support my claim that the nature of scholarly writing is in for a tectonic shift – one that is already rumbling.

5.2.1   Body/Identity

The moment a person signs up for a Google Mail (gmail) account, their first Google identity profile is created. The Google identity profile contains as much or as little information as the user wishes to provide, and includes an image, or icon, that represents the user's identity in some way. Users chose how they wish to represent their identities via icons. In this way, Google products maintain the feel of a social media, though only Google+ formally is considered a social media. Whittaker and Gillespie (2013), in their article titled "Social Networking Sites: Mediating the Self and its Communities" stated, "Adam Smith (1759) conceptualized society as a mirror reflecting back to the individual aspects of themselves. It follows that interactions with different communities would reflect back or constitute different aspect of the self" (p. 493). When a user chooses an image to put in the icon, she is delivering a preference about how she wishes others to view her in the Google application environment, which is only one possible way that she interacts with others in a digital world. The image she chooses will signal to others which self

she is while using Google. She can choose to show herself from any angle, or not at all. Many

users chose to show pets, or even to choose no image, which is marked by a stock silhouette, or

sometimes a randomized animal. For the figures featured in this chapter, I use my own Google

icon, email, and display name, which is primarily professional for my work at *Hybrid Pedagogy*.

My icon shows my face at a slight right angle, is in color, and does not display much of what I

am wearing. It shows my gender, race, age, and that I wear glasses. All of these features tell

other users about my physical makeup, and reflects my professional self to the society of readers

and writers who I work with at *Hybrid Pedagogy*.

The Google profile icon is salient throughout the Google environment. Vice President of

Streams, Photos, and Sharing, Bradley Horowitz (2015) stated in his blog that Google seeks "to

help people discover, share and connect across Google like they do in real life" (para, 1). Thus, a

Google identity exists across Google applications, on all Google products, and is set up to follow

you from device to device. For example, in a full-page website view (as opposed to a smartphone

app) of a gmail email, a user's Google icon will appear in three places in the default setting: in

the top right hand corner, in the Google hangouts chat list to the left of the email, and in the

email itself. Inside the Google Drive application, in full website view, the icon appears again in

the top right corner, and will appear next to any document you have shared with others, and

along the top of any shared folder where there are multiple users with access to the same folder.

This gives the guise of an always present worker, not subject to temporal norms.
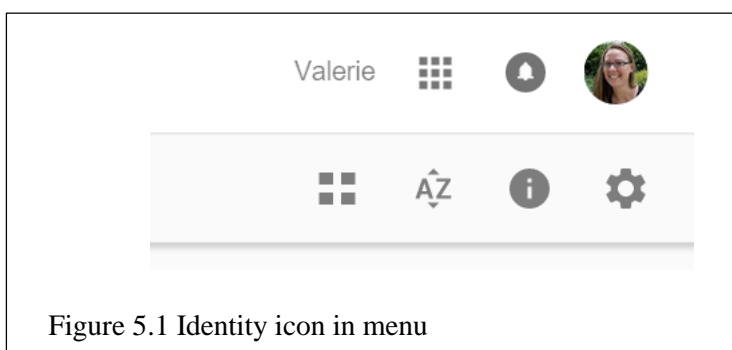

Figure 5.1 Identity icon in menu

Figures 5.1; 5.2; 5.4; and 5.5 show some of the ways an identity icon can be displayed in Google Drive, and a Google Document. Figure 5.1 shows the top right hand corner of Google Drive, which houses the majority of Google applications such as Google Documents, Sheets, Presentations, and so on. On the left-hand side of this close-up the username is displayed, followed by the 9-square application menu, which opens up when clicked. Next is the alert bell, which tells the user when she has a notification from a Google app, and finally, the Google profile icon, which in this case is in a circle. This image is the same that will show up in all the spaces Google manages, including Google+, and YouTube. Figure 5.2 shows an open Google Document in which two users are 'present' simultaneously. Along the top of the page, the icon is now a square, and features a colored stripe along the bottom of the image. The stripe indicates what color the user's cursor will be within the document. Users cannot, however, control the color assigned to them, and may be completely unaware of its presence on their collaborator's screen. This color feature decreases any confusion about who the cursor belongs to when two or more writers are synchronously present and working within a single document. When the icon appears this way, it means present users may also access the instant message function and communicate via chat box, should they choose. Figure 5.3 is an illustration of the icon does not appear in the chat box, but the user's names are displayed. Figure 5.4 appears on top of other user icons and shows the settings features where users can change their image, and control their profile. This screenshot was taken inside the Google Document and shows that my profile image drops down from my email address, which is managed by *Hybrid Pedagogy*, who can also make changes to my profile if they should choose because they manage my employee account. From here, I may change my image, or alter any of the other display information in my personal profile. Finally, Figure 5.5 shows a comment bubble in the Google Document where a user may

make a comment on the composition external to the page, but still contained within the document. The icon appears next to the user name who made the comment, in a square box, with the user's cursor color along the bottom of the image. Even when the user logs off the document, the comment remains behind until any user resolves it.
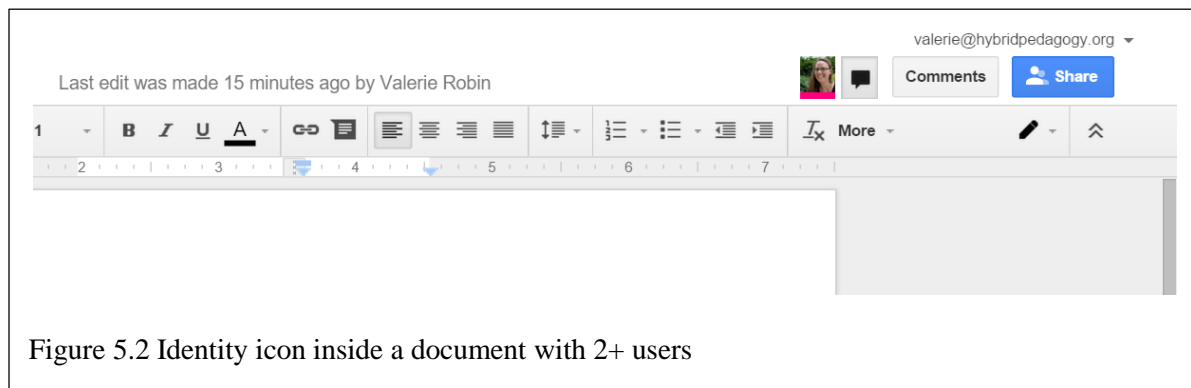

Figure 5.2 Identity icon inside a document with 2+ users

When icon images appear frequently and with prevalence, a temporal-material value shift occurs, allowing for some digital affordances. First, the image itself reflects an aspect of the user's life that is materially important enough to represent in the icon frame. Google operates similarly to a social media in that users have a set identity within the Google environment, and they (ideally) conduct their Google life according to the indicated identity. Whittaker and Gillespie (2013) observed "that there is a striking convergence between recent developments in
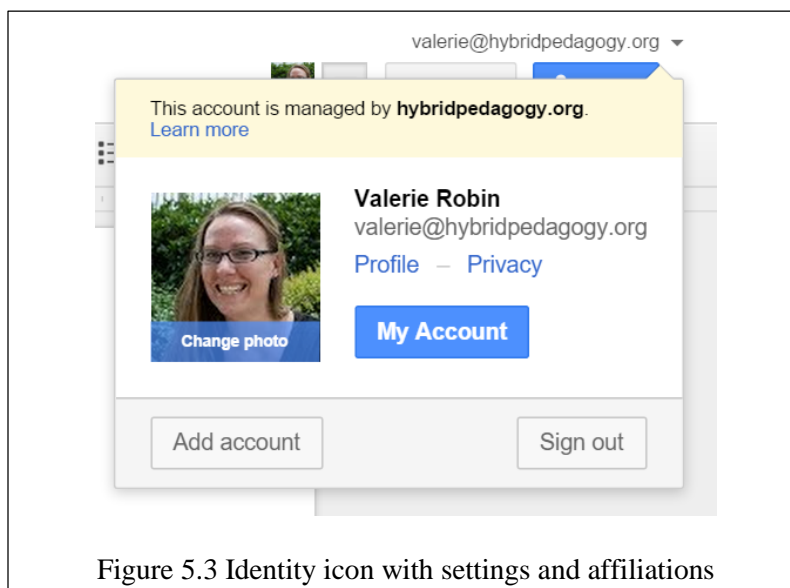

Figure 5.3 Identity icon with settings and affiliations

social networking platforms and recent academic conceptualisations about the relation between

the self and the community" (p. 502). When we use a platform such as Google to communicate

via email, compose via Google Documents, Sheets, or Slides, and share and store working

content via Google Drive, we chose an identity which indicates the type of communication and

sharing we do with the Google account: personal, family specific, business, and so on. Because

other users may never meet the physical person behind the icon image, while using the Google

platform, the identity a user has chosen to display becomes the material representation by which

others view them through digital spaces. Users have no control over the size, shape, or placement

of their icon on the page, so decision made within the icon box can affect the impression a user

gives to others with which they interact through the Google platform. For example, a user may

choose to represent themselves with a close-up shot of their face in black and white because they

feel this is a more professional look. On the other hand, a casual user might choose an image of a

wide shot of a hiking adventure with a wide nature shot. A user may even choose to show a

beloved family pet, or a favorite car to give a personal note to their image without showing their
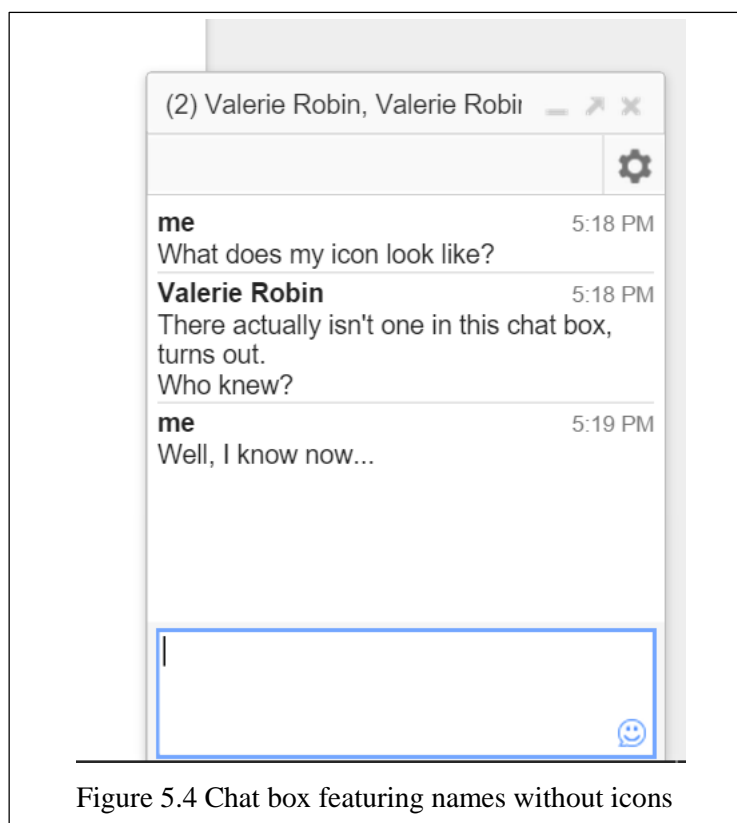
Figure 5.4 Chat box featuring names without icons

own face. There are endless ways to display what is materially important, and these choices are contingent on how the user views their purpose and audience in the Google platform. In this way, users can create a persona that gives off any impression they wish. A successful identity performance delivered this way may lessen preconceived notions other users may have had in face-to-face interactions, for example.

However a user decides to project visually, it is in icon image display across digital spaces where temporality merges with materiality, which some may consider an extension of affordances, or as limitations. Inside a Google Document, the image icon has the potential to appear hundreds of times, depending on the level of interaction taking place in a document. It can give the impression of a user being in several places at once – an impossible move outside the digital realm. In Devoss and Ridolfo's (2009) second tier description of their term 'Rhetorical Velocity' "refers to the understanding and rapidity at which information is crafted, delivered, distributed, recomposed, redelivered, redistributed, etc., across physical and virtual networks and spaces" (Velocity section, para. 2). A Google image icon is a visual object composed strategically for rhetorical delivery of a constructed version of a physical self, meant for the Google environment. In an ideal situation, a Google user understands how to compose, or craft, her icon so that as it is distributed across the Google environment, this icon is delivered in such a way that she has control over how her audience receives the message about her constructed identity, and that this impression remains stable as it appears in multiple Google spaces simultaneously. The user need not be present in the document, drive, or email system for her icon image to appear. In his article "The IRL Fetish," Nathan Jurgenson (2012) delineated how the expressions 'offline' and 'online' are incorrect as binary terms:

The notion of the offline as real and authentic is a recent invention, corresponding

with the rise of the online. If we can fix this false separation and view the digital

and physical as enmeshed, we will understand that what we do while connected is

inseparable from what we do when disconnected. That is, disconnection from the

smartphone and social media isn't really disconnection at all: The logic of social

media follows us long after we log out. There was and is no offline; it is a lusted-

after fetish object that some claim special ability to attain, and it has always been

a phantom. (para. 11)

Even when logged off of Google, including the applications, the icon remains behind, delivering

the constructed image to other users. In some cases, current to the moment I am writing this,[5]

even when a user is away from her computer but hasn't logged fully off of Google, her cursor

and chat head may remain active within a Google Document. In both instances, the physical

presence of the user in question remains in icon form. A Google Document may indicate that I

am currently in the document, when I may have forgotten to log fully off, for example. This

Figure 5.5 Identity icon inside a comment bubble

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[5] Google alters their products so rapidly, that it is possible that anyone reading this text even one year from now, may not recognize the features shown in this chapter.

kind of lingering presence is a departure from the binary 'clock-in/clock-out' physical presence

of industrially related labor. It is common to 'see' another user inside a document, and dual-user

features remain active, when in fact the other user has physically departed.

Scholars need not be in office to be present, or working, which impacts the traditional

industrial values with which many of us were raised. When the icon image exists on screen even

after the user has physically departed, the line between 'at work' and 'not at work' blends,

especially in the eyes of other users. This matters because, as I described in Chapter 1, the

collective concept of 'the common' informs values systems and what counts as work for most

Westerners. When online/offline is not a binary opposition, but instead a fluid concept, the idea

of what counts as labor shifts. Users can be 'present as they are completing other tasks, or

traveling from place to place physically. Because Google makes applications for smartphone,

users can add notes to writing while commuting, or eating lunch. As they interact with one

another via mobile technology (which I will address in more detail later in this chapter), the

identity icon moves across interfaces with them, giving an impression of the transcendence of

space, time, and singularity. It is in this fluidness of personhood and performed identity, which

can exist only because of the affordances of the Internet, where we find the most drastic shifts in

values that have been in place since the rise of industrialization. This shift causes discomfort for

many people – a discomfort that is evident in ubiquitous popular press articles with titles like,

"Smart Phones are Killing us – and Destroying Public Life," and "How Social Media is Ruining

the Authenticity of Generation-Y."

5.2.2   *Interactivity*

Google Documents features allow users to interact in a variety of ways. Interactivity

within a document can be synchronous, where two users are interacting simultaneously in time,

or asynchronous, where users interact without being present at the same time in the same document as was typical before IWS. The chat box, shown in Figure 5.3, is a place where users may instant message one another in a pop-up box that appears inside the document when two or more users are present in the same document. This is an interaction that can only take place synchronously because two or more users must be present in the document simultaneously for the chat function to become available. Users also have the option to write directly in the document synchronously, but this can become confusing when multiple users attempt to write on the same line at the same time. As one user types, the added letters shift the placement of the line of text, which shifts where the cursor appears. For purposes of editing, proof reading, or providing feedback, many users choose the comment bubble feature, which can be used synchronously, or asynchronously. Figures 5.5 and 5.6 show a comment bubble that appears to the right of the document whenever a user leaves a comment. The bubble contains the icon image I use for editing at *Hybrid Pedagogy*, my user name, and the text making of the content of the comment, in which I wrote "Original comment." Each comment bubble, as well as each reply to a comment, contains these marks of physical presence in time within the document.

Comment bubbles, like the one pictured in Figure 5.5, contribute to the change in timing of the occurrences of labor within a Google Document. By default, Google will auto-email users when a comment is created and posted, as well as when users reply to comments. This has several temporal-material implications which can be considered both as affordances and limitations of an IWS. First, it promotes instantaneity of response for users who maintain an always-online lifestyle via mobile technology. A user receives the email and may feel obligated to respond to the comment right away. In a study titled "Smartphone use and work-home interference," psychologists Derk, van Duin, Tims, and Bakker (2015) observed that "there

seems to be a universal expectation that everyone reads and responds to emails constantly" (p. 156). Employees involved in the study reported feeling guilty for not answering emails even when at home. And though this study concerned non-specific labor, it applies to cloud-based writing as well when the application generates auto-notifications. Besides nudging labor during non-work hours, these emails also generate an automatic notification that work is progressing within the document.

Automatic notification has several implications for constructed labor time involving computer-generated reminders and organization. When an automatic notification reaches the user, she can choose not to engage the comment immediately. However, these notifications can also act as a reminder that work is in progress and new comments now exist and are ready for engagement. Likewise, the user could choose to initially ignore the email, but leave it as a reminder that she needs to respond to the comment in the future. In this way, she can use the reminder emails to aid in task organization. Instead of investing time into checking the document for responses, Google eliminates this 'checking' step and saves the user several moments of labor time. These auto-notifications also generate a direct link to the Google Document in question, saving the user time in recalling the document through her Google Drive interface. For some, the urge to label these labor practices negative or positive is great, but it is my purpose here is to avoid ethically classifying new work practices as they emerge. Users have the option to change notification settings, to ignore emails, turn off mobile notifications, and so on.

Software companies like Google are also in constant flux, altering their own labor practices, and evaluating and re-evaluating the functions and setting in each application. For example, when I began outlining this chapter, Google+ and the general Google personal identity account were the same, without option to separate them. But on July 27th, 2015, Bradley

Horowitz announced that Google+ will no longer be required when users open a general Google

account. Horowitz wrote, "It doesn't make sense for your Google+ profile to be your identity in

all the other Google products you use. So in the coming months, a Google Account will be all

you'll need to share content, communicate with contacts, create a YouTube channel and more,

all across Google" (para. 3-4). This illustrates two main themes: First, it implies a pushback on

the shift in values systems that blur the lines between work life and social life, when users

request a separation between Google+ user accounts, and the rest of Google applications. But it

also implicitly embraces the blur between work life and social life by assigning Google+ as the

only social aspect of Google applications when all of them could be used equally for work *or*

social purposes, particularly applications such as YouTube, or Google Hangout.

Auto-notifications that keep work organized and present are directly linked to a work

flow that could be correlated to a life steeped in surveillance. Many rhetorical, and social science

theorists have written extensively on the topic of surveillance, and much of surveillance theory is

situated around societal institutions. For example, in 2001, sociologist David Lyon defined

surveillance this way: "any collection and processing personal data, whether identifiable or not,

for the purposes of influencing or managing those whose data have been garnered" (p. 2). The

management of data, and people via data, is significant because it is an interaction that many

users are unaware of as they work in the cloud. Lyon explained, in his book *Surveillance society*,

that this definition is only one possible type of surveillance, and that it applied to fragments of

the identity users generate online and does not consist of "embodied persons watching each

other" (p. 2). Two years later, Lyon (2003) offered a more concise definition for the same style

of surveillance – one of large societal collection – when he stated that surveillance was simply,

"the garnering of personal data for detailed analysis" (p. 2). In examining the use of Google

documents as a cloud-based writing application, it is impossible to ignore these big data collection occurrences despite their invisibility to the general user. Thomas Claburn (2009) reported in *Information Week* that "Google … was granted a patent for its floating data center design, an idea that the company filed to protect on Feb. 26, 2007" (para. 1), which Heidi McKee (2011), claimed will be built to store the data Google collects from users when she stated, "In 2020, unless some efforts are made to rein in these megabusinesses, everything we write with any digital device may be data mined and 'served' with 'personalized content' (e.g., ads)" (p. 280). If this is true, all work that occurs in the cloud, could be data mined and sold for any purpose imaginable, nefarious or otherwise.

Whatever the ethical implications this kind of large-scale surveillance may have, it is unclear what the effects surveillance might also have on day-to-day scholarly activities. Lyon stated above that the definition he provided for surveillance did not include 'embodied persons,' yet collaborative work most certainly does. When we write in spaces like Google Documents, we are using identity markers to establish connections with other people with whom we work. In her critique of data mining, online privacy, and governmental web surveillance, McKee (2011) admitted "I'm not fully sure about the effects of this surveillance on writing and the teaching of writing or what the implications for this are in the future, but it's easy to get paranoid" (p. 285). My aim here is to show that both megabusiness surveillance, and person-to-person surveillance are worth examining in a cloud-based writing environment. As collaborative writing becomes increasingly valued in the humanities, and in tenure-track career advancement, compositionists need to account for the ways in which surveillance get played out from all possible angles. Data mining and management are another part of the always-on temporal existence of the rising post-industrial era.

Over the course of my research, I have not come across appropriate words for concepts that happen at the embodied level of everyday collaborative work. Inside a Google Document, it is possible for one user to watch another as they type inside the document. Could this be considered a type of voyeuristic observation? When all users' presence is detectable and an observer cannot watch invisibly, is 'voyeur' an appropriate term? Further, for many users, an etiquette for behavior inside the document develops with experience. For example, at *Hybrid Pedagogy*, it is customary for the user who created the comment bubble to be the one to resolve it when the editing note has been fulfilled. In a study about collaborative writing enacted in a *World of Warcraft* wiki (WoWWiki), Rik Hunter (2011) found the very meanings of 'collaborative' and 'authorship' to shift in an online wiki environment. Hunter observed that "authorship on WoWWiki emerges out of sets of social practices and technological developments that have histories, and those histories can be ideologically mixed or in transition as a result of changing practices and technologies" (p. 45). The social practices Hunter observed using discourse analysis, are linked to a culture of Internet fandom and wiki spaces specifically which decenter ownership of writing, and promote content debate. In a Google Document however, the collaborative wiki-space performance unfolds differently because it is part of a community with more varied and larger boundaries and a still emerging history. Perhaps a smaller-scale study on collaborative scholarly writing, which centralizes authorship as a core value, is necessary to measure how users interact with one another as they perform various activities such as commenting and editing. An empirical study of how collaborative etiquettes develop in a digital environment could help compositionists to better understand how labor practices are shifting as they are enacted.

Features included in a Google Document, such as the comment bubble, change the way scholars can choose to participate in the task of writing, which break the bounds of more limited industrial temporal practices. Though in the case of big data surveillance, the choice to not be fragmented and sold to ad agencies is to choose not to use corporate produced interactive writing software. The 'always on' existence is pervasive for many users, and disrupts the usual clock-in/clock-out style of labor many people are accustomed to. When a reply to a comment bubble can notify me at 3am that there is a new opportunity to collaborate, the very idea of separation of public and private lives begins to crumble. Expectations involving speed and duration of work shift as well. As one user leaves comments alongside a document, the other could be responding to previous comments since both users may work synchronously within the document, without being in the same physical room. Further, since users can work from anywhere they have access to the Internet, work need not be done 'at work,' but can be performed from almost any space at any time, even instantaneously, if the situation allows. The very phrase 'at work' becomes muddled, taking on new meaning worth examining.

Image Focus: Comment bubble attached to the title

Above: The full website interface for a Google Document with a comment bubble referring back to the highlighted portion.

Right: The android smartphone interface for a Google Document with a comment bubble referring back to the highlighted portion.
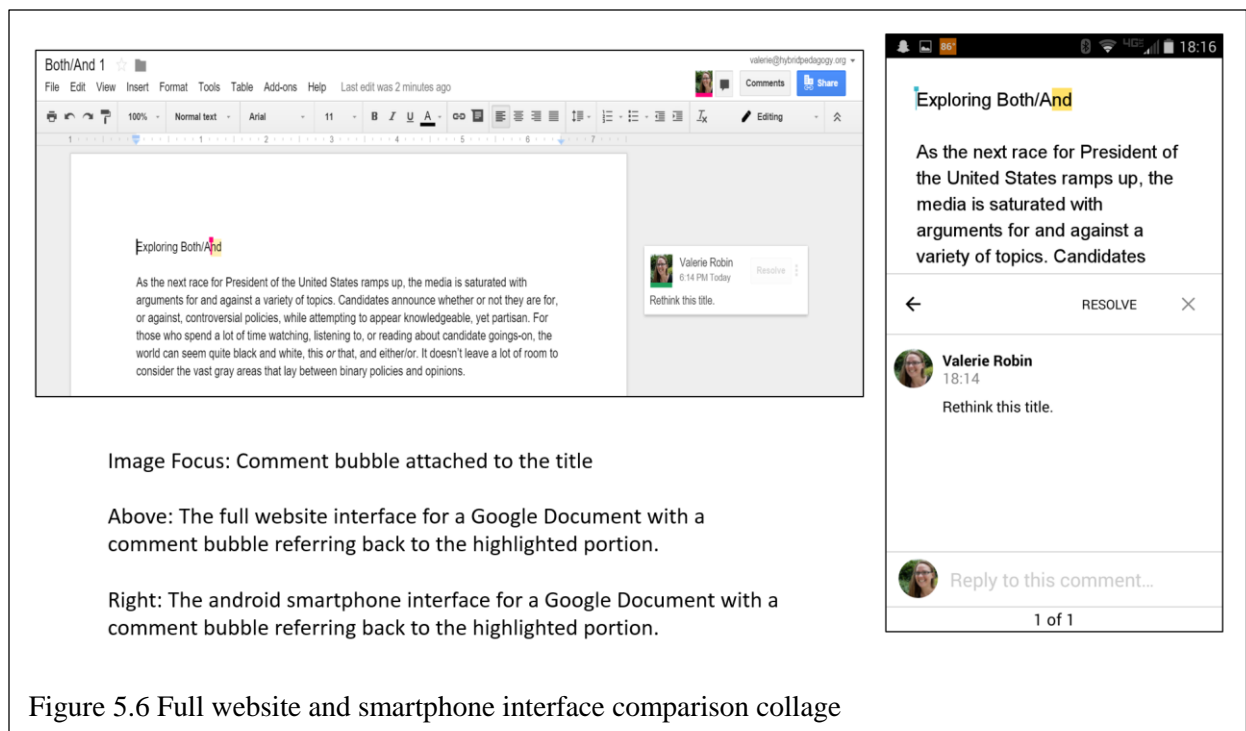
Figure 5.6 Full website and smartphone interface comparison collage

5.2.3   Access/Accessibility

Because Google Documents is a Google application, it is designed to be accessible from

any device compatible with Google applications. This means that a Google Document can be

accessed through a smartphone any time that phone is connected to the Internet. While there has

been much discussion concerning access in computers and composition over the years (Arola

2010; DeVoss, Cushman, & Grabill 2005; Grabill 2003; Pigg 2014; Selfe 1999; Wysocki 2005),

there has been little to illustrate the differences that exist when users have differing computer

access to the same software. In a Pew Research report titled "U.S. smartphone use in 2015,"

Aaron Smith (2015) reported that "64% of American adults now own a smartphone of some

kind, up from 35% in the spring of 2011. Smartphone ownership is especially high among

younger Americans, as well as those with relatively high income and education levels. And for a

number of Americans, smartphones serve as an essential connection to the broader world of

online information" (para. 4-5). This means that most users accessing interactive writing

softwares have the capability to do so from their smartphone. Because much of what is delivered

digitally is accessible through our mobile devices, my study concerns itself not with who does

and does not have access, but *how* they have access, and what it means to the ways and whens
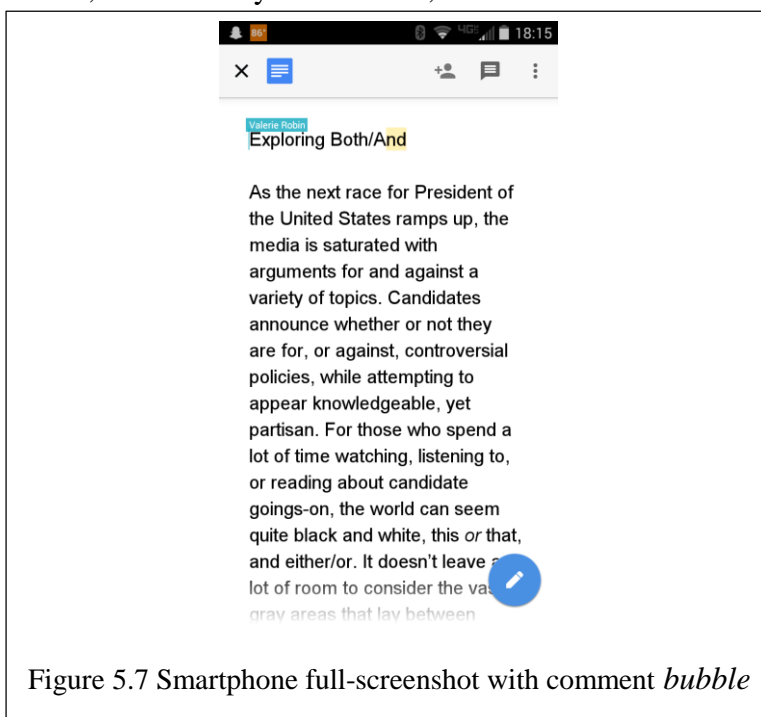

Figure 5.7 Smartphone full-screenshot with comment *bubble*

that scholars choose to write. And though this study does not concern itself with disability studies, I urge readers to consider the ways in which different device access may complicate use for those with special needs.

Since most people participating in academic writing have a choice in how to access their applications, the access issues that arise between devices are important for scholars to pay attention to. Additionally, some of our student's only access to the internet is through a smartphone, and increasingly, scholars, and scholars in training, are taking advantage of the affordances mobile technologies allow in our day-to-day work lives. In her recent article, Stacey Pigg (2014) argued that "Mobile, networked technologies and the global economy thus mean augmented – if not precisely new – spatial tensions and challenges for academic writing processes in a mobile culture" (p. 253). Pigg focused mostly on writing environments in her article, which is a key piece in some of the value shifts in the labor of writing occurring now. She explained that our material conditions and our virtual ones overlap in a way that needs to be studied. One of these ways is "by accounting for material writing processes," such as "material constraints and conditions of literate activity in everyday practice" (p. 254). In this case, both Pigg and I are concerned with everyday mobile practices. I am specifically concerned with the differentiations between full website interfaces and smartphone interfaces, and how this affects the ways users can access the same materials when they choose to work from spaces where work space and internet connectivity support one device more favorably than another.

The differences in interface between full website and smartphone are sharp. This matters because many scholars have the capability to use their smartphones to take notes, read articles, or even to get some writing done while on the go, and many of us take advantage of this capability. Further, since many of student writers have *only* access through their smartphone, and it is

crucial that instructor-scholars are familiar with interface differences so we can assist when

needed. In Figure 5.6, I have collaged two screen shots of the same content and corresponding

comment bubble. In the screen shot directly above the text, the full website laptop interface is

visible, though I have cut the shot about ¼ down the full page. In the vertical facing screen shot

to the right, the interface is from my entire smartphone screen, and displays the content with the

comment bubble open. Even though the full webpage screen is cut to show only what is

necessary, there is still much more information displayed in the full website version, and that

information is arguably more visually accessible. In a larger interface, the information is

structured in a way that users are accustomed to, with the menus along the top, and the comment

bubble to the side, aligned with the highlighted text. In the full web version, users have access to

the font, the tools, and retain the capability to easily add another comment to the document. The

human looking at the screen can see all the elements involved in the document at once, and

choices in function are obvious to any skilled user. In the smartphone interface, the information

is limited. With the comment bubble open, there are no menus along the top of the screen, and

the capability users have to add a new comment are not readily present when the user is viewing

the content of the comment bubble. When the bubble is closed on the smartphone interface, the

ability to create a new comment bubble appears at the top of the screen, which is illustrated in

Figure 5.7. But because the smartphone size limits the amount of information that can be

displayed onscreen, understanding what features are available for use becomes difficult. For

users unfamiliar with the smartphone interface, these limitations can be frustrating and hinder

desires to use the application. Figure 5.7shows the other user present in that portion of the

screen. The menu along the top grants easy access to adding another user, and to adding a

comment. But the user still has no option to change font, or to alter the design of the document.

For users who have access only to mobile technology, using a writing software on their device has an imbalance of limitations over affordances involving temporal-materiality in interesting ways, and the affordances are value changing. If high productivity is valued in the traditional industrial labor model, then mobile technologies are an advantage. In 2005, DeVoss, Cushman, and Grabill asked, "What material, technical, discursive, institutional, and cultural conditions prohibit and enable writing with multiple media?" (p. 23). And the question is not only still relevant, but arguably more so, now that so many people own and operate smartphone technology every day. Smartphone data is capable of finding a connection almost anywhere in a high-population dense environment, even without a traditional Internet connection. This means users can work from the train they use to commute to the office; they can use their phones at restaurants with a public connection; they can use their phones while they drive. In this case, multiple media and multiple devices enable writing to take place almost anywhere within an area with decent connectivity. This increases the time we are available to work, and can be contacted. As this availability increases, so do the expectations for availability increase in terms of when we perform labor. For users with a choice between devices they can access, mobile technology can eliminate long delays in interaction, increasing the contact and time between asynchronous actions within a document. Figure 5.7 shows that the two buttons that are easiest to access are 'sharing' (indicated by the bust silhouette next to a +, and the speech bubble that makes comment bubbles), indicating that interaction is key to the function of the Google Document. The values that are represented are increased connectivity between people, and between laborer and labor.

While the affordances temporally and materially shift values concerning labor and writing are great, the limitations in current technology use are stifling. Working from anywhere

at any time, as I showed earlier, can be subjectively problematic as well as enabling. Arguably

the greatest limitation concerning interface difference is the change that takes place in interface

when a full website must become smartphone compatible. Porter (2009) explained, "Designing

information for ready and usable access by mobile phones is perhaps the most important way to

support access by a broader socioeconomic range of users – and also by users across the globe"

(p. 216). Because smartphones are even *more* prevalent than they were in 2009, it is crucial that

we examine the delivery of information through the smartphone interface. Today, not only must

a web page be smartphone compatible to be digestible in a mobile environment, but it must be

compatible with a variety of smartphones. Figures 5.6 & 5.7 are from a Motorola built Android

Mini smartphone, and so the interface of the Google Document you see is compatible with the

software written for that phone. An iPhone interface may have different choices on screen inside

a Google Document. When writers interact with one another through these mobile interfaces,

they need to know what these limitations are, or knowledge accessibility becomes an

insurmountable factor. Since I have never used Google Docs on an iPhone, I may be unable to

assist a colleague or student who uses one. This undercuts the ease of collaboration that cloud

tools were created to afford.

5.3   A Future in the Cloud

What counts as work differs for every scholar, and the time spent working varies too. As

new technologies emerge, the discourse in computers and composition on the future of writing

has grown increasingly complex. As we barrel along, attempting to keep up with technological

trends, what is deserving of our attention becomes layered beneath an economics of rhetoric that

is not politically neutral. How we access our information and the speed at which we work are

shifting. For some, this is a bright and exciting future for writing. For others, it is frustrating and

limiting. No longer is access an issue between the haves and the have-nots, it is an issue of haves, have-nots, and what-do-you-have. On February 26, 2015, the *Google Webmaster Central Blog* announced that "starting April 21 [2015], we will be expanding out use of mobile-friendliness as a ranking signal" (para. 2). This means that sites that are smartphone ready appear higher on Google search indexes than those that do not. Ability to access applications whose documents and pages do not take up hard drive space, and do not need to be constantly saved and resaved in new places to ensure security, are favored, and may already be the norm for some users.

When information is delivered electronically and becomes accessible through mobile devises – not only readable information, but malleable, interactivity-ready writing – the industrial labor for which most of us were trained, alters. I have argued already that industrial values favor the single, autonomous, material-free author. I add to this argument that the delivery category of 'access' is the cumulative sum of all Porter's delivery *topoi* because it embodies an instantaneous circulation-capable identity, and forefronts interactivity among users, all while encouraging a shift in the language of capital in interesting ways. This then reflects a movement in the economic values of rhetoric in a digital environment. Whatever individual users believe the affordances and limitations are on their personal work-life blending is not the focus of this analysis. The argument is that as digital tools become more accessible and prevalent, the work of writing changes, as does the value of the work of writing.

Access to cloud technology changes the time of day writers can access, share, and alter their writing, and it changes the rate at which interactivity with other writers, interfaces, and data, can occur. As these processes speed up, expectations, habits, and the very practice of writing shifts. This shift affects how the labor of writing takes place, allowing for the ways we

talk about, and teach writing, to also shift. What was once a nuanced lifestyle for a set few with interests in computing, is now everyday labor for a growing number of people. As our language changes, new scholars (and our students), will come into contact with a new economically-based, post-industrial rhetoric that will continue to transform the way we spend time working now, and into the foreseeable future.

6   UNLOCKING THE INVISIBLE

What counts as real is subjective. If a 'real job' is one for which the worker gets paid a large sum, then writing articles for scholarly publication does not count as a 'real job.' And if life outside the academy counts as 'real life,' then being a scholar is not a 'real life' at all, but something else. Alison James (2015) took enough issue with this divide to write an opinion piece about it in *Times Higher Education*. Her article "Call the world outside university anything you like, just don't call it 'real'" listed several reasons why 'real world' is not a viable colloquialism. Perhaps the most interesting to this study was listed number three: "3. 'Real world' sets up a value binary." Underneath this number, James argued that "It implies that the knowledge, capacities and dispositions that students are fashioning at university are of inferior substance compared with those they will grow through future experiences" (para. 7). I would add to James's claim that it implies that only work pursued outside the university has value. This kind of value asks that workers create a tradeable commodity, something that (apparently) cannot be manufactured within the academic system. This is not necessarily a positive in our complex culture that values education, and the art and intellectual products it produces. But this value divide is not new. Marx (1867) covered it in *Capital: Volume I* when he wrote, "The concept of a productive worker therefore implies not merely a relation between the activity of work and its useful effect, between the worker and the product of his work, but also a specifically social

relation of production, a relation with a historical origin which stamps the worker as capital's direct means of valorization. To be a productive worker is therefore not a piece of luck, but a misfortune" (p. 644). If we agree with Marx, and examine work through a lens of industrial values, then a 'real job' would also be a misfortune.

Regardless of its 'realness,' as a job, digital composers must pay attention to various economic modes of delivery which alter our scenes of time, and material presence. Porter (2009) linked an economics of rhetoric to motivation: "What motivates someone to produce and distribute a piece of writing? What motivates someone else to access it, read it, interact with it? What drives the interaction and makes it productive for both parties? These are basic questions of rhetorical production that are also basic questions of economics" (p. 218). I argue that the answers to Porter's questions of motivation lay in issues of time and the work of writing. A scholar may be motivated to write in response to an issue she read about in an article which she most likely accessed online through a remote database. She may be responding to a post in a popular magazine she was linked to through her twitter account the day the post was distributed. The possibilities are endless. What is certain is that the speed at which information moves plays a part in our motivation as scholars to produce and distribute knowledge capital both through the institutions where we work, and via the open web. For me, it is not the motivation that forms "the secret of the Web 2.0 dynamic" (p. 218), as Porter put it, but the time-space compression occurring that speeds up the rate and amount of information coming across our virtual desktops. Perhaps a qualitative study measuring the time it takes scholars to join a discussion via responding to posts and other scholarly articles today, versus pre-Web 2.0 is in order. There are likely endless ways computers and composition scholars could examine how a time-space compression has affected the rate and process by which we all perform the work of writing.

As cloud computing gains prevalence in the work-life of writers, we see terms associated with work, work spaces, and time spent working alter. As I collaborate on projects with other writers, I occasionally find myself meta-cognitively assessing the idea that even 10 years ago the words I use to discuss files and images would have sounded like a foreign language to me. A sentence like, "Upload your jpeg. to our shared Dropbox and I'll put it into the infographic," is loaded with both temporal and materially charged language that has altered the process of composition. No longer do collaborators need to be present to share images (a .jpeg is most often an image file), they may put them into shared spaces in the cloud. A Dropbox, for example, is a cloud storage space which acts much like Google Drive, but without the applications that come with Google products. Instead, writers can share files instantly without ever being in the same room. Because of the cloud, we no longer need to store files on thumb drives, disks, or even hard drives. And whole folders can be shared with a click. Additionally, if a file is shared through Dropbox, or Google Drive, or any cloud storage system, as the document is altered, it need not be re-shared, but is simply automatically updated inside the shared file, erasing any time needed to share again. Any linguist interested in the change in work related language and writing could likely create a corpus of words new to writers since Google Documents went public. I expect that many of the words would be temporally loaded.

This sense of compression of public time has altered the value attached to writing. Lisa Dush (2015) analyzed the way the phrase 'When writing becomes content' gets enacted in the field of technical communication. She sees content in two ways: "the new opportunities and responsibilities that come with the addition of content into our professional purview, and also the values we must defend if content substitutes for writing in professional and other settings" (p. 175). For Dush, and the editors at *College Composition and Communication*, 'content' is value

laden enough to spend 24 pages analyzing and problematizing. In some cases, content is a substitution for writing, treated as a filler for the money-making ads that take up space in the margins of the webpage. Citing both Trimbur (2000) and Marx (1867), Dush explained that "in networked space, a video or a tweet is judged not on whether it communicates very useful information (its use value), but rather on the number of clicks and retweets it accumulates (its exchange value, rendered as ad revenue or brand reach)" (p. 178). For those of us who moonlight as content writers, whether it be for online popular academic publications like *Chronicle of Higher Ed*, or outside the academy writing for blogs, or news sources, the discussion on writing becoming content is of paramount importance. We must ask ourselves how the discussion of concepts like content becoming writing are affecting the way we write, teach writing, and theorize writing.

The work of scholarly writing is inextricably linked to the construction of public time in Western culture. Whether or not scholarly writing counts as 'real' to the majority, it does count as work, and that work is in the midst of a transformation. In direct relation to emerging technologies, our sense of public time seems to be speeding up. Stephen Kern (1983) put it best when he wrote, "Among the many responses to the new technology those of the alarmists appear more impassioned and more numerous than those of the defenders of speed. But protests, however moving, cannot negate the face that the world opted for speed time and again" (p. 129). Though Kern was talking about transportation here, his sentiments remain true when applied to emerging digital technologies of today. For those of us that remember dial-up internet, getting online was flashy, fast, and an exciting way to look up what little information existed then. In introducing the problematic idea of the electronic textbook, Lanham (1989) informed readers that "The electronic word is, obviously, much easier to quote because it is much easier to

duplicate and move around. We can imbed much larger quotations in our text through hypertextual techniques … than we could when they would grossly distort our own prose surface" (p. 281). For 1989, talk of academic textbooks and research papers was the wave of the future – something many people were unsure about. Today, if the university library databases undergo a change at our home institutions, people are talking about it. Trying to imagine going back to physical library research after 20 years of online access to research databases would give any scholar intellectual vertigo. Scholars are so used to the speed and ease with which we retrieve and process information, going back would seem a catastrophic setback. The scenario exists too for word processing, and now, increasingly, collaborating and communicating in the cloud.

An interest in the rhetorical canon of delivery tends to coincide with these major moves in technology. Anytime writers communicate or collaborate in the cloud, they are accessing the canon of delivery in complex ways. Delivery has securely moved beyond speech, and while it retains many of its original ties to speech (gesture, intonation, etc.), it now concerns itself with many of the constructed temporal elements that affect the writing process from start to finish. Where many of us may have learned that the canons have an order, and each piece, (invention, arrangement, style, memory, and delivery) is separate from the next, scholars are agreeing (Brooke 2009; Diogenes & Lunsford 2006; McCorkle 2012) that the canons are actually quite fluid, sharing many of their components with one another. Thinking of how best to deliver a composition is no longer the final stage of writing, but arguably begins in the invention stage – particularly when deciding on audience in a world saturated with social media platforms and blogs of all kind. Within IWS technology, share features, collaboration, and the 'always on' feel of work in the cloud become part of the writing process, and thus, delivery is forefronted. All

cloud-based software compress the amount of time needed to perform work-related tasks, such as saving, or installing files. Since documents saved on the cloud can be accessed anywhere with an internet connection, and subsequently delivered from anywhere, the rate at which the work of writing can be distributed and circulated are increasingly compressed, along with our cultural sense of time for work-related tasks.

Time and the material situation of the work of writing affect every stage of the writing process. In 2006, just before the emergence of Web 2.0, Richard Lanham asked a felicitous question: "If information is now our basic 'stuff,' must not our thinking about human communication become economic thinking?" (p. 21). Lanham believed that digital writing was about an attention economy he felt was emerging and he asked important questions about audience and intellectual property. What Lanham couldn't address was an Internet where anyone could edit and share at lightning speed, with an array of possible interactions, going beyond simple human communication.

As I moved through Porter's delivery *topoi*, I pointed out factors involved in writing in the cloud that are invisible to many of us. Whether or not we take into account the size and placement of our personal icon, or the fact that our digital presence is constantly mined for data, these issues exist and they affect the way we are represented to and through others in digital spaces. And not only how we are represented, but how we appear present, or absent in collaborative situations where we may be serving in roles as co-writers, editors, or audience. Further, accessing our work from a smartphone, or a small tablet may affect the way we process and contribute to our work, as does being in a noisy café, or on a train. Unless we divulge this kind of information, our physical connection to the information with which we work in the cloud is invisible to other users. And it may not matter to other writers, as long as the work flow is

fluid and responses come in at an expected pace. What is invisible, only becomes manifest when there is a disruption in the constructed sense of time.

In the spirit of Colin Brooke, I say it is nearly time to cease bemoaning the neglect of digital writing in the field of rhetoric and composition. In 1999, Kathleen Welch said this about students whose lives exist in the hegemony of the television and the computer: "When we in the humanities ignore, or, worse, jeer at the acoustic/spoken/visual/written bases of their new literacy, their special knowledge/ability, their new routes to the achievement of arête, … we fail them as their teachers and exemplars of language. We also fail the larger national community that remains in dire need of what we have to offer and that pays our salaries" (p. 4). Welch was ahead of her time in implicating humanities scholars. Her model positioned scholars interested in technology and composition to move forward. In the years since, scholars have examined the topics Welch listed above. We have called out, warned, and urged scholars not to neglect the changes happening in writing as technology emerges. With each new scholar who collaborates in a Google Document, or shares files through a cloud storage system, we move more fully into an era of IWS. Along with this era comes complexities which we have not yet unraveled. So rather than ending with a warning, I urge computers and composition scholars to keep digging. The Internet is deep, and it is dark, and the more it permeates our lives, the more complex our temporal-material rhetoric will get.

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