Syracuse University

SURFACE

Dissertations - ALL   SURFACE

January 2015

Geopolitics of Digital Literacies: Accounting for Myths and Realities

Rachael Shapiro
Syracuse University

Recommended Citation

Abstract

This dissertation interrogates the global material consequences of the rhetorics of digital literacies in the One-Third World. Building on the work of literacy studies and computers and writing scholarship, I define and critique "the digital literacy myth"—a public discourse wherein digital literacies and their technologies are portrayed as inherently democratic for individuals and nations, and are promised to deliver economic competitiveness to those who can attain and best leverage them. I follow the consequences of the digital literacy myth, showing how the myth shapes One-Third World responses to transnational moments of struggle in the case of the 2009 Iranian election protests and the recent decades of rape related to conflict minerals in the Democratic Republic of Congo. Using a transnational feminist analytic to trace transnational networks of literacy and materiality, I argue that the digital literacy myth frames how One-Third World citizens are likely to read and participate in global events. And, I note the ways in which US neoliberal interests have historically invested in the digital literacy myth in order to serve their economic agenda. Lastly, I address how, as ethical writing teachers, we might balance teaching our students the digital literacies of today's economy while remaining aware of the costs of those literacies in the global era.

Geopolitics of Digital Literacies: Accounting for Myths and Realities

by

Rachael Shapiro

B.A. State University of New York at Plattsburgh, 2006
M.A. Washington State University, 2008

Dissertation submitted in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy in Composition and Cultural Rhetoric
in the Graduate School of Syracuse University

August 2015

keep it real or build anew, and both are examples of courage that have inspired me these last seven years. I have such gratitude for Missy Watson for working to make this a community I could feel a part of. Thank you for your faith in me, your endless giving, your consciousness and conscientiousness. Thanks also to Tim for reminding me that what seems painful or scary might just need a more patient, loving gaze. Your humanness and loving presence in family, work, and spiritual being prove that the borders between these arenas are illusory.

In addition to those named above, I hold deep admiration for all of my CCR family—past and present—who have nurtured my intellectual and professional growth with kindness, humor, and great spirits. You have shown me such passion, such jazz, such pride and devotion and struggle and patience and style. I'm privileged to know you. And to my faithful WSU crew, Chris Ritter and Katie Ericsson—I love you both and am so glad to have you ever by my side.

To Kristen Krause, who has become a cherished friend. Thank you for all of your amazing help, kindness, and support. (The chocolate was always just an excuse to see you!) And Anne Fitzsimmons, thank you for always being in my corner. You've shown me what it means to be selfless in this work and to find sustenance in supporting others.

I have been so honored to work with Chris Palmer, LouAnn Payne, George Rhinehart, Kristi Johnson, Martha Love, Faith Plvan, and Beth Wagner. Thank you all for solving the big problems with stealth and vigilance, and for the millions of small gestures you make each day to make learning possible here. Thanks, too, to the PWIs who have made this an incredibly engaged and vibrant teaching community, and to the many students and TAs who I've been blessed to teach and learn alongside.

This journey has been made more substantial and sustaining thanks to my communities outside of CCR as well. My yoga teachers—Jen, Erin, Tara, Melissa, Gary, and Greg—have

helped me to understand my own embodiment, to make a sacred space for myself, and to practice letting go of what doesn't serve me. I am grateful, as well, to Susan Pasco who has taught me to tap into a tremendous well of strength I didn't know was there.

And finally, the great worth of my life rests in my family. This project is dedicated to you. To Maija, I offer gratitude for your model of what it means to cultivate deep roots when I might otherwise feel compelled to wander. And to Rachel whose heart is always open and looking to give to others—I have basked in that love on good days and hard ones alike. May I better follow your example in the decades to come. To Shaina, who reminds me to let go and laugh and to put my whole heart forward, facing whatever may come with honesty and fearlessness.

To Colleen, Vinnie, Richelle, Mike, Karis, and Zoe—you have taught me what it means to give all of your material, emotional, and temporal resources in service of your family. I love you all.

To my mother, whose love is never questioned and who is my eternal comfort. To my father, the source of my curiosity and my insatiable hunger to know the world and myself. To Anny and Jesse who are truly incredible people, and who inspire me in so many different ways. Loving you all is the great opportunity, lesson, and blessing of my lifetime.

Thank you finally, and most of all, to Kevin and Ellie. My crew. My compadres. My companions. My mirror into my own heart and window to my future. I walk this path beside you and because of you.

Table of Contents

> …it remains our responsibility, as persons who profess expert knowledge about the cultural and cognitive dimensions of literacies, to understand as fully as possible the material implications of literacies and to act decisively to ameliorate those literacies' … legacies. (Mortensen 421-22)

Introduction

Over fifteen years ago, Cynthia Selfe warned us of the consequences of not paying attention to the rhetorics and realities connecting literacy and technology. The problematic digital utopianism that Selfe traces through scholarship in our own field and through public policy and private advertising has not been as unveiled and publically interrogated as she had hoped, but rather has become more deeply ingrained in our national imaginary. Just as Selfe argues that definitions of technological literacy and illiteracy have uneven material consequences for individuals differently located among the axes of race, class, and gender, I argue that rhetorics of digital literacies in the West[1] coalesce to form a new "digital literacy myth," and have uneven material consequences on a global scale. More specifically, those who are already privileged in the West and Global North continue to build upon economic strength and political power, in part thanks to long-developing ideologies of technology and literacy.

Here, I am invoking Harvey Graff's 1979 definition of the literacy myth as "the belief, articulated in educational, civic, religious, and other settings, contemporary and historical, that the acquisition of literacy is a necessary precursor to, and invariably results in, economic development, democratic practice, cognitive enhancement, and upward social mobility" (qtd. in

---

[1] Throughout this project, I will use the terms West or Western when denoting rhetorics that subscribe to the idea that digital literacies and their technologies are inherently tied to democratic progress, citizenship, and freedom. I will use the terminology of One-Third/Two-Thirds world

Graff and Duffy 35). Graff, Brian Street, Selfe, and other literacy scholars have worked to disrupt the literacy myth,[2] pointing out that even in nations with near 100% literacy rates, poverty and uneven distribution of social and material resources ensue (Street 105). In our current moment, a *digital literacy myth*–in which government, public, corporate and academic discourses cast digital literacies as a means of access to employment in the global economy and a path to democracy across global borders–is seeping into our national imaginary and beyond, making heady and often false promises for increased democratic freedom and economic prosperity.

While Graff, Street, Selfe and others have made great headway in their efforts to debunk the literacy myth, its residue can be traced as "ideological traffic" in rhetorics of digital literacy. By tracing ideological traffic, a term borrowed from M. Jacqui Alexander, I am referring to a process that Rebecca Dingo characterizes as one of "lay[ing] bare the rhetorics that have become naturalized and a common part of our political imaginary" (70). We can see traces of the literacy myth naturalized with regard to digital literacies when we look at public policy documents like the 2010 US Department of Education's *Transforming American Education: Learning Powered by Technology*, as I do with more scrutiny in Chapter 2. The introduction to the report connects technology in education to success for the United States on the global economic stage:

---

[2] In citing these particular literacy scholars, I intend to signal a move away from autonomous models of literacy, or any notion that literacy can be received from a top-down model, or that any particular literacy can ever be "complete." Instead, I see literacies a multiple, multidimensional, and a series of social practices that are contextually emergent and dependent. This view acknowledges that literacies have varying currency for different folks dependent upon a given social location; and as Hawisher and Selfe explain, they have lifespans. While some have contested the value in using the term literacy to refer to such shifting experiences, I find the term and concept generative as a way to pinpoint these social processes within an economic and material history, noting the ways in which shifting definitions of literacy have had real consequences for the lived realities of individuals.

Education is the key to America's economic growth and prosperity and to our ability to compete in the global economy. It is the path to good jobs and higher earning power for Americans. It is necessary for our democracy to work. …

The plan recognizes that technology is at the core of virtually every aspect of our daily lives and work, and we must leverage it to provide engaging and powerful learning experiences and content, as well as resources and assessments that measure student achievement in more complete, authentic, and meaningful ways. (ix)

These introductory remarks position the entirety of the US education policy that follows as defined by the promised connection between technology, education, and resulting American prosperity on a global scale. Given the centrality of the notion that digital literacy will equal employment and success, rhetoric and composition and literacy studies must turn attention to the implications of digital literacies in the global era.[3]

As writing teachers, we are literacy sponsors for students (Brandt), and if we are to take that role seriously we must cultivate clear and informed digital pedagogies as we help students develop skills with contemporary writing technologies. As Selfe argues, we must pay attention to

---

[3] Further evidence of the belief that digital literacy and economic success are intimately connected can be observed on the national level in locations such as President Obama's 2011 proposed bill, The American Jobs Act. This legislation contains provisions to create stronger employment readiness under the heading "Modernizing America," which include updating public schools to include "internet-ready classrooms," and "to deploy high-speed wireless services to at least 98 percent of Americans" ("Fact Sheet: The American Jobs Act."). Another government initiative, digitalliteracy.gov is an online repository of information that supports digital literacy development in US citizens, describing these literacies as required for full participation in the current job market. In the "Digital Literacy Fact Sheet," linked to from the site, the administration cites that "Ninety-six percent of working Americans use new communications technologies as part of their daily life, while sixty-two percent of working Americans use the Internet as an integral part of their jobs," and that "High-speed Internet access and online skills are not only necessary for seeking, applying for and getting today's jobs, but also to take advantage of the growing educational, civic, and health care advances spurred by broadband" (1). Rhetorics like these travel across scholarship in literacy in the areas of K-12 education, higher education, and adult education, as can be witnesses in policy statements from professional organizations like NCTE and CCCC. See, for instance, NCTE's research briefs "Writing Now," and "21st-Century Literacies." Chapter 2 in this dissertation will explore rhetorics like these in more detail.

technology; we must also examine the geopolitics of digital literacies, determining whose interests are served by this push to global digital literacies, whose interests are at stake, and how various peoples' material realities are impacted by the costs and affordances of digital literacies. As Canagarajah explains in *A Geopolitics of Academic Writing*, to which this project's title pay homage, geopolitical analysis draws on the concepts of world systems theory (see Wallerstein) and other social and economic concepts to understand how power and capital circulate on an inequitable global scale. This approach allows us "to see conflicts at the local level as connected to struggles for power and resources at the global level" (Canagarajah 38) and in my project specifically, to weigh and measure the material realities of digital literacies in a global context against the rhetoric commonly circulated around digital literacy, employment access, and success in the global economy.

We need to pay still more attention to the rhetorics of digital literacies in the global era because, even when they hope to serve social justice, rhetorics of digital literacies can collude with neoliberal/neocolonial interests when we overlook the material costs and affordances of these literacies and their technologies. When a customer purchases a computer, notebook, tablet, or smart phone, he or she is not the only one who has paid for the device, and money is not its only cost. There are distinct material and geopolitical costs accompanying these literacies and their technologies: for instance, impoverished children in India collect old computer technologies to disassemble them for their scrap materials; Chinese technology assembly-line workers commit suicide in response to extra-long hours of tedious repetitive labor in squalid conditions; women endure rape and torture in the Democratic Republic of Congo connected to the mining of conflict minerals that go into the production of electronic devices; and poor workers in the US receive just enough technological literacy to render their labor adequate for particular "routine

production" or service-based jobs (Reich 1992). These groups are connected through optimistic rhetorics of digital literacies that serve the interests of a different class of global citizen in ways that obscure the human costs of those literacies and their technologies. And, as writing teachers, our pedagogies prepare students to use literacies that have a role in those networks of literacies and labor, since literacy education in the global era cannot be separated from its role in interdependent economies.

One of the central claims of this dissertation will be that (like Selfe reminded us) we must vigilantly attend to the question of whose political and economic interests are served in the circulation of particular rhetorics about digital literacies. To investigate those rhetorics about digital literacies, my dissertation brings together scholarship in computers and writing, literacy studies, and transnational feminism in order to understand how US-based rhetorics of digital literacy in rhetoric and writing studies parallel the classical literacy myth in ways that serve Western economic interests on a global scale. Throughout the chapters that follow, I attend to the following questions:

1. In what ways do rhetorics of digital literacy shape a narrative that suggests that technology and education are a necessary good that spread and preserve democracy and enable the Western citizen access to and power within a high-tech global economy? Where do these rhetorics circulate, and whose interests do they serve? What consequences do they bear and for whom?

2. How can we understand One-Third World citizens' use of digital literacies in the context of circulating narratives of digital literacies and their technologies, especially in response to global events?

3. What are some of the costs and consequences of the digital literacy myth? In other words, what transnational material realities can help us recontextualize these narratives so that we can re-imagine how political economic interests are preserved through their circulations? What happens when we overlook the materiality of our composing technologies in order to preserve our hopes for returns of social and economic capital?

4. As composition and rhetoric teachers and scholars, how can we construct more realistic senses of the material and social costs and affordances of digital literacies? What are our responsibilities as ethical, rhetorical teachers as we shape writing assignments that acquaint students with digital literacies? How can we help cultivate responsible citizen-writers who are aware of the benefits, but also the costs and consequences, of digital literacies?

In pursuit of these questions, I want to shift attention in our field to the ways in which our hope circulates through our rhetorics for literacies and their technologies, how particular political economic interests help to shape that hope, and how such hope has material costs around the world. Honoring Selfe's appeal to our attention at the turn of the century, I also want to recognize that, as Cathy Davidson explains in *Now You See It: How Technology and Brain Science will Transform Schools and Business for the 21ˢᵗ Century*, when we focus too narrowly on one thing we risk missing blaringly obvious and equally important events, ideas, and information. Noting ways that the information era has been contested as we struggle to catch up to ways our being in the world has changed, she writes that: "Politically, on the right and on the left, we've got a lot to say about whether the globalized workforce of the twenty-first century is good or bad, but in some ways the politics of globalization are beside the point. The digital age is not going anywhere. It's not going to end and it's not going away" (12-13). For me, the problem

of the digital and what it means for the globalized work force is *precisely* the point, the question I want to keep in the center of my attention throughout this dissertation. While Davidson focuses on how we might transform schools and business given the digital and new forays into brain science, though, I find space and opportunity in her point that in the connected age we can leverage our collaborative attention. A brief review of scholarship in rhetoric and composition, computers and writing, and literacy studies will demonstrate that while there is precedence for material and social analysis of literacies, including digital literacies, we need to pay yet more attention to the geopolitical effects of rhetorics of digital literacies on a global scale.

Hope and Material Critique in Digital Literacy Sponsorship

> "One way of looking at a field is to see what it hopes for, what visions of a possible future it sees and strives to realize." (Moran, "What We Have Hoped For" 343)

Teacher-scholars working with new writing technologies have had moments of great hope and great doubt for digital literacies' potential. Particularly in the early days, scholars placed no small amount of faith in technology, as they saw the power of technology to increase collaboration, create student-centered classrooms, communicate in more meaningful ways, and even combat the social ills of racism, classism, sexism, sexuality discrimination, and ableism.[4] Among the most commonly referenced works in early utopian computers and writing scholarship is Marilyn Cooper and Cynthia Selfe's 1990 *College English* article, "Computer Conferences and Learning: Authority, Resistance, and Internally Persuasive Discourse." Describing the often assimilatory goals of composition courses in adapting students to the academic discourse community, Cooper and Selfe suggest that writing teachers can help students develop more complex understandings

---

[4] For more examples of utopian rhetorics in early scholarship on the topic, see: Spitzer; Thompson; Kiesler, Siegel, and McGuire; Batson; Shriner and Rice; and Faigley, "Subverting."

of language and power by encouraging discourses of resistance and dissent (851). In the

following passage, the authors offer a series of hopes/claims about the potential for asynchronous

computer conferences to help revolutionize the writing classroom:

> Electronic forums then can offer new spaces, new environments for academic discourse that invite certain kinds of students in our English composition classes to contribute their conversation. Adrienne Rich notes, for instance, that women (and, we can add, other oppressed minorities) will find their voices when "they begin to move out toward what the feminist philosopher Mary Daly terms a 'new space' on the boundaries of patriarchy" (49). Computer networks may provide such spaces, electronic and cultural "lacunae" (Wittig) in which both teachers and students can learn to listen to multiple voices, and thus, in Carol Gilligan's words, learn the importance of "different truths"(156). In these spaces, writers and teachers of writing may be able to recapture, from women and other "silenced" (Olsen) minorities, perspectives that we have lost. Thus, computer conferences can be used to exploit the revolutionary nature of this communication technology and bring about needed changes in our writing-intensive courses. (858)

Cooper and Selfe capture in this passage their hope and excitement for the democratizing power

of technologies and their literacies as spaces to negotiate the historically rooted social injustices

of academic epistemologies, patriarchy, racism, etc. that shape the in-person writing classroom.

This hope for technology's liberatory potential in the writing classroom has continued to

circulate throughout our scholarship and our pedagogies, just as the hope for technology to bring

peace, cure disease, restore social order, and promote justice have persisted for generations. That

is to say, I can identify with, and am not entirely devaluing this hope. Using the tools we have to

fight for justice is always an admirable goal—one I keep in my heart in all of my own work.

Nevertheless, the critiques that follow are important reminders that tools must be contextualized

if we are to evaluate their worth for justice, as this dissertation explores.

Of course, there was also some kairotic justification for the perhaps overzealous

advocacy for technology's role in the teaching of writing, as early adopters in the field faced no

shortage of resistance to their work. Early scholarship on computers in *College Composition and

Communication* and *College English* reveal great hesitance and curiosity about whether

computers could at all enhance the teaching of writing as it had historically been done, including

invention work (see Burns), revision (see Collier), and prewriting (see Wresch). Kenneth

Bruffee's response to Cooper and Selfe's article, for instance, highlights some of the resistance

in the field that shaped their rhetorical situation. Bruffee suggests that each of the benefits named

by Cooper and Selfe can happen without technology, and he argues that their under-treatment of

authority may reveal that the authors "are as much part of the problem as part of the solution"

(951). He writes pointedly: "Even at Michigan Tech the cozy, warm-blooded, subtechnological

forms of collaborative learning…might occasionally be effective alternatives to computer

conferencing," and that face-to-face conferences may even be preferable since you can hold them

anywhere, they don't require any equipment, and they don't contribute to environmental

degradation (951). While Bruffee's argument may read as borderline *ad hominem*, his fear of

change was and remains deeply tangible throughout the discipline—fears that have not proven

entirely unjustified in the age of machine grading and plagiarism detection services. Further,

material critiques that attend to the physical, spatial, and economic realities in teaching with

technologies have been significant to cautious practice, as I'll explore below and throughout the

dissertation. Examples like this one reflect the reluctance with which much of the field regarded

the approaching technological revolution and its potential effects on their classrooms, and it is

this rhetorical situation that may have amplified some scholars' support for the positive influence

of computers in the teaching of writing.[5]

---

[5] I should add, too, that I have no doubt that these hopeful teacher-scholars witnessed incredible
and different and challenging kinds of writing and relationships within their classrooms as they
worked to integrate computers into their instruction.

Yet, computers and writing scholars, as a group, have been continually and beautifully reflective in their praxis.[6] For instance, the following year in their *College Composition and Communication* article, "The Rhetoric of Technology and the Electronic Writing Class," Hawisher and Selfe go on to critique what they describe as the "uncritical enthusiasm" of some scholars who celebrated the integration of computers into the composition classroom, offering the more tempered conclusion that "if we plan carefully and examine our integration of technology critically, computers have the potential for helping us shift traditional authority structures inherent in American education," toward becoming "a community of learners" (36, 44). We still feel a distinct sense of hope in these claims, but it is a tempered hope made softer with an emphasis on conscientious practice.

Thus, within the course of a year, we can see the significant shift from celebration to critique in computers and writing scholarship. Building upon Hawisher and Selfe's conscientious reflection, in 1993 Susan Romano denounces what she termed the "egalitarianism narrative" of earlier computers and writing scholars and cultural critics' claims that:

> networking technology markedly facilitates liberation from traditional institutional learning disablers such as the proscenium classroom, the presentational mode, and academic language. The electronic alternative facilitates a redistribution of control over language and knowledge via temporal and spatial reconfigurations and via idiom itself. Not only do students in general benefit from this reconfiguration; those students most effectively silenced by the traditional learning format--those we call marginalized--stand to gain the most.

Romano worries about the hidden consequences of such utopian claims for the use of computers to teach writing, arguing that "claims for an automatic egalitarianism engendered by technology

---

[6] We can see such reflection, for instance, across the scholarship, collaboration, leadership, and editing work Selfe has so generously contributed to the field. What I love about Selfe's work is the opportunity to see the depth and nuance that comes with careful and cautious sowing, tending, and cultivation over many years with related questions—a model I will return to throughout my own career.

are particularly invidious because if the technology is inflexible, infallible, and ever-enabling, then human beings absorb blame for failure" (14). Any instructors or students whose experiences do not conform to the grand narrative of egalitarianism, she explains, are then much more hesitant to reveal and ponder their counter-narratives. The following year, Pamela Takayoshi hones the critique of utopian visions of technology. Moving away from Romano's larger rhetorical focus to consequences for women specifically, Takayoshi takes on the claims that "computers are potentially empowering tools for disenfranchised groups and marginalized students, particularly female students who have had few tools with which to carve out a space for themselves in the male world of the academy" (21). She finds that "we cannot adopt the computer into a situation that operates according to the same patriarchal rules as traditional classroom discourse and expect that patriarchal base to unravel without conscious awareness, discussion, and action on the participants' part" (33). Throughout the early decades of computers and writing scholarship, then, we see trends in hope and doubt concerning the liberatory potential of computer technologies in the teaching of writing.

Materializing Critique and Possibility in the Digital

Since that time, persistent critique and tempered hopes have prevailed in computers and writing scholarship, as scholars have explored the promises and pitfalls of particular platforms and pedagogies, composing practices in digital spaces, and ways in which identity is performed online. Rhetoric and composition scholars in more recent years have complicated the prior utopian narrative of technology and have avoided either the hyper-utopian or dystopian rhetorics that circulate among earlier computers and writing texts, just as they do among theories of globalization and literacy. Astute scholars have recognized, as Manuel Castells wrote, that

"indeed, the dilemma of technological determinism is probably a false problem, since technology is society, and society cannot be understood or represented without its technological tools" (5). Recognizing the interdependence of technologies and culture resists determinist materialism, such scholars take up instead a dialectical material pursuit that is "simultaneously concerned with the social construction of reality and reality's construction of the social" (McComiskey 700).

Materialism in rhetoric and composition work has been ultimately concerned with moving beyond the limits of the symbolic and discourse to understand how many of the central concerns in our field are amplified, adjusted, or erased when thought through the physical, the spatial, the bodily, and labor. As Jack Selzer describes in his introduction to the groundbreaking collection on material rhetorics, *Rhetorical Bodies*, those in our field concerned with materialism "take seriously the material conditions that sustain the production, circulation, and consumption of rhetorical power" by recognizing how "material, nonliterate practices and realties—most notably the body, flesh, blood and bones, and how all the material trappings of the physical are fashioned by literate practices," while simultaneously "[demonstrating] how literate practices…ought to be understood in the serious light of the material circumstances that sustain or sustained them" (9-10). For example, some materialists in our field are working in objects, addressing questions about affect, agency, or networks (e.g., Lynch and Rivers; Hesse, Sommers, and Yancey; Bogost). Others take up the body, particularly in disability rhetorics, in feminist rhetorics seeking to recover the female body within the history of rhetoric, in fat studies, and in medical rhetorics (see, for example, Dolmage; Lunsford; Seigel). Still others work to understand the problems of labor and capital in the implements, institutions, and social contexts of writing and the teaching of writing (see Khan; Schell; Scott and Welch). Recent conference

presentations, blogs, dissertations, and CFPs in the field are also taking up rhetorics of craft, the makers movement, and DIY (see the forthcoming 2016 special issue of *Harlot*). Thus, there is a long and wide-ranging, though not entirely consistent history of material critique in our discipline.

Most formative to my own material analysis in this dissertation is work grounded in materiality and literacy, especially that of Peter Mortensen. In his 2001 article "Reading Material," Mortensen traces papermaking and its material consequences as the manifestation of the "toxic discourse" associated with literacy. He looks at the environmental degradation and simultaneous low literacy rates in the Southern region where the US paper manufacturing makes its home. Mortensen cites this concurrence as the material and social costs of "uneven and unjust literacy development" (395). He notes that, although papermaking pollutes the air, land, and water and contains chemicals hazardous to human health, its manufacturing processes typically happen in rural locations that obscure its consequences from those who most frequently engage in the literacy practices that demand paper production in the first place. He argues, convincingly, that:

> We need, in addition, to appreciate literacy as a material practice bound up in cycles of production, consumption, and waste whose outcomes are felt unevenly across regions in the United States and increasingly, across regions worldwide. Such an appreciation is, of course, an impetus to further scholarly inquiry, but also, as I explain in my conclusion, a call to social action. (398)

As a final gesture, Mortensen argues that we must not remain satisfied in the analysis that "something so seemingly natural as literacy might, in practice, have unnatural effects that are profoundly unjust in their distribution" (416). He argues that, instead, composition teachers and literacy scholars must take material action, though this is admittedly difficult due to the complexity and circumstantial nature of his case and the overall situation. Mortensen's work in

this article is among the few I've seen that substantially tie the literacy work of our discipline to its material costs and consequences for the environment and the physical health, social opportunity, and lived realities of those affected. That said, material analysis has been taken up as computers and writing and rhetoric and composition scholars have studied ways in which identity, the body, space, and literacy are bound up with our digital and literate practices.

Critiquing Materiality and Identity

Material work bordering cultural and digital rhetorics, for instance, recognizes the ways in which digital environments may reproduce or complicate the racism, systemic oppression and silencing that we find in physical spaces like the traditional classroom. For instance, scholars Lisa Nakamura, Barbara Monroe, and Adam Banks have interrogated representations of race in online spaces and narratives of digital literacies and practices that have replicated histories of race and class oppression in the United States in recent decades. Nakamura's 2002 *Cybertypes: Race, Ethnicity, and Identity on the Internet,* for instance, reminds us that identity in virtual spaces is still rooted in conceptions coming out of material, historical, and ideological realities. In her 2004 book *Crossing the Digital Divide,* Monroe continues the work of unearthing hidden political and social agendas in particular rhetorics of technology. She resituates the conversation surrounding the digital divide by complicating racist and classist binary metaphors of the have's and have-not's, in order to think in more holistic, particular, and political economic terms about the situation of teaching and technological literacy–especially where it concerns the poor and students of color.

In 2006, Banks describes in *Race, Rhetoric, and Technology* how narratives about the digital divide and African American rhetoric belittle and obscure the complexities of African

American meaning making and resistance in their online and offline rhetorical practice. He warns that what the lesson of the history of African Americans and technology seems to mean "for Black people is that the original sins of slavery and Jim Crow and the continual dehumanization that accompanied them are repeated, reinscribed into the life of the nation every time the technologies that govern its economic, social, and political structures change" (xxiii). Banks attends here to the tangled histories of US narratives of technological and national progress in contrast with the material and social realities of racism, revealing the oft hidden advantages and privileges that are in part maintained through systems of technological literacy education and valuation. Ellen Cushman, on the other hand, looks at the recovery of the Cherokee language along the tribe's journey to digitize, and hence preserve their language and identity in her 2011 book *The Cherokee Syllabary: Writing the People's Perseverance*. This work, with Banks, moves to attend to the literate agency of people of color in online spaces, while still acknowledging structural and personal racism as real factors of constraint. Ultimately, when we consider these narratives and critiques of the utopian social rhetorics of technology in conversation with some of the material analyses of computers and literacy, we see that the connections between capital, identity, and literacy loom large—especially when we bring these tools into the classroom.

Digital Bodies: Embodiment and Disability Studies

Also concerned with the material in terms of identity, agency, and power, scholars have begun to investigate the body in connection with the digital. Taking up embodiment early in computers and writing scholarship, for instance, Selfe and Selfe's 1994 article "The Politics of the Interface" explored how the design logics of early Mac computers reflected a particular kind of

body as imagined user—the white, middle class male. More recently, in their 2012 collection *Composing (Media)=Composing (Embodiment): Bodies, Technologies, Writing, and the Teaching of Writing*, editors Kristen Arola and Anne Wysocki implore readers to witness "that what any body is and is able to do—and how any one body differs from other bodies in its affective and physiological capabilities—cannot be disentangled from the media we use or from the times and cultures in and technologies with which we consume and produce texts" (8). Contributors to the volume work to understand the relationship between the digital (and otherwise-mediated texts) and the body, particularly by looking in and through texts, interfaces, and technological artifacts.

For instance, in Ben McCorkle's chapter "Whose Body? Looking Critically at New Interface Designs," he is concerned, like Selfe and Selfe, that "designers of digital interfaces… assume unquestioned subject positions for the user" (174). He worries that, in contemporary design, which is moving closer to embodiment, "the user becomes less aware of her body as object— less aware of how her subjectivity is constructed" (176). In these efforts to make technology and interface invisible, McCorkle argues, we are witnessing "a bleeding edge of interface design, one that conflates technology and body in an attempt to erase the lines of demarcation separating them, resulting in an embodied, phenomenal experience of the equipment at hand (at least for those able to afford it)" (181). McCorkle contrasts these designs that seek seamlessness between technology, mind, and body with examples of design that works to highlight the interface, drawing attention to embodiment as "an interruption of the phenomenal state aspired to by dominant interface design"—a move that he argues "is a vital means by which users can recognize their own roles as technological agents when producing or consuming new media texts" (185). In other words, McCorkle is concerned with ways in which the invisibility of

the interface might unwittingly constrain user agency, particularly in Othered bodies. Other recent studies of embodiment connected with the digital have included race and identity, sex and sexuality, gender identity, queerness, fertility, the family, and disability, the last of which I'll attempt to capture here.

Disability scholars in our field who have explored digital technologies, literacies, and pedagogies have sought to understand their material opportunities and costs for bodies with a spectrum of abilities. For instance, in Jay Dolmage's article in Arola and Wysocki's collection titled "Writing Against Normal: Navigating A Corporeal Turn," he argues that in contrast to writing pedagogies and spaces that conceive normal bodies to the exclusion of the range of actual bodies that compose our students, "we can develop technologies and pedagogies for writing that not only affirm the body, but that affirm all bodies" (110). Scholars in rhetoric and composition and computers and writing have borrowed from disability studies this move to get beyond "retrofitting" in our scholarship and pedagogy. Further addressing the problem of disability, access, and design in their 2013 *Kairos* article "Multimodality in Motion: Disability and Kairotic Space," Yergeau et al., offer readers two confusing options on the landing page of their webtext: a button that reads "Access" and one that reads "Enter." The authors use this design device as a way to explain that hidden placement of access statements on websites, "alternative entrances, [and] disclaimers—by their very nature, …create a special population of people, whom we then identify as disabled." In her contribution to the multi-authored text, Yergeau points out that "what's happening in the name of access is this: reconfiguring disabled people, dismantling their ways of being and knowing, and reinventing them, as best we can, into normate clones." She argues that, instead, "we need to disable our structures and theories— disable as in take apart and disable as in actively involve disabled people," in a "participatory

conception of access [involving] a redesign of the normative social systems that define, prevent, or limit access to begin with." Thus, in terms of both embodiment and disability students, we have come to understand that digital spaces have material consequences for bodies in the world, and thus that design is an opportunity for enhancing or constraining agency for technology users.

Digital Spaces, Places, and Interfaces

Attending to bodies as they move through the physical world, digital rhetorics, digital humanities, and computers and writing scholars in rhetoric and composition have taken up the issue of bodies, technologies, and literacies in relation to space. In a currently-circulating CFP for a 2016 special issue of *Rhetoric Society Quarterly* on "Wearable Rhetorics: Quantification, Materialization, and the Body," John M. Jones writes that the Apple Watch and predictions for the market increase for wearable technologies "provides an important and timely opportunity for rhetorical scholars to reexamine rhetorics of technology and the body as well as the relationship of wearables to emergent use-cases and relevant theoretical frameworks." This issue seeks to understand how the movement of technologies *with bodies* and *through space* affects, shifts, or challenges rhetorical theory and practice. Scholars like Jason Farman have taken up the question of bodies moving with technologies through space, such as in his chapter "The Materiality of Locative Media: On the Invisible Infrastructure of Mobile Networks" in the collection *Theories of the Mobile Internet: Materialities and Imaginaries*. While Farman explores mobility in all of his work, in this piece he asks: "What information pathways were necessary for me to be 'located' and broadcast to my friends on Foursquare? What does the infrastructure behind locative media and mobility actually look like?" (48). In reflecting on the hidden infrastructures, Farman concludes that "fluctuation between these levels of invisibility and visibility are a result

of the power structures (such as capitalism) that are invested in maintaining various levels of visibility and invisibility and the cultural desires that are founded on such structures" (55). Thus, the problem of technology's simultaneously increasing ubiquity and invisibility is of great interest for those concerned with materiality.

In another recent example taking up the material via the spatial, Jeff Rice's 2013 *Digital Detroit* investigates how shifting economic realities have changed physical places, especially in the context of the digital. Taking up the network metaphor, he writes: "We live in the age of the network. Interest in economics, labor, the World Wide Web, marketing, media, war, and other areas foregrounds the network and the changing apparatus we experience in a world shaped by technological innovation" (5). He continues that to understand this network is "to recognize the complexity of relations, interactions, and movements that digital culture generates. Space is one locale where such connections occur. The complex space many of the texts I note here describe can be understood as a network" (5). He sees Detroit—a complex and struggling city—as a network in motion, whose (momentary) identity can be traced by breaking down and reassembling its relationships.

Through his "digital navigation," Rice explores Detroit in ways that blend the digital and material. As he puts it "the city's rhetorical positioning evokes innovative methods that shift control from the circulated meanings disseminated in a variety of formats to media-based strategies the network provides" (20). His own constructed database of the relationships moving through the network of Detroit yield, for Rice, Digital Detroit, or "the technological intervention I make as part of a larger exploration of the city, space, rhetoric, and networks" (30). Rice's work in *Digital Detroit* reflects the reciprocal relationship between the digital and the spatial, wherein each acts upon and informs the other. Thus, the blending of bodies and space in

connection with the digital is another emerging avenue through which scholars are working to understand the material impact of technologies. This strand of scholarship in concert with those named above reveals that, throughout recent and earlier work on materiality and the digital, scholars in our field have largely (though not entirely) adhered to the project of dialectical materialism, seeking to unearth ways through which bodies, spaces, and places interact with and have bearing on the digital. I would like to draw from this dialectical foundation to address questions of the digital and material that focus more explicitly on literacies.

Literacies and Materiality

Within rhetoric and composition, scholars have, on occasion, worked to identify and interrogate the social and material consequences of literacies, capital, manufacturing, and the products of literacy. Contributing to scholarship investigating materiality, literacy and technology in an early (1985) and ominous *College English* article, "Literacy, Technology, and Monopoly Capital," Richard Ohmann warns that though computer literacies might be new and exciting, they need to be thought of with regard to the same political and economic contexts that have historically complicated literacy in general. He reminds us that literacies and their technologies are often developed, touted, and distributed from above, systemically and cyclically affecting citizens along the same axes of race, class, gender, etc. that maintain the status quo. He concludes that computer literacy, like any literacy, is not inherently liberatory and will only serve democratic purposes if we actively intervene to help it do so. He describes the economic interests in the spread of computer literacy:

> Seen from this side of the market, computers are a commodity, for which a mass market is being created in quite conventional ways. And their other main use in the home, besides recreation, most likely will be to facilitate the marketing of still more commodities, as computerized shopping becomes a reality. Thus our "age of technology"

looks to me very much like the age of monopoly capital, with new channels of power through which the few try to control both the labor and the leisure of the many. (684)

Given this warning, Ohmann grants the liberatory *potential* of computer literacies, but qualifies that the spread of such literacies on their own will not resolve social problems. He explains that "especially in education, we have something to say about whether that potential is realized. But its fate is not a technological question: it is a political one" (685). Ohmann's analysis demands that writing teachers consider in what ways the technologies and literacies we sponsor in our classrooms support private interests that do not take the needs of our students and the larger populous into account.

In another critique of digital technologies and their literacies from the perspective of capital, M.J. Braun traced what he calls "democracy hope" in his 2001 article "The Political Economy of Computers and Composition: 'Democracy Hope' in the Era of Globalization." In an analysis of work from five major scholars who have taken up technology—Chris Anson, James Berlin, David Downing, Charles Moran, and Cynthia Selfe—Braun argues that while computers and writing scholars have in many ways attended to history and economy, they have done so without a clearly articulated model of capital. This oversight, he explains, leads to "democracy hope," or, the idea that "if we just work hard enough for and through democracy, social inequality can be mitigated" (131). Sadly, Braun argues, this is simply not the case since:

> As relative surplus value, technologies and the changing class formations they generate do not act independently of capital's absolute drive for surplus labor (Marx 432, 645). The democratizing effect of new technologies in one sector of the economy must be accompanied by the further imposition of tyrannical control over workers' lives in other sectors. Otherwise, surplus value cannot be extracted from human labor. (136)

In other words, going even further than Ohmann's fear above, Braun argues that technology is always already embedded deeply within the structures of capital, taking into its very make the politics of labor and exploitation. This problem of control over workers' lives is one I take up in

Chapter 2, and I address labor in the manufacturing of technologies in Chapter 4. These political

economic critiques are central to the larger project of this dissertation.

Other material critiques, in computers and writing, investigate the links between capital

and literacy, looking to specific software and problems of software manufacturing cycles to

understand how the materiality of the programs we use shape our literacy work. In their 2002

article, "The Politics of the Program: MS Word as the Invisible Grammarian," for instance, Tim

McGee and Patricia Ericsson traced the invisibility of Word's grammar checker, interrogating

how the service interrupts composition students' drafting experience and teachers' pedagogy and

knowledge. Acknowledging Microsoft's ubiquity—between 80 and 90% of the market share at

that time—McGee and Ericsson warn that "because Word is on millions of desktops and

Grammar Checker is turned on by default, it has many more, practically invisible, 'over your

shoulder' opportunities to be a grammar teacher than the typical English teacher" (455). To

combat the checker's contrary influence to rhetoric and composition's foundational values,

including attention to the politics of Standard English, McGee and Ericsson suggest that we

cultivate a critical practice in investigating the more invisible aspects of the interfaces we use

with our students. Similarly critiquing the materiality of interfaces, Shannon Madden notes in

"Obsolescence in/of Digital Writing" that "Obsolescence impacts the durability of writing

theories and yet the rapid obsolescence of writing tools is understood as natural and inevitable"

(30). Contextualizing this problem within the field of rhetoric and composition in the global era,

Madden argues that:

> Writing scholars should do more to apply critical pressure to obsolescence in technology
> design because our professional practices are bound up in obsolescence and because
> obsolescence has human and environmental consequences that we can no longer afford to
> ignore. Such inquiries could also help writing studies specialists resist the harnessing of
> literacy, communication, and pedagogy to market forces and exploitative corporate
> practices. (31)

Thus, McGee and Ericsson and Madden's articles both recognize some of the material challenges concerning the tools of writing instruction—materiality that by the software programs' very deign are rendered invisible, yet which come with great consequence for our everyday work.

Still other material critiques contend with the claims that technology serves justice in the global public. In their 2014 article, "One Train Can Hide Another: Critical Materialism for Public Composition," Tony Scott and Nancy Welch look at the example of the once-viral *Kony 2012* video that swept the nation. The *Kony 2012* video—in which the group Invisible Children made a powerful appeal for the US to take military action in protection of Ugandan children— went viral across social networks until college classes, celebrities, and even the president were deploring the violence it depicted. Scott and Welch point out that, while the video and the #KONY2012 movement that followed it seemingly stirred the political and democratic spirit of the nation, the resulting discourse was decontextualized and ultimately looked beyond Uganda and to the power of the digital and discursive. They trace how, "in public dissemination of the campaign, priority was given to the new technological form of the video's launch, the speed and mass reach of its reception, and the idea that the metaphor of global discussion was being made real" (564). Placing the video within its historical and material context, Scott and Welch point out that the video was, in actuality, persuading its audience to accept the military action Congress had already been pursuing in Uganda. This leads the authors to their driving point that "*One train can hide another*" (565), and that when we look beyond the focal point of digital media's supposed service to political discourse, we can see ways in which that discourse obscures more important material histories of oppression and circulation of capital. As they argue:

Depictions of a composition professional's digital mobility studiously ignore—or suggest

a cosmopolitan class disembedded from—the low-wage migrant labor through which undergraduate composition continues, ever more deeply, to be delivered. The double body-banishing whammy of linguistic idealism and technological fetishism further insulates writing research from contact with the potentially mercurial body, locating theory in the sanitized corporate. Even as public and digital rhetorical theories emphasize global connectivity and the creation of "convergence cultures" (see Jenkins) that purport to be progressive portals to the world, these theories take shape in corridors cleansed of globalization's most troubling material effects and evidence of struggle by its discontents. (570)

In other words, Scott and Welch beg that we take a moment to pause in our celebration of the digital, reflecting instead on what other factors, what costs might be at play in such discourses of delight. Material critiques of digital technologies and literacies, like those of Mortensen, Ohmann, McGee and Ericsson, Madden, and Scott and Welch, place literacy into context, tracing industry's profits in connection with everyday people's risks and costs. Through such work we are forced to consider how the myth of literacy's promise benefits some and harms others, and we must face the ethical problem of our role as writing teachers therein.

Locating Literate Agency in the Context of the Transnational Network of Literacy and Materiality

Under the weight of the costs of literacies—the material, social, environmental tolls; the support of neoliberal and private interests; the maintenance of the social status quo and its oppressive social structures—we might wonder if there is such thing as literate agency with which individuals can navigate the world according to their own needs and goals. In other words, to what extent can the literacy myth (much like the American dream and bootstraps narratives) come true for anyone at all? When and where do some people use literacies for individual economic advantage or democratic action? Connected to such questions, scholars are working to study how individuals employ their agency with regard to literacy in varied socioeconomic and

identity locations—another level of material analysis of literacy.[7] While Deborah Brandt notes

the material situatedness of literacy and its affordances in the United States in her seminal work

Literacy in American Lives, she does not slip into the determinist perspective, which would

render individual agency moot. Rather, Brandt does an excellent job of contextualizing how the

intersection of individual literacy development and large-scale economic development

"illuminated the competing interests that came to surround literacy as it rose in exploitable

economic value, especially in the second half of the last century" (4). Her work in tracing the

material and personal literacy stories of individuals historicized within larger social and

economic trends in the United States leads Brandt to surmise that:

> Where once literate skill would merely have confirmed social advantage, it is, under
> current economic conditions, a growing resource in social advantage itself. On the one
> hand, this intensifying worth of literacy brings renewed possibility to the democratic
> hope in public education that more equal distribution of literate skill can moderate the
> effects of inequality in wealth and civil rights. But, as a matter of fact…just, as it seems,
> the rich get richer, the literate get more literate. (169)

In other words, social and economic contexts constrain the democratic affordances that expanded

literacy is often said to promote, in both digital and offline spaces. While this scholarly history

captures the strength of political economic and material concerns in both literacy studies and

computers and writing scholarship, the US-centric nature of the studies leaves space for

understanding the circulation and impact of rhetorics of digital literacies on a global scale.

    This is not to say that digital literacies in the global era have been unattended to in our

field. On the contrary, Gail Hawisher and Cynthia Selfe (with their coauthors) have published

many works in the last decade focusing on this very topic, including: *Global Literacies and the

World Wide Web* (2002); "Globalization and Agency: Designing and Redesigning the Literacies

---

[7] See also Kate Vieira's work on literacy and immigration, Iswari Pandey's work on literacy in a
South Asian immigrant community, and Morris Young's work on Asian American literacy
practices.

of Cyberspace" (2006); "Moving Images of Literacy in a Transnational World," (2010); and, most recently, *Transnational Literate Lives in Digital Times*, (2012). In their 2004 essay "Becoming Literate in the Information Age: Cultural Ecologies and the Literacies of Technology," Hawisher and Selfe build the premise that "literacies have lifespans" that emerge, gain currency, and fade depending upon a given "literacy ecology." Literacy ecologies are shaped by historical, material, and social forces, and "specific conditions of access have a substantial effect on people's acquisition and development of digital literacy" (644). However, the authors further insist that "people can exert their own powerful agency in, around, and through digital literacies," sometimes even breaking through historical social boundaries and oppressive structures (644). Here, too, we find the struggle for balance in understanding how larger structures of power and circulation of capital affect the literacy education and life outcomes of individuals, while observing and valuing literate agency in the world.

While attention to larger structural constraints continue to ground their analyses of life histories of digital literacies in the global era, Berry, Hawisher, Selfe, and their coauthors work to make visible in individuals' particular experiences how literacy has served or stunted their agency and goals. The authors maintain vigilant attention to the material details of their participants' lives, but zoom in on, as they describe it, "how individuals inhabiting transnational contexts learn, take up, and use digital communication technologies to extend their communicative reach, to maintain their social and cultural identities, and to construct their worlds." Recognizing their own position as American researchers, Berry, Hawisher, and Selfe feature the narratives of their contributors in ways that "offer a valuable counterbalance to national triumphalist stories, showing us the way toward a globalized world that does not conquer or subsume difference, but that instead values different positions as additional

perspectives on shared issues and problems." As they recognize, the case studies shared in *Transnational Literate Lives in Digital Times* are the stories of relatively privileged individuals from Bosnia, Nigeria, Australia and elsewhere (though there was, of course, great diversity among the individuals' material circumstances). Still the individuals' life histories, and the authors' situating of those stories, do important work to highlight the uneven global development in information architecture, access, and the accompanying economic development that Manuel Castells describes as "an extraordinarily variable geometry that tends to dissolve historical, economic geography" (*Millennium* 106).

Berry, Hawisher and Selfe's work on digital literacies in the global era marks the path for an analysis of how the circulation of rhetorics of digital literacy from more powerful players in the global economy affects the literacy ecologies of individuals and groups in other parts of the world. The work of this dissertation, then, will fill what I have identified as the next step in the strong history of scholarship focusing on ideology, political economy, and literacy in the global era. Selfe (1999) and others have pointed to ways in which rhetorics of digital literacy have served particular material interests of privileged groups and have perpetuated what Graff named the literacy myth through the evolution of 21st century literacies in the digital age. And contemporary scholars have begun to look at ways in which individuals use digital literacies to enhance their lives and to meet their social needs across transnational boundaries. My dissertation will follow this trajectory to its next logical step through a broader look at the material costs and affordances of the rhetorics of digital literacy on a global scale. Using a transnational feminist analytic, I define and trace the consequences of the digital literacy myth in the context of the transnational network of materiality and literacy.

Transnational Feminism: A Global Lens for a Global Problem

While postcolonial theory, globalization studies, world systems theory, and theories of political economy all inform my thinking about these questions, methodologically I turn to transnational feminism, whose analytic best makes possible the complex tracing of rhetoric, literacy and material consequence across borders and political realities. Transnational feminists have a long history of working within the interstices of feminism and postcolonial studies to decode patriarchy and ways in which patterns of global imperialism manifest in layers of oppressive relations all over the world. In "Revisiting 'Under Western Eyes,'" Chandra Mohanty offers that the best practice for feminist scholarship moving forward would be to remain "attentive to the micropolitics of context, subjectivity, and struggle, as well as to the macropolitics of global economic and political processes and systems" including "grounded, particularized analyses linked with larger, even global, economic, and political frameworks" (223). This sort of methodology allows for particularized magnification of the material and rhetorical effects of global capital and cultural globalization on the lives and bodies of women and men, and is similarly recognized throughout transnational feminist scholarship, such as in the work of M. Jacqui Alexander.

In *Pedagogies of Crossing*, for instance, and keeping with the enmeshed theoretical foundations of globalization and political economy, Alexander points to another important analytic method in transnational feminism–working within time-space compressions in order to observe patterns of power that can effectively counter cultural relativist claims which would otherwise render that power and its effects invisible (184). Drawing together seemingly disconnected moments that are separated in our histories by time, place, and cultures reveals how larger structures like patriarchy, racism, and neoliberalism operate in particular and contextual

ways, but toward related interests. In this way, transnational feminist scholars can practice "ideological reassembly," making visible "how ideologies actually traffic across multiple sites" (192), by bringing "historical formations into a universe in which they share palimpsestic time [so] that we are able to plot the routes of ideological traffic and proximity within and among them" (194). This defining method within transnational feminist scholarship attends to constellations of power, made visible through a historical and geopolitical reading practice that uses time-space compression as a technique for unveiling asymmetries of power. For me, this works by pulling together and rhetorically analyzing texts representing US educational policy, protests in Iran, and coltan mining in the Congo to illustrate how the digital literacy myth travels across transnational networks of literacy and materiality. The contexts for these moments are seemingly distant and distinct. However, compressing time and space to hold them at once under a critical gaze, with an eye toward overlapping and particular colonial histories, helps reveal the ideologies and rhetorics that connect them.

Drawing on this tradition, transnational feminists within rhetoric and composition have continued in the methods modeled by Alexander and Mohanty, offering more explicit attention to our familiar questions of author, text, and context as a focus within the transnational feminist analytic. For instance, in Rebecca Dingo's *Networking Arguments*, she outlines an analytic of the same name that "can demonstrate the complex ways that rhetorical appeals reach a diffused yet linked audience while also accounting for how contiguous power relationships add meaning and force to arguments" (18). The practice of networking arguments, she describes, "helps make visible 'vectors of power' by linking texts, and allows us to understand the shifting material and representational impacts of globalization on women, especially in the context of neoliberalism and neocolonialism" (8). Dingo's framework for networking arguments offers an excellent

model for rhetoric and composition scholars who wish to trace the ways in which texts move within and across geopolitical borders. Networking arguments is also especially useful as it allows one to highlight the complexities of author, text and context in negotiated global scenarios and enables us to see how a text conceived in one particular location can have inordinate effects in locations bound by different dynamics of power. As Dingo articulates:

> in order to understand women's oppression, feminist rhetoricians must consider not only a woman's local circumstances but also how vectors of power–supranational policies, colonial history, global economic structures, even our practices here in the West–shape women's lives in disparate places. In other words, feminist rhetoricians must place micro-examples within macrocontexts. (144)

In 2006, Mary Queen offered a model similar to Dingo's networking arguments, but one which she applies to a range of digital texts in her article "Transnational Feminist Rhetorics in a Digital World." In that piece, Queen traces what she names the "rhetorical genealogy" of digital texts, attending to ways in which digital texts and material realities meet and transform one another in the context of transnational feminist rhetorical action. Specifically, Queen advocates for a method of reading digital texts that attends to circulation, noting that "the rhetorical action of delinking text from one context cannot be separated from the simultaneous rhetorical action of linking text to (an)other context" (485). Queen and Dingo, then, effectively model transnational feminist modes of rhetorical analysis of both digital and public policy texts; these analyses focus explicitly on the ways in which: texts and material realities make and remake each other in varied ways across borders; texts conceived within a particular position among vectors of power might shift in meaning and impact as they travel to another; and, how the varied impact of texts might open possibilities for rhetorical action and resistance to dominant ideologies carried through those texts.

While Dingo and Queen focus on women in transnational contexts, my own analysis will

focus on how particular class and national and transnational arrangements are co-articulated through rhetorics and material realities of digital literacies in specific social and political locations. For instance, the groups mentioned earlier in India, China, the DRC, and the US *are connected* through the ways in which optimistic rhetorics of digital literacies work against their interests in as much as they create or reify Othered positions for them, positions that usually do not have access to the agencies, privileges and possibilities associated with digital literacies. My intention is to respond to Schell and Hesford's call in their introduction to the 2007 special issue of *College English* focusing on transnational feminism–that we ought to expand the potency of rhetoric and composition scholarship through: "1) questioning the ways in which the nation-state and Western rhetorical tradition(s) are still the originary units of analysis, and 2) addressing a larger understanding of transnational connectivities that condition practices of rhetoric across and within the borders of the nation-state" (464).

Trajectory

Drawing from this transnational feminist methodology, the investigations of the dissertation follow the trajectory of the following questions, through which I delve deeper into the relationships between globalization, rhetorics of digital literacies and their technologies, and the material costs and consequences thereof.

In Chapter 2, "The Digital Literacy Myth: Tracing the Neoliberal Pedagogy in the National Education Technology Plan," I define the digital literacy myth, relying heavily on Selfe's *Technology and Literacy in the 21st Century*. I trace the ideological traffic of the myth through the 2010 National Education Technology Plan, revealing how what Riedner and

Mahoney name "the neoliberal pedagogy" shapes the report's redefinition of literate subjectivity in the global era.

In Chapter 3, "Rhetorics of Hope: Western Narratives of a 'Social Media Revolution,' I identify the digital literacy myth's influence in shaping how Western media understood the use of Twitter in the 2009 Iranian election protests. I reveal how these "flattened narratives" of a social media revolution cost us the opportunity to study more nuanced and historicized story of technology and democratic action, specifically through an analysis of women's knowledge, bodies, and labor in the work of the movement.

In Chapter 4, "Geopolitical, Bodily and Material Costs of Hope in the Two-Thirds World: Tracing Flattened Networks," I trace the costs of hope for democratic technologies and their literacies by attending to social disruption in the Democratic Republic of Congo, where rape is rampant amidst the conflict over coltan and other minerals necessary for the laptops and smartphones we love. In response to flattened narratives circulated by Western consumer advocates, I articulate the network of the technologies, literacies, and their consequences, including: systematic rape as a weapon of war, DRC women's agency and resistance, colonial histories of the DRC, the material production of coltan in its impact on social dynamics in the DRC, and the digital literacy myth and its operation as a frame that shapes US subjectivities. Through this constellation, I trace circulation of power among the actors as they are differently positioned, particularly against the background of rhetorics of technologies and flattened narratives of the foreign other.

In Chapter 5, "Teaching amidst Rhetorics and Realities of Digital Literacies in the Global Era," I respond to the question that guides the literature review above regarding the spectrum of individual literate agency in the global era and our role as literacy educators. I argue that we

should cultivate critical digital pedagogies that make informed and conscientious choices regarding digital writing assignments. I suggest a model of assignment design that includes "layers of literacies" and a transnational feminist pedagogy.

Connecting Moments of Affect, Intellect, and Materiality

As a final note before I begin, I want to take a moment to locate myself in this project. I find it important to say that my work in rhetoric and composition began nearly a decade ago when, as an M.A. student at Washington State University in Pullman, Washington, I began experimenting with technology in the composition classroom. A literature student at the time, I quickly found the questions of digital writing and critical pedagogy to be the most compelling of my intellectual journey. Transitioning out of literature and into writing studies, my teaching and writing sought desperately and excitely to explore how technologies could serve social justice, both within and outside of the classroom. In other words, I entered the field in 2006 with the same unfettered hope that Susan Romano describes with her phrase "the egalitarianism narrative." This is clear in the way that I came to my original site of analysis in this project—the 2009 Iranian election protests. On my 45-minute morning commute to Syracuse University that summer, I found myself teary-eyed with my radical desires awakened and stirred as I listened to NPR's account of how Iranians were using Twitter as a way to come together and fight for their political freedom. I was moved by the ways in which ordinary people from around the world were lending their support and solidarity, building beautiful political alliances over vast invisible networks. And these were the kinds of claims I made in my final days of coursework as I reflected on the archives of tweets I'd gathered from the months of unrest.

It wasn't until later that, through conversations with mentors, friends, and conference presentation attendees, I came to remember and enact my WSU mentors Barbara Monroe and Kristen Arola's advice to temper my claims, to dig more deeply, to look with a more critical gaze. Armed then with more postcolonial theory, transnational feminist thought, and attention to history's role in understanding contemporary events, it was kismet that brought me to my second site of analysis—rape in the Democratic Republic of Congo. It was the March 17th, 2010 airing of *Law and Order SVU*'s "Witness" episode that first introduced me to the problem. In the episode, character Nardali Ulah explains to the detectives that she was afraid to testify about a rape she had witnessed because she was in the country illegally from the DRC. Having run from the violence there, Ulah describes how five armed militiamen raped her and her five-year-old daughter in front of her husband. Later from the witness stand, defending her character in light of her illegal status, Ulah explains that she had fled the DRC due to the violence there, recounting how "the men who raped me were fighting for control of the mines that produce tin, tungsten and tantalum, the conflict minerals you so desperately need to make your cell phones and computers" ("Witness"). She cries as she recounts her story: "The women in my village were raped. The women in the militia camp were raped. I was raped repeatedly by so many men, I lost count. They put their guns in my sex and one of them pulled the trigger. I was in the hospital for over a year. It left me incontinent." Through my research I've found that this fictionalization is all too real, as are the problems of digital production and consumption and violence captured in the character's testimony.

In the Spring 2010 semester, I was working my way through seminar projects on Twitter in Iran when I put together the incredible hope with which I viewed technologies' democratic potential and the great pain with which I listened to the plight of women who were raped and

displaced by violence that sponsors the manufacturing of those technologies in another part of the world. It was in that moment of juxtaposition of hope and the material costs of that hope that this dissertation truly found its beginning. Working through that powerful moment of pairing, I aim to effectively demonstrate how the digital literacy myth shapes Western subjectivities as citizens in the world and consequently has material consequences, especially for women, across global borders. I have since come to see that, unfortunately, there are many other events and texts spanning histories and peoples whereupon I could have performed this analysis. To understand the harmful material consequences of the digital economy, I might have looked more closely at the transition from a stable farming economy to e-waste processing in Taizhou, China. Or, I could have analyzed the use of the Internet in the 1999 Seattle WTO protests, the use of Twitter in Moldova, or the role of digital organizing in the Arab Spring or Occupy Wall Street movements. Any of these sites grants the opportunity to trace the problems of globalization, technologies and their literacies, and networks of power.

The fact is, the materiality of literacy in the global era has ubiquitous consequences, and as literacy sponsors we invoke that materiality everyday in our classrooms—whether we acknowledge it or not. This project is a reflection of my own journey to temper and nuance my hope for technology and literacy in light of materiality in the global era. It is my sincerest hope that, through the pages of this dissertation, I can present the opportunity to my peers and colleagues "to think what we are doing" (Arendt), particularly with respect to the pursuit of literacy education to which we have dedicated our collective livelihoods. Through the lens of transnational feminism, I hope to uncover the hidden economic agendas, the neoliberal interests, the flattened narratives that are the undercurrents to the scene of contemporary literacy. While we may not be able to eradicate the real and rhetorical violence and oppression I describe in the

pages that follow through our pedagogies alone, I hope my analysis will confront willful or

incidental blindfolds that would bury our culpability in these global literacy systems.

Chapter Two: The Digital Literacy Myth: Tracing the Neoliberal Pedagogy in the National Education Technology Plan

> We need to acknowledge the economic and political goals that policymakers have identified as the end product of technology expansion: the effort to maintain and extend American privilege, influence, and power within an increasingly competitive global marketplace, ostensibly for the benefit of all citizens. (Selfe 160-161)

Introduction

When I began teaching college writing in the second semester of my Master's program in English at Washington State University in 2007, the digital divide and questions of whether we *should* use technology in the classroom were the most pressing questions concerning digital literacies and writing curricula at the time. iPhones wouldn't come out until later that year, and other smart phones were largely cost-prohibitive to most college students. YouTube had only been around for a couple of years, and the mass migration from MySpace to Facebook was just beginning—in fact, my featured paper for my M.A. portfolio was on using MySpace as a learning management platform in the FYC classroom. Optimism for the revolutionary classroom potential for writing technologies, like that described in the introduction, was rampant in my own teaching and writing and that of my colleagues.

That said, many computers and writing scholars have warned against including technology in the writing curriculum for technology's sake; Adam Banks, for instance, writes in *Race, Rhetoric, and Technology* that writing teachers "must make sure clearly articulated pedagogical goals drive all technology decisions so that purchases, training, and planning related to technology implementation remains relevant to the learning, social, political, and economic needs of those we serve" (20). And when we do include, teach, and rely on digital literacies in writing classrooms, computers and writing scholars have advocated that we help students

perceive and make rhetorical choices appropriately in light of the social, political, and material realities shaping issues related to technologies, their affordances, and circulation, among other concerns. Stuart Selber, for instance, argues in "Reimagining the Functional Side of Computer Literacy" that teachers must "help students negotiate the multiple and contradictory discourses in which they will be implicated as writers and communicators," including those inscribed within various digital interface designs (485). In other words, evolving out of the originally sweeping claims and significant critiques of the potential of technology in the writing classroom described in Chapter 1, and in light of the growing ubiquity of student's technological access and literacies, computers and writing scholars have come to a more temperate view—what Cindy Selfe has recently described as a "healthy skepticism" about teaching with technology (Beck 350).

Less than a decade into my teaching career—recognizing, of course, my location at an expensive, private university—I now can rely on the vast majority of my students to have smartphones and laptops, and to already possess or be able to develop functional literacies for digital filmmaking, podcasting, or website building within a few short class sessions. Our students (often and controversially referred to as "digital natives") come to us now with a relatively high level of digital access and literacy thanks, in part, to US national technology and literacy agendas that have been in the works since the latter half of the 20th century. That is, a national political economic agenda has been achieving its goals with help from the private sector. Attending to materiality of literacy in the global era, in this chapter I work to explore the hidden US economic agenda and its roots within the digital literacy myth. Analyzing the 2010 National Education Technology Plan, I reveal how the digital literacy myth's promise for US economic progress and competitiveness in the global economy is trafficked through educational policy.

Roots of the Digital Literacy Myth: Returning to *Technology and Literacy in the Twenty-First Century*

As I demonstrate in Chapter 1, while computers and writing scholarship often focuses on materiality, it is much less common for this scholarship to interrogate the national political backdrop against which our students develop their literacies, let alone the historical, material, and social circumstances that inform those literacy opportunities. Still the best example of this kind of work is Selfe's 1999 book *Technology and Literacy in the Twenty-First Century* wherein she traces the US government's vision of an economic future that would rely on our position as the most technologically advanced nation in the world. To reach this goal, she notes, we would need to invest in and develop cutting edge technologies; we would need a citizen population literate enough to purchase and use those technologies; and, we'd need a work force with the technological literacies to support those objectives and to make us the most advanced labor population in the Information Age. In this introductory section, I will spend considerable time carefully re-presenting Selfe's work on the political implications of public policy and discourse on literacy and technology, in part to show my project's indebtedness to her analysis. I understand the history Selfe traces to be the roots of the digital literacy myth, and I hope that my work takes up her torch to reveal that still more attention must be paid to technology and literacy given new power assemblages in the global era.

In her book, Selfe describes that the Clinton administration's 1990's Technology Literacy Challenge—which was articulated through the 1996 National Education Technology Plan: *Getting America's Students Ready for the Twenty-First Century: Meeting the Technology Literacy Challenge*—communicated a complex mix of hope, anxiety, and ideology that connected technology, literacy, and our national economic agenda. The Challenge meant to

ensure "equal access to an education rich in opportunities to use and learn about technology,"

claiming that with this kind of literacy "graduates will be qualified for high-paying high-tech

jobs and thus have the means of achieving upward social mobility and economic prosperity

within our increasingly technological culture" (5-6). However, Selfe argues that the plan,

rather, "serves a fundamentally conservative role," as it maintains hierarchical social strata based

on historical divisions along race, class, and gender lines, defines people as literate or illiterate in

ways that reinforce socially inequitable and uneven distributions of social capital and material

advantages, and finally, reproduces faith in technology as a path to social and economic

progress. "Unfortunately," Selfe points out, "the very hopefulness of the group generally blinds

them to the important connection between the literacy instruction in our existing

educational system and that system's role in reproducing persistent social problems" (9).

Throughout her work tracing the investments, ideologies and costs of the technological

literacy agenda, Selfe returns to the point that official definitions of literacy are imbued with

power and bear material consequences. She explains that national literacy programs contain

inherent definitions of literacy, which—as Graff and Street and other literacy scholars before her

have revealed—have deep ideological currents and real material impact on the lives of citizens

defined as literate or illiterate. More pointedly, Selfe writes that: "the definition of literacy

determines not only who will succeed in our culture—and the criteria for such success—but also

who will fail" (18). While many literacy scholars have traced how specific literacies can affect

particular groups' ability to succeed, especially as outsiders to a dominant discourse (see Young;

Royster; Prendergast; Stuckey; Vieira), the technology literacy agenda, as she points out,

correlates to Graff's literacy myth in that the investments we place in literacy's potential for our

nation's wealth and democracy quite often work *against* many historically underserved people. She argues that:

> …the national project to expand technological literacy has not served to reduce illiteracy or the persistent social problems that exacerbate illiteracy. Rather, it has simply changed the official criteria for the labels of both "literate" and "illiterate" while retaining the basic ratio of individuals in both groups [along the axes of race and class]. …Literacy is always a political act as well as an educational effort. (137*)*

And if the project was not in actuality benefitting all citizens in the way that it promised, Selfe points out that it was, at least, meeting its other goals in "producing a continuing supply of educated workers who had the skills necessary to design and manufacture increasingly sophisticated technological goods and could offer specialized technological services in international arenas" (138). In this way, one of her primary arguments in the book explains, "formations associated with capitalism, including the corporate and industrial sectors… contribute to a collective cultural understanding of the official skills that make up technological literacy" (13).

While Selfe builds on past literacy scholarship, tracing how definitions of technological literacy might serve to further harm those who have been impacted by definitions of print-based literacies historically, she also presents an important analysis of how hegemonic private and government powers benefit economically from the new national literacy project centered around technologies. Selfe reveals the hidden economic agenda buried within the National Education Technology Plan, pointing out how the Clinton administration sought to use the already publically accepted sense of technological literacy as important to the coming future to fuel policy efforts like the Global Information Infrastructure (GII) to invest in our nation's growing technological literacy assets in the global market. Selfe articulates the two dominant goals of the GII. First, she argued that the GII sought "to increase the worldwide markets for American

technologies and expertise by encouraging a range of developing countries to establish and

become increasingly dependent on network computing environments," and thus, "countries

would need American technology, and they would provide technology-based businesses in the

United States with a continued market for electronic products" (55). Second, Selfe writes, the

GII aimed:

> …to promote the spread of democracy and liberalized systems of capitalism. The GII was to provide forums for democratic involvement and expanded freedom of speech, illustrate the need for increasing privatization of technology resources, and offer a case study for decreasing government regulation. (55)

She cites Vice President Al Gore's public statement regarding the GII as fundamental to our

foreign policy and good business: "Each link we create strengthens the bonds of liberty and

democracy around the world. By opening markets to stimulate the development of the global

information infrastructure, we open lines of communication. By opening lines of communication,

we open minds" (qtd. in Selfe, 55-56). Thus, the threads of technological, democratic, and

economic hope have long been intertwined in our national policy.

The private sector, Selfe reveals, had a mutual role and investment in the spread of

demand for technologies and their associated literacies, and business and industry worked to

support this national literacy project. In one of the clearest explanations of the neoliberal interest

in the technological literacy agenda as she presents it, Selfe recaps the history of private

investment this way:

> To start the engine that would drive America's economic revitalization effort in both the domestic and international arenas, the private sector had two major tasks to accomplish. The first involved maintaining or increasing the pace of domestic technological development by stimulating the appetite of American consumers for a broad range of sophisticated technological products, thus creating high-paying, high-tech employment opportunities for increased numbers of American workers and fueling economic growth. The second task was to influence and support the educational system as it produced technologically literate employees who could help export high-tech goods and services to foreign countries hungry for their own technological expansion. (87)

In other words, the private sector served to benefit from, and thus invested in, propelling the technological literacy agenda in order to reap the economic benefits that were promised by expanding domestic demand and global markets for technological goods and services. Demand for these goods and services would not be possible without the increasing access to technological literacies needed to operate the technologies, and hence the government and private interests sought to invest in making those literacies more accessible.

Even then, there was a sense that global economic competition would play a significant role in the power and future status of the US in the years to come; the Technology Literacy Challenge, in combination with the Global Information Infrastructure plans, reflected our national plan to ensure our economic success. Selfe relays convincingly the collusion between government and private interests to leverage our nation's resources in technological literacy, development and manufacturing, expertise, service, and consumerism toward leadership on the global stage. She points to reliance on outsourcing of labor as one way that the US gained advantage in breaking the barrier of prohibitive costs of technological manufacturing, and shows how this move also helped to deepen overseas interests in consuming those products (94). Selfe writes that the shift in the economic agenda and its dependence on the prevalence of technologies and their literacies also relied on a "complex global dynamic" that "depended on the vigorous engine of the technology industry to produce technological goods, stimulate consumer appetites for electronic goods, and employ individuals educated in schools that value technological literacy" (95). Selfe explains that the government and private sectors worked to instill the opportunity and cooperation from citizens that were necessary for materializing the technology and information-based, globally competitive national economy they imagined for the near future. Noting the overt commitment to this plan and its projected political and economic outcomes,

Selfe argues that "it was not coincidental that the achievement of the goal would, in turn, provide additional demand for more sophisticated technological goods on the part of more citizens and could continue to improve the economic picture" (96-7). Essentially, the government and representatives in the information technologies industry came together to draw upon global networks and realities and to compel citizen-consumers to desire the technologies and literacies that would meet the ends of their envisioned economic future. This strategic collaboration is the foundation of the transnational network of literacy and materiality that I uncover throughout this dissertation.

Among the most traceable (if not transparent) spaces in which to follow government efforts to support this economic agenda is in educational policy, and more specifically the National Education Technology plans that have evolved since the first iteration in 1996. Selfe pointed out the ways that this US educational policy document and related public campaigns aimed at building an educational system to help realize national economic goals. She wrote that:

> It is primarily within the articulated ideological relationships revealed by this narrative [about the promise of literacies]–where a belief in technological progress, a value on the competitiveness of nations and individuals, and the recognition of economic security as a national and individual goal are connected–that the identity of the project to expand technological literacy was constituted in our culture. (122-23)

The 1996 National Education Technology Plan, she pointed out, contained within it rhetorics that were reliant on many aspects of Graff's literacy myth—specifically how government investments reveal a narrative about technological progress. She translates this narrative into the equation: science + technology + democracy (+ capitalism) + education = progress + literate citizenry (122-23). While Selfe did an excellent job of showing how traces of Graff's literacy myth showed up in our educational policy at the turn of the century, I have found that in the global era those strands of the literacy myth have actually evolved.

In the global era, the literacy myth has become entangled with the US economic and political agenda for technology and literacy, resulting in a new iteration, what I call "the digital literacy myth." The *digital literacy myth* describes the ways in which government, public, and academic discourses cast digital technologies and their literacies as a means of access to economic gain in the global economy and the spread of democracy on a global scale. These rhetorics, as I will develop throughout the dissertation, are deeply ingrained in our national imaginary, and their articulation, overlap, and circulation, carries social, political, and material consequences across borders. The digital literacy myth embodies the initial elements of economic and democratic progress, but also extends that promise in scope from the individual to national level and from national to global level. Specifically, in the digital literacy myth, print literacies become literacies of digital technologies; economic promises are transferred from individual upward mobility to our nation's success as a global superpower; and, the promise of democracy focuses not just on greater inclusion domestically, but also the spread of democracy across geopolitical borders.

Like Selfe, I will turn to the National Education Technology Plan to highlight how the rhetorics of the digital literacy myth are infused within educational policy in order to help the US citizenry accomplish its economic goals. The latest iteration of the NETP, *Transforming American Education: Learning Powered by Technology*, was released in 2010. The report is situated firmly within the global era, wherein the movement of people, money, and information across borders has enabled many cosmopolitan dreams, but has also yielded economic uncertainty as the interdependence of the global economy stimulates a hefty national anxiety for the US and all states. While Selfe traced the ways state and private interest-endorsed definitions of technological literacy came to be enacted in the 1990s in anticipation of a more deeply

globalizing and information-based world, my goal is to demonstrate how many of the schemes she traced have become only more deeply sedimented into our public policy, and increasingly imbued with neoliberal interests.

Part of the trouble with studying neoliberal logics, or ideological constructs that coalesce toward a particular goal or interested projection of how the world ought to be, is that the rhetorics of neoliberalism are often confused for socially concerned efforts. For instance, consider the language of "right-to-work" states. This language seems to position political security and agency in employment for workers, when in reality the legislation grants employers the right to terminate employment at will, depending on employer-set terms rather than state-protected rights. Or, consider the "Guest Worker Program" rhetoric, wherein, Jen Wingard argues, "the state uses certain bodies that will never be accepted as citizens as an underclass in service of capital" (ix). In this way, neoliberal interests and rhetorics travel across borders and inform how Two-Thirds World peoples are made fit for the global economic market. For instance, as Dingo points out with her analysis of microlending from individuals in the US who seek to "empower" women in developing nations, this "empowerment is melded with neoliberal capitalism in ways that elide women's cultural and geopolitical locations" (128).

Further, "the neoliberal logic that credit and markets empower women is enabled by gendered colonial discourses; empowerment circulates as an interarticulated rhetoric that masks women's specific and lived realities" (129). Under neoliberalism, already disenfranchised groups like women, immigrants, people of color, people with disabilities, and the poor are subject to (and often persuaded to buy into) supporting roles that benefit private capital on a broad scale, roles that meanwhile protect the status quo that set the conditions of their disenfranchisement in the first place. As Dingo explains, neoliberal arguments attempt to eschew the past and invent

the new (i.e., the 'neo' in neoliberal) so that arguments become detached from their contexts and histories" (100-101). Neoliberal logics, like those within which the digital literacy myth is situated, use this decontextualization to better serve capital while seeming to serve the public good. And, these rhetorical moves come with unevenly distributed material consequences for the lived realities of an interconnected global public.

My analysis of the most recent NETP confirms what Dingo writes of public policy, that it "is merely a tangible outcome of a set of distributed logics" incorporating ideology from areas as diverse as "legal rule, personal experience, cultural memories, history, political ideologies, economic relationships, transnational connectivities" (25). Dingo refers to these as "boundless distributed logics," which reflect ideologies that become absorbed into social structures and shape outcomes for people across borders. These logics are "boundless" and "distributed" because, although they have roots in particular political histories and relationships (such as European colonialism or US territory expansion), they become untethered from their originary locations in time and space in order to operate in new contexts.

In my analysis, I find that government and private interests for securing a US foothold in an evolving global economy overlaps with a neoliberal sense of the student-as-future-worker, and even an eye toward *including* historically Othered bodies. This state-sponsored policy might seemingly suggest outcomes that would benefit those who reached the digital literacy-learning levels it envisions, however those benefits will be unevenly distributed as were those of the print literacies that preceded the digital age. Further, as Dingo points out: "Neoliberal rhetorics of empowerment focus on *giving* agency to individuals–often with primacy on individual economic advancement, which tends to further subjugation/colonization" (108). In other words, I argue that tracing the digital literacy myth through the report's seeming emphasis on *providing* advanced

skills and literacies of the global era by leveraging technology in all areas of learning—while perhaps seemingly altruistic and democratic in aim—must be read in terms of private stakeholders, neoliberal interests, and government anxiety about national reign in a shifting global economy. In the analysis that follows, I unearth a buried narrative within the *Transforming American Education* report that reveals the boundless distributed logics of the digital literacy myth and neoliberalism in the global era.

Neoliberalism, Pedagogy, and Policy

By and large, 20th century education seemed founded upon the Deweyan project of schooling as a means to enact a more perfect democracy. Whereas dominant US ideology held that public education would serve the good of the nation by molding students into fully-informed agents in our democracy, in the neoliberal era, rhetorics of education are shifting to reflect anxieties concerning students as future workers and our nation's status in the global economy. Henry Giroux and other critical pedagogues have long acknowledged that "it is impossible to separate what we do in the classroom from the economic and political conditions that shape our work" (3), and at the moment that means that political realities and neoliberal interests are continuing to shape K-12 and higher education in the age of high-tech global capitalism. Since the global economic crisis of the early 21st century, educational policy has been increasing susceptible to neoliberal influence. The private sector has seen growing profits in the areas of textbooks and testing, while the use of business discourse is prevalent in public policy and educational scholarship alike. More and more, private partnerships and contracts are influencing curriculum and instruction, circumventing teacher experience and training. Thus, private interests and logics are dovetailing with our public education system.

Another resulting trend is the demand in education, and in other publicly sponsored venues, to do "more with less." In a 2010 speech to the conservative public policy think tank American Enterprise Institute, Education Secretary Arne Duncan describes how, amidst "the worst recession since the Great Depression," the fiscal downturn "is a reality that everyone seeking to improve education must grapple with. Yet, there are productive and unproductive ways to meet this challenge of doing more with less." He advocates for technology as one way that schools can accomplish more productivity with less financial input:

> Technology can play a huge role in increasing educational productivity, but not just as an add-on or for a high-tech reproduction of current practice. Again, we need to change the underlying processes to leverage the capabilities of technology. The military calls it a force multiplier. Better use of online learning, virtual schools, and other smart uses of technology is not so much about replacing educational roles as it is about giving each person the tools they need to be more successful—reducing wasted time, energy, and money. (Duncan)

Increasingly, through policy like Race to the Top, public funds for schools are being based upon student test scores and teacher evaluation and accountability. Technology, according to Duncan and other policymakers, will help measure, assess, and improve education through cost-effective means and toward profit-ensuring ends.

We can see this neoliberal shift in educational models as rhetorics of technologies and their literacies' have been imported, circulated, and have evolved in educational policy since the 1980s. In their article "A Retrospective on Twenty Years of Education Technology Policy," Katie Culp, Margaret Honey, and Ellen Mandinach point out that as early as 1983, federal policy was shifting to include technology as an essential feature of US public K-12 education (279). Commissioned in preparation for the 2004 National Education Plan, the report notices the trends and distinctions among nearly 30 policy documents concerning education technology between 1983 and 2003. From across their 20-year sample, Culp, Honey, and Mandinach find that three

themes guide the reports' argument in favor of investing in educational technologies: that technology can serve "as a tool for addressing challenges in teaching and learning" (282), that technology can be "a change agent," and that it can operate as "a central force in economic competitiveness" (283). They even cite one 2002 report that argues for "the urgency of investing in technological literacy, broadly defined, stating that increasing the technological literacy of the public would improve decision making, increase citizen participation, support a modern workforce, enhance social well-being, and narrow the digital divide" (286). Revealing and confirming Gramsci's point that the shift from one historic bloc to the next is never clean, residual invocations of the democratic promise captured in the digital literacy myth are ubiquitous among these policy documents. However, neoliberal rhetorics and what Dingo and Strickland call "the anxiety of globalization" are now deeply infused within public policy, including the National Education Technology Plans.

The *Transforming American Education* report, as do some of the educational technology policy statements that precede it, contains neoliberal logics that are naturalized in the language and context of the document and require close reading to be revealed. The document reflects neoliberalism as "a hidden pedagogy," as Rachel Riedner and Kevin Mahoney describe in *Democracies to Come*. While there are many definitions of neoliberalism to work with, I like Riedner and Mahoney's in particular because of their focus on rhetoric's service to the project. As they describe it, neoliberalism is "an economic policy of upward redistribution in which public services are privatized, markets are opened up, and weakened government regulations are allowing corporations the 'freedom' to pursue capital by extending market relations ever deeper into our social relations" (10). While this may read as a standard definition, the authors base their conception on what Bourdieu calls "strong rhetoric," which is "persuasion as a mode of

authoritative discourse, particularly the authoritative discourse of Empire, that is enacted

materially, on bodies, practices, subjectivities, cultures, and communities. Neoliberalism is the

pedagogy of Empire" (10). In this explanation, the authors draw attention to the ways that

citizens must be persuaded by active state, private, and powerful interests to "buy in" to the

logics that they might otherwise see as disenfranchising. In fact, these interests draw upon strong

rhetoric to make their schematic seem the best and only choice.

As a "hidden pedagogy," neoliberalism, Riedner and Mahoney explain, has to be slowly

and carefully written into mainstream cultural epistemologies to be effective pedagogically. The

use of *writing* here makes it so that: "we can see the economic as a product of intention, choice,

and as crafted. We can begin to analyze the particular rhetorical strategies, if you will, of writing

of neoliberal economic relation into the social fabric as an act of pedagogy. It's a process of

approximating, normalizing, and writing, an established truth that has been posited discursively,

rhetorically, and materially" (11). This slow emersion from many angles resonates with what

Selfe described as the "capillary"-style (borrowed from Foucault) infusion of desire for

technologies and their literacies instigated by the government and tech industries. Selfe showed

us the slow and careful persuasion of the American public to subscribe to notions of

technological literacy as essential for upward social mobility. This same process has now

become firmly rooted in the assumptions and practices of public education, although now the

sense of global consequence is more overt and the neoliberal framing is more thinly veiled.

These ideas are made more convincing, just as in Graff's literacy myth, because there are

exceptions within which digital literacies *do* grant some individuals economic mobility or

democratic participation in particular circumstances. But the fact remains, there are no

guarantees for US citizens' economic gain or democratic participation due to digital literacies, let

alone that technologies and their literacies will deliver democracy to other nations and cultures, as I explore in Chapters 3 and 4. Rhetorically, the digital literacy myth serves neoliberal interests by garnering public buy in through its false promises.

In educational technology policy, we see the neoliberal rhetorics that shape learning and teaching realities in public education around the country. As such, attention to how these rhetorics operate in the policy is a must for anyone concerned about what larger forces are at work in, and what myths might shape, the landscape in which we work with various technologies in school. For Riedner and Mahoney, the rhetorical quality of neoliberalism makes meaning that operates in the world. Subjects' seeming range of choices are made available through the rhetorics that work on their daily spaces. In other words, "As a rhetoric, as a world vision, as a system of value, as relationship between labor and capital, as a politics, and as a cultural consensus, neoliberalism is also a pedagogy: a mode of education that exists in a variety of cultural sites that incorporates subjects into dominant neoliberal ideology" (20). One of those sites has been the history of educational technology policy, as Selfe revealed in the 1996 National Education Technology Plans, and as Culp, Honey, and Mandinach traced in the educational technology policy from 1983-2003.

Neoliberalism's hidden pedagogy in these documents can be located in evolving rhetorical patterns. Beginning in 1995, for instance, the power of educational rhetorically shifts in the reports; rather than technology being described as tools that solve teaching challenges, "technology becomes a tool of transformation, which promised, simply by its presence and capabilities, to cause changes in how teachers teach, how schools are organized, and how students work together and learn" (Culp, Honey, Mandinach 300-301). Here, the agency is transferred from the teachers and schools to the technology itself. These rhetorics work to further

disempower literate agency of teachers at the same time that they are sponsor the digital literacy myth. As I show in Chapters 3 and 4, the digital literacy myth operates in conjunction with neoliberalism as the hidden pedagogy of the state, working to achieve state and private interests. Rhetorical attribution of agency to technology, rather than people, becomes a significant part of that pedagogy, as people now envision technology as the key to their political and economic ends. In reality, it is the ends of the state and private interests that are served by this project. My analysis of the *Transforming American Education* policy works to further uncover this hidden pedagogy, its connection with the digital literacy myth, and how the document's rhetoric defines explicit roles for the state, for schools, and for citizen-subjects.

Transforming American Education: Policy and Overlapping Hopes

In 2009, the Department of Education's Office of Educational Technology began work on updating the 2004 version of the National Educational Technology Plan, an educational policy document that focuses on integration of technology into public education. In meeting the demands of the Obama Administration's Open Government Directive, which promotes "transparency, participation, and collaboration" in policy development and implementation across executive departments and agencies, contributors to the updated plan included experts and stakeholders from government representatives, educational science scholars, national education organizations, private technology developers from the business sector, varied philanthropic organizations, and public school administrators, among others. More, *Transforming American Education: Learning Powered by Technology*[8] is remarkable for the process of its making. The

---

[8] This is the third NETP to be released since the 1996 *Getting America's Students Ready for the 21st Century: Meeting the Technology Literacy Challenge* report considered by Selfe in

document went through quite a few stages of revision, each enhanced through data collection and collaboration that took place, in part, through the use of Web 2.0 platforms.

Organized by SRI International, an independent nonprofit research firm, the first draft was developed out of focus groups held in June 2009 at the National Educating Computing Conference, wherein teachers, administrators, and software specialists contributed their conceptions of contemporary learning and technology. Following the conference, chief technology and chief information officers from school districts across the country participated in a forum to share their ideas. Finally, "300 leading educators and educational technology experts participated in the ISTE Leadership Symposium," drew up the initial draft of the Plan, and then opened the draft for public comment hosted on a Department of Education webpage from June 29-July 12, 2009 (*Transform* A-1). The findings were shared with "a technical working group of educators, researchers, and state and local policymakers," who used the data to draft the initial vision and goals for the NETP over the course of a total of six days of face-to-face meetings and 10 hours of webinars (A-1). Over the course of three months, the second version of the NETP was publicly available for input, during which time the site saw tens of thousands of visits. Over 2,500 interested parties registered, representing teachers, students, administrators, researchers, policymakers, and more. Another round of webinars with pertinent organizations, a summit with developers from top technology companies, and a final round of revisions resulted in a policy document filled with hope and promise for reshaping the American education system and meeting our national destiny with the help of technology. What's especially significant about the

---

Technology and Literacy in the 21ˢᵗ Century. The others include the 2000 report *eLearning: Putting a World-Class Education at the Fingertips of All Children*, and 2004's report, *Toward A New Golden Age In American Education—How the Internet, the Law and Today's Students Are Revolutionizing Expectations*.

process of this document's development is that it openly turned to the public, concerned experts,

and relevant private parties in order to craft a policy that reflects democratic inclusion of the

diverse interests of a range of stakeholders. It is, perhaps, for this reason that the document

reflects overlapping and sometimes contradictory values and impulses. These values and

impulses together illustrate throughout the policy the digital literacy myth as I've been

articulating it.

The Digital Literacy Myth in the TAE

Throughout the *Transforming American Education* report, the digital literacy myth overtly and

implicitly informs the authors' understanding of the outcome of "transforming American

education" with technology. Exhibiting faith that technologies and their literacies promise

individual or national economic prosperity and greater democracy, the authors write, for

instance:

> The United States cannot prosper economically, culturally, or politically if major parts of our
> citizenry lack a strong educational foundation, yet far too many students are not served by
> our current one-size-fits-all education system. The learning sciences and technology can help
> us design and provide more effective learning experiences for all learners. (19)

Here the report reflects the long-standing classical literacy myth that schooling, and hence the

abilities to read and write, guarantee economic and national prosperity. The fate of our citizenry

and our country depend on quality education, education—they argue—that can be vastly

improved through technology. This is the myth in its most macrolevel instantiation; however,

there are many more microlevel moments in the report wherein the technological faith that is

essential for the myth to prevail manifests as a suggestion, goal, or example. It is in these

micromoments where the neoliberal pedagogy most effectively hides, and thus where we must

devote careful attention. Tracking and categorizing these moments in *Transforming American*

Education led me to articulate several premises pertinent to the logic of fulfilling the promises of the digital literacy myth as it plays out in the report:

1. The primary goal of restructuring education with technology is to ensure American leadership in the global economic market;

2. In order to remain competitive, we need a particular American worker-subject that embodies the specific skills required by private interests in the digital, global era;

3. That subject must be well possessed of STEM skills;

4. Those who have been historically underserved must also be included in the updated (digital) literacy myth;

5. Constant assessment will make certain we are (cost-)effectively achieving these goals;

6. And, the state has an investment in and responsibility for ensuring the above goals are met, toward fulfilling the myth.

I will investigate each of these premises and the small moments that inform them as they unfold in the *Transforming American Education* report below.

1. The primary goal of restructuring education with technology is to ensure American leadership in the global economic market.

While the initial literacy myth focused primarily on an individual's social mobility as the economic gain, the digital literacy myth tends to focus on the individual primarily *as a means* to greater innovation and economic competitiveness for the nation in the global market. It is precisely in this way that Arne Duncan's introductory letter and the introduction to *Transforming American Education* position the need for restructuring the education system with regard to

technology's affordances. Duncan's remarks in the front matter of the report, for instance, begin

very tellingly:

> Education is vital to America's individual and collective economic growth and
> prosperity, and is necessary for our democracy to work. Once the global leader in college
> completion rates among young people, the United States currently ranks ninth out of 36
> developed nations. President Obama has articulated a bold vision for the United States to
> lead the world in the proportion of college graduates by 2020, thereby regaining our
> leadership and ensuring America's ability to compete in a global economy. To achieve
> this aggressive goal, we need to leverage the innovation and ingenuity this nation is
> known for to create programs and projects that every school can implement to succeed.
> (v)

In his assessment, we sense the anxiety of competition in the global educational market, leading

Duncan to conclude that more college education will benefit our national footing in the global

economy. Education, the statement asserts, is important for its utility to economic prosperity, for

individuals who can become prosperous and help the nation do the same, and only then for

democracy to function. The nation's success in financial terms, and in the systemic and social

terms implied by the use of "democracy," is tied to the ability of individuals to access education.

To be the leader in degrees granted, the statement affirms, will help maintain the US as a global

economic superpower, but only if those degrees are reflective of innovative potential, which

technologies and their literacies will help ensure.[9]

    While there are many moments exhibiting uncritical technological faith throughout the

body of the report, the earliest moment in which technology is framed with the powers that drive

---

[9] The problem I take with this rhetorical gesture is not so much that college education can in
some cases support individuals in economic reward or informed participation in our democracy.
Rather, my concern is for the ways in which Duncan's statement reflects the state's unarticulated
project in connecting American workers to their technology-based agenda for maintaining
dominance in the global economy. This narrative is less concerned with the many individuals for
whom the myth will not come true—often thanks to unevenly distributed resources, rights, and
freedoms among government-sponsored public structures that maintain white, heterosexual male
privilege. Rather, the motives behind rhetorics of expanded college education and digital
literacies are more concerned with building a critical mass of exploitable labor.

the myth appears early in the executive summary, where a sub-theme of the report is also first

articulated: technology is ubiquitous in private, public, and business life, and so should be used

to reshape and improve education. The authors express the necessity of "leveraging" technology

in education because they believe it can:

- "provide engaging and powerful learning experiences and content";

- "measure student achievement in more complete, authentic, and meaningful ways";

- "be pivotal in improving student learning and generating data that can be used to
  continuously improve the education system at all levels";

- "help us execute collaborative teaching strategies combined with professional learning
  that better prepare and enhance educators' competencies and expertise" (xi-x).

In other words, technology has the power to provide better content, mode, and structure to

learners than education has yet allowed. In fact, education is described as an antiquated system

that, in some ways, has not evolved since the 1800s and 1900s (xx, 68), whereas today's youth

have already successfully integrated technology into their lives and are clearly better for it. The

educational system, then, must be updated to get with the times, promoting the independent and

individualistic learning students are already doing outside of school:

> Many students' lives today are filled with technology that gives them mobile access to
> information and resources 24/7, enables them to create multimedia content and share it
> with the world, and allows them to participate in online social networks where people
> from all over the world share ideas, collaborate, and learn new things. Outside school,
> students are free to pursue their passions in their own way and at their own pace. The
> opportunities are limitless, borderless, and instantaneous. (x)

Essentially, students are already on their way to creating, participating, and pursuing knowledge

in limitless ways through their use of their personal consumer technologies; they are primed to

become the technological innovators our economy and democracy need—yet education is

holding them back, or so it seems given the rhetorical construction of the passage. Whereas

outside of school students are free and find themselves in a media-rich environment that

encourages participation, schools are akin to "dark zones" where creativity, sharing, and

meaning-making are inherently squashed by outdated instruction and technology. Here, too,

through the rhetorical moods of agency and freedom, technology is positioned as empowering to

consumers—rhetoric that works to accomplish and naturalize a neoliberal project in public

education. The line of reasoning I've traced in this first step of the narrative concludes and

persuades that:

> *Our national security as a democratic institution and as an economic superpower thus*
>
> *depends on the retooling of education with the infusion of technology at every structural*
>
> *opportunity.*

2. In order to remain competitive, we need a particular American worker-subject that

embodies the specific skills required by private interests in the digital, global era.

> Neoliberal rhetoric is intended to preserve, stabilize, and extend capitalist social/labor-relations, with the particular purpose of producing laboring subjects. (Riedner and Mahoney 20)

In the third paragraph of the introduction, the authors of *Transforming American Education*

proclaim their goals with regard to the type of American subject they wish American education

to produce:

> We want to develop inquisitive, creative, resourceful thinkers; informed citizens; effective problem-solvers; groundbreaking pioneers; and visionary leaders. We want to foster the excellence that flows from the ability to use today's information, tools, and technologies effectively and a commitment to lifelong learning. All these are necessary for Americans to be active, creative, knowledgeable, and ethical participants in our globally networked society. (1)

Education critics, scholars, and critical pedagogues have understood at least since Dewey the

ways in which public education works to manufacture a particular kind of subject, one which can

potentially serve or thwart state interests. And, as Dewey himself put it, "the conception of education as a social process and function has no definite meaning until we define the kind of society we have in mind" (103). In this case, the intended American society is one that is globally connected and competitive, one that leads the world in literacy and social, technological, and economic progress. The education and government experts who contributed to the report have a particular idea of the necessary subject who can make this envisioned society a reality.

Several scholars have identified a new worker subjectivity generated by the passage from the post-Fordist economy to the Information Age. Contemporary work in the knowledge economy has been described as immaterial, information-based, symbolic-analytic work, wherein workers produce and use conceptual rather than physical products, navigate complex networks, experiment, collaborate, and think in abstractions through fragmented and flattened hierarchies (Johnson-Eilola). Symbolic analytic work was first defined by political economist Robert Reich, before his tenure as labor secretary under Clinton in the 1990s. In *The Work of Nations: Preparing Ourselves for 21st Century Capitalism*, Robert Reich describes the emerging global knowledge economy, in which "barriers to cross-border flows of knowledge, money, and tangible products are crumbling; groups of people in every nation are joining global webs" (179). He aptly foretold that as this shifting economy demands new kinds of workers, those equipped with necessary skills would not fairly represent social groups. The symbolic analysts, whose skills must include "*abstraction, system thinking, experimentation,* and *collaboration*" (236), were being educated within systems outside of the standard test-driven banking model of education; "rather than construct meanings for themselves, meanings are imposed upon them" (236). The *Transforming American Education* report implicitly draws upon these descriptions and proscribes instead the kind of education that can generate far more future workers with

60

symbolic analytic skills from across social strata. These symbolic analytic skills are directly tied

to the demands and shaped by the literacies of the Information Age as they've co-developed

across the spheres of the cultural, the personal, and the economic.

More specifically, the skills required to accomplish this sort of work demand a new

subjectivity, what Reich later referred to as possessing qualities of both "geek" and "shrink"

(cited in Johnson-Eilola 28). The symbolic analytic subjects, according to Johnson-Eilola, should

be ethical "rhetorical technologists," who can:

> …identify, rearrange, circulate, abstract, and broker information. Their principle work materials are information and symbols, and their principle products are reports, plans, and proposals. They frequently work online, communicating with peers (they rarely have direct organizational supervision) or manipulating symbols with the help of various computer resources. (29)

What's required of the new worker, however, is not limited to a set of data-processing skills and

communicational literacies. Rather, the subject is expected to represent his or herself as a *whole,*

dynamic person who is happy to invest their personality and creativity into their working lives as

well. The ways in which youth and adults have come to compose and perform their identities and

their meanings in collaboration with others via email and synchronous and asynchronous chat (in

the early days), and increasingly through social media, games, and other virtual communities—

now seamlessly interwoven throughout work and play in one's daily life thanks to mobile

technology (see Farman)—have developed alongside increasing demand in the global economic

sphere for workers whose self and whose literacies can be playfully and creatively adapted to the

needs of a given work task and environment.

James Paul Gee, describing a newly needed educational landscape that walks the line

between preparing youth for the new capitalist job market and preparing them to critique it,

explains that individuals on the new job market must portray themselves as "shape-shifting

portfolio people." These new workers are compelled by contemporary capitalism to shape and reshape themselves according to whatever arising need is currently prioritized, and hence workers must be flexible and adaptable in order to be secure in their positions (if there is to be any "security" at all). As Gee explains, "Security in the new capitalism, such as it is, is rooted not in jobs and wages, but in what I will call one's 'portfolio.' By one's portfolio I mean the skills, achievements, and previous experiences that a person owns and that he or she can arrange and rearrange to sell him or herself for new opportunities in changed times" (97). He explains that in new capitalism, young job seekers' "set of skills, experiences, and achievements, at any one time, constitutes their portfolio. However, they must be ready and able to rearrange these skills, experiences, and achievements creatively (that is, to shape-shift into different identities) in order to define themselves anew (as competent and worthy) for new circumstances" (105).

The *Transforming American Education* report contributes to this redefining of the contemporary worker by integrating technology at each stage of the education process, envisioning an educational environment that continually provides, monitors, and corrects the learning of a worker-subject who learns and whose learning is improved by technologies and their literacies. As the report describes, "The challenging and rapidly changing demands of our global economy tell us what people need to know and who needs to learn. Advances in learning sciences show us how people learn. Technology makes it possible for us to act on this knowledge and understanding" (10). Education, in other words, must be designed and determined according to the needs of contemporary jobs. Gone, then, are the days in which the national project for education was intended to construct good, ethical citizens. Rather, the national economic project that Selfe identified in the Technology Literacy Challenge emerging out of the 1990s has

expanded and become distributed across cultural nodes, with the growing influence of the digital

literacy myth as part of the neoliberal hidden pedagogy.

Education and technology, in the document's vision, aim to produce workers who can

sustain this economic agenda based upon technologies and their attendant literacies. Reflecting

this shift overtly, in the section titled "What and How People Learn," the report's authors explain

current jobs in terms of their technological demands and affordances:

> Technology dominates the workplaces of most professionals and managers in business,
> where working in distributed teams that need to communicate and collaborate is the
> norm.
>
> The challenge for our education system is to leverage technology to create relevant
> learning experiences that mirror students' daily lives and the reality of their futures. We
> live in a highly mobile, globally connected society in which young Americans will have
> more jobs and more careers in their lifetimes than their parents. (9)

Here, students/future-workers are said to face a high-tech employment landscape defined by

instability. Supposedly, that instability requires creative adaptability of the kind they already

practice in their use of technologies in their personal lives. Further, throughout the section

"Learning: Engage and Empower," students are cast as future workers who will have many

careers that they will have to prepare for independently through their ability to be "expert

learners" who can use 21st century skills like "critical thinking, complex problem solving,

collaboration, and multimedia communication" (13), and who are digitally literate, including the

following digital skills:

> …information literacy, the ability to identify, retrieve, evaluate, and use information for a
> variety of purposes; media literacy, the ability to consume and understand media, as well
> as communicate effectively using a variety of media types; and digital citizenship, the
> ability to evaluate and use technologies appropriately, behave in socially acceptable ways
> within online communities, and develop a healthy understanding of issues surrounding
> online privacy and safety. All this requires a basic understanding of technologies
> themselves and the ability to make increasingly sound judgments about the use of
> technology in our daily lives. (13)

Adaptable, digitally literate workers must be prepared to be experts at learning, in part to prepare for the unstated insecurity of contemporary employment. Hence, the stated goal is that "All learners will have engaging and empowering learning experiences both in and out of school that prepare them to be active, creative, knowledgeable, and ethical participants in our globally networked society" (23).

Throughout the report it becomes obvious that teachers' worker-identities must also be retooled to meet current professional standards. For instance, in describing professional development for teachers in their new proposed context of technology-leveraged education, the authors explain that: "Professional learning should support and develop educators' identities as fluent users of advanced technology, creative and collaborative problem solvers, and adaptive, socially aware experts throughout their careers" (45). Additionally, they must be more available to their students to facilitate what the report refers to as "always on" and "just in time" learning, such as the example they cite in the Yes Prep program, wherein teachers "[give] students their cell phone numbers so that students can call them during the evening to ask questions about homework" (70). While technology as described in this case can address historical questions of access to quality education, there is no mention here of the increasingly nebulous amount of labor demanded of teachers in an "always on" learning environment, nor is there discussion of how to compensate teachers who are expected to be always available. Despite the drive toward quantifiable teacher assessment in national and local discourse concerning teacher evaluation, the report signals evolving and non-quantifiable expectations for teacher labor in the digital age— including high-tech identities and constant presence.

In this strand of the neoliberal narrative and its trafficking of the digital literacy myth, the work of teachers is redefined with respect to technology's ability to reform their potential and

productivity. Similarly, students are cast as future workers who must be granted the literacies and skills fit for the global capitalist era. As Riedner and Mahoney make clear, this is part of the hidden pedagogy of neoliberalism, wherein "Neoliberalism, in one sense, is a way of defining work in relationship to culture that secures a workforce for capitalism. It is, in other words, a new historically produced social relation, a new way of mystifying and alienating labor as it creates an updated labor force for capital" (19). Throughout the *Transforming American Education* report, we can recognize the intertwining of the neoliberal project and its need to design future workers to sustain its goals of profit and power and the prevalence of the digital literacy myth that works to convince educators, students, and citizens that the technologies and literacies of the global age are necessary for their own benefit. Riedner and Mahoney point out that:

> As neoliberalism configures relationships of power and between labor and capital, consolidates identities, interpellates bodies into systems of identity, and creates relationships across public and private spheres, it creates deep and even violent economic, political, and cultural ruptures. (21)

Supporting neoliberal hegemony in its particular vision, the digital literacy myth's pervasiveness in the document (via an unfailing faith in technology's boon to students, teachers, and education) also serves the specific national and private agenda that Selfe revealed. In this policy document, we see yet another moment wherein future worker subjectivities are made fit for a global economy that requires particular labor skills and consumer demands. What Gee calls "shape-shifting portfolio people," what Johnson-Eilola names "rhetorical technologists," and what the *Transforming American Education* report describes as "expert learners" are the consolidated identities that are interpellated through policy documents like this one, as well as a number of other cultural sites named throughout this dissertation. The more the digital literacy myth is trafficked, the more it fortifies the cultural structures needed to accomplish the hidden economic

goals—the hidden pedagogy—it contains. The report's trafficking of the digital literacy myth

affects and shapes future workers toward neoliberal interests. In other words:

The increasingly high-tech and insecure job market shapes the report's understanding of

what education, educators, and learners should look like, such that contemporary and future

workers can successfully adapt to and remain competitive within the global economic market

for the good of the nation.

3. Those subjects must be well possessed of STEM skills.

Reflecting the cohesive strategy of the Obama administration in preparing future workers to

continue the knowledge work and technology-based innovation that are projected to serve US

interests in the global economy going forward, the US Department of Commerce recently

released the report titled *The Competitiveness and Innovative Capacity of the United States*. The

study was mandated by the 2010 America COMPETES Act, and it went through a similar

process of gathering expert input, soliciting commentary, and relying on collaboration that

characterized the composition of the *Transforming American Education* report. Such a

comprehensive plan to educate future workers for the nation's benefit in the global marketplace

responds to the fear of losing what Reich identified over 20 years ago as our national advantage

in the information economy. He writes:

> But even with a larger supply [of workers across the globe who have symbolic analytic
> skill sets], it is likely that Americans will continue to excel at symbolic analysis. For two
> reasons: First, no nation educates its most fortunate and talented children—its future
> symbolic analysts—as well as does America. Second, no nation possesses the same
> agglomerations of symbolic analysts already in place and able to learn continuously and
> informally from one another. While these two advantages may not last forever, American
> symbolic analysis will continue to enjoy a head start for the foreseeable future at least.
> (233)

Just over two decades later, we are seeing our leadership become fearful that our "head start" is quickly coming to a close. *The Competitiveness* report opens by echoing worry over American workers' skills compared to those of other nations, noting that "the scientific and technological building blocks critical to our economic leadership have been eroding at a time when many other nations are actively laying strong foundations in these same areas" (v). The authors acknowledge, like Reich, that we were world leaders in innovation and economic expansion in the 20th century, but for the 21st century, "… various parties have raised alarms about whether this nation's economy can continue to be competitive" (1-1). This fear about competitiveness is one of the chief motivating factors in the National Education Technology Plans, as Selfe revealed of the 1996 plan, and as I am tracing in the 2010 plan. These policies are motivated by fear, and in response they reinscribe the digital literacy myth. In these cases, the myth is persuasive as it works to calm individuals' fears with promise of democratic and economic agency afforded by technology, and thereby easing the "anxieties of globalization" (Dingo and Strickland). In the hidden pedagogy of the neoliberal project, then, education thoroughly reformed through technology becomes the path to ensuring American worker-subjects will develop the literacies necessary to remain competitive in the global market.

The report unabashedly describes US citizens in terms of their potential to develop the symbolic analytic skills that will provide the most assurances for our economic future via STEM-rich fields. Our ability to compete globally is defined in the report in terms of citizens as worker-resources, or, human capital:

> The human capital embodied in the work that STEM workers perform is valued in other sectors of the economy. This capital includes knowledge of mathematics, computers, and electronics and more general skills, such as critical thinking, troubling shooting, and various forms of reasoning. More generally, a growing number of occupations in the economy have been found to require a greater intensity of non-routine analytical and

> interactive tasks—that is, ones requiring reasoning and high executive functioning—
> while a declining number of occupations rely more heavily on manual and routine tasks.
> (4-4)

The Competitiveness report argues that education is among the primary grounds for cultivating

the kind of human capital necessary to fulfill the goals of *The America COMPETES Act*, to

create symbolic analytic workers with well-developed STEM skills. But the authors note that

"While the United States continues to have top-flight higher education institutions, fundamental

problems in the kindergarten through college system threaten our ability to increase the skills of

our workforce as rapidly as needed" (4-8). *Transforming American Education* responds to these

perceived needs, featuring recurrent insistence on the value of STEM education and the use of

technology for improving and expanding what's currently offered. While these may read like

moves made by concerned and invested policymakers who want to build the best possible system

of education for today's youth, keeping in mind the hidden economic agenda of the myth and the

neoliberal pedagogy it supports highlights ways in which such an education may support further

exploitation of US workers, most of whom will not benefit from the profits their skilled labor

will generate for the national economy.[10]

The thread of fear detected through the insistence on competitiveness results in an

economic strategy that shapes literacy education in the US. In a subsection entitled "Enabling All

---

[10] I am thinking here of Michael Hardt and Antonio Negri's work in *Commonwealth*, wherein they trace how contemporary capital and its ideologies engender particular subjectivities, how economic ideologies *produce people* via government, private, and cultural systems that preserve the conditions of capital's best interest. As they explain: "Recognizing modernity's racism and coloniality as biopower helps accomplish the shift of perspective by emphasizing that power regulates not just forms of consciousness but forms of life, which entirely invest the subordinated subjects, and by focusing attention on the fact that this power is productive–not only a force of prohibition and repression external to subjectivities but also and more important one that internally generates them" (80). It is Hardt and Negri's project throughout the Empire trilogy to locate a path for the multitude (what post-Occupy readers will think of as the 99%) to use those same particularities to resist and reclaim the common.

Learners to Excel at STEM," the authors note that US reign in science and engineering has been shaken, "primarily because of rapidly increasing capability in East Asian nations," and that teens "are losing ground in science and math achievement compared with their peers around the world" (22). To address the threat of impending loss of US dominance in the global economy, the *Transforming American Education* report suggests that we must prepare all students in STEM education, and that "technology can be used to support student interaction with STEM content in ways that promote deeper understanding of complex ideas, engage students in solving complex problems, and create new opportunities for STEM learning at all levels of our education system" (22). On the one hand, the report suggests that education powered by technology will increase our competitiveness by equipping the national labor pool with the high-tech workers needed for the contemporary global economy. On the other hand, further emphasis on high-tech education, labor, and production reinvests in the state's reliance on information technologies as the platform for maintaining economic and political dominance. This double bind supports Shannon Gleason's assessment of STEM education as "a largely neoliberal project that argues for a global, market-based competitiveness, positioning students as entrepreneurs and marketers of their own employability in heroic service of the nation." Thus, we ought to consider how policy goals that at first glance seem innocent, progressive, and socially conscious are actually bound up in neoliberal logics that subject citizens' learning, work, and lives to private goals.

To provide a summary of the line of argument I've been tracing here thus far, then:

> *The* Transforming American Education *report advocates substantial structural, content, and procedural changes to public education to "leverage" technology at every level. The end goal of these changes—preserving a distinct technological faith and colluding with the neoliberal project—is to produce symbolic-analytic, STEM-capable human capital*

that will work to maintain or improve US footing in the global economy.

As I trace through the following chapters in this dissertation, these rhetorics have real impact on how US citizens perceive themselves as political and economic agents in the world, how we read world events, the larger landscape of higher education and even the teaching of writing. At this point, however, I'd like to draw attention to some cross-purposes also at work owing to influences from two factors: the Obama administration's social mission and the consistent input and authorship of actual teachers and teacher educators.

4. Those who have been historically underserved must also be included.

A surprising and commendable feature in *Transforming American Education* is the frequent and consistent move to advocate for women, people of color, nontraditional learners, and learners with disabilities. More than just a gesture, the authors are recommending the systemic overhaul of the sort that feminist, critical race, and disability studies scholars have continually insisted could be the only route toward real educational progress. The note of social justice that saturates the document overlaps with the resounding neoliberalism and state interest that I've been tracing up to this point. Both elements, however, are endemic to the digital literacy myth. In this way, the discussions of women, people of color, adult learners, etc., describe ways of making previously Othered-bodies "fit" for the imagined political economic project. In this way, these citizen-categories function throughout the report as what Jen Wingard describes as "branded bodies," which "commodify bodies and allow them to circulate, thus assisting in the production of surplus value and bolstering the US economy through the mystification of the laboring bodies that they brand. But they are also valuable to neoliberal subjects who need to identify particular images and values as American" (10).

In this way, those subjectivities who have previously "fallen through the cracks"[11]

become enfolded into the logics of the market—particularly the project of defining the US

economy through leadership in technologies and their literacies. Or, as Wingard explains, the

Othered individuals reflected in the report are referenced less in terms of their unique

knowledges, experiences, or life goals, and more as:

> an image, a sound bite, or a meme to be forwarded in the name of a particular political
> platform. Once branded, these bodies are rhetorical constructions that are used in the
> name of governmentality or to gain purchase in the market or the political arena. Either
> way, the material contexts and conditions of these bodies—their histories, their complex
> relationships to the economy and ideology—are evacuated and their identities become
> much the same as a credit score, a mere identifying factor that can be used in the name of
> capital. Through branding the complexities of economic, politics, and history are
> removed and replaced with the promise of an attractive lifestyle that can
> be attainable through simple exchange. (14)

In the case of *Transforming American Education*, women, immigrants, people of color, folks

with disabilities, nontraditional learners, and still others are used to appeal to definitions of

American multiculturalism and opportunity, as a testament to the myth that digital literacy will

result in economic advantage, and as a way to leverage those bodies to protect US economic

interests.

The move toward "inclusion" of Others reminds us that the digital literacy myth comes

with the faith that democracy will expand following economic progress that will result from the

spread of digital literacies and technological development. Expanding Americans' ability to work

and compete within an increasingly high-tech world, the policy history suggests, could reinforce

national and global markets for technology and maintain our national competitiveness. Selfe

identified how the national project to expand technological literacies in the 1990s ignored, or

was blinded to, the social disparities that were in part a result of and would part amplify, the

---

[11] See the 1999 National Telecommunications and Information Administration report "Falling
through the Net: Defining the Digital Divide."

former literacy myth, explaining that "the individuals who do not have the financial means to afford technology, the inequities of technological distribution along the related axes of poverty and race, the ways in which technological literacy supports a continuing cycle of illiteracy as well as literacy" (39). In contemporary policy, however, the experts and government representatives are finally attending to questions of access.

Careful reading reveals that the report's "inclusion" of women, people of color, and other historically underrepresented groups, while seemingly socially progressive, is actually bound up with the neoliberal logics described above. Directly following the claim that opens the report— that education and technology are essential to our global competiveness, which is "necessary for our democracy to work" (1)—the authors boldly assert that "America needs a public education system that provides all learners—including low-income and minority students, English language learners, students with disabilities, gifted and talented students, early childhood learners, adult workforce learners, and seniors—with engaging and empowering learning experiences" (1). They cite President Obama's 2009 call that women and girls should be better represented in STEM careers (3). They point out that communications technologies can help address the problem that the least effective teachers are most often placed in the poorest performing schools by "bringing" experts and more effective teachers into the classroom virtually (44). They articulate the goal that we should: "use technology to provide all learners with online access to effective teaching and better learning opportunities and options in places where they are not otherwise available and in blended (online and offline) learning environments" (49). They argue that the state should provide devices to those students who cannot afford them, in efforts similar to the school lunch programs (55). And, they argue that technology can help build the most equitable education system we've yet seen:

When combined with design principles for personalized learning and UDL, these
experiences can also be accessed by learners who have been marginalized in many
educational settings: students who from low-income communities and minorities, English
language learners, students with disabilities, students who are gifted and talented,
students from diverse cultures and linguistic backgrounds, and students in rural areas.
(23)

This move is also present in *The Competitiveness* report, where the authors note the gender and

race inequities in the STEM fields (4-12–4-14), and argue that "with greater equality in

educational attainment, demographic disparities within the STEM workforce can be diminished,

helping to boost STEM employment and US leadership in technology and innovation" (4-13).

The emphasis on education as the path to prepare students in the literacies required for

technological career fields, and the emphasis on a more democratic inclusiveness of historically

Othered worker identity groups further reflects the ideological trafficking of the digital literacy

myth. In fact, the report relies upon the persuasiveness of the myth as a means for enacting its

neoliberal pedagogy (much like the nation-state uses Others to define itself and preserve its

interests by branding bodies, as Wingard explores).

On one hand, we might read these gestures as sincere attempts toward realizing social

justice goals at the same moment when systemic rearticulation is necessary to best "leverage

technology" anyway. The political and social moment is one in which race is getting explicit

national attention, in part, thanks to the election of our first president of color. Additionally, the

Hispanic vote and women's votes have become increasingly recognized as significant political

blocs, and the immigration issue has been met with rising interest on all sides. *The*

Competitiveness report, in fact, reflects the delicate balance of interests at play in national

technology and education policy most explicitly, in a section titled "The Foreign-Born Are Key

Members of the STEM Workforce." They cite that 1/5 of current US STEM workers are not

American-born (4-14), noting that employers often lament a lack of prepared and skilled

American job candidates (4-15). They write that, "in a global economy, the payoff to attracting the brightest minds to the United States has been considerable," and that:

> Many of the foreign-born students educated in STEM disciplines in the United States want to remain here lawfully—starting their own firms or contributing to the growth of existing firms. The United States must develop immigration policies to ensure that this country is welcoming to the world's best and brightest. (4-15)

In the section on increasing representation in highly skilled STEM professions cited above, the authors state their desire to heal "demographic disparities" toward the goal of maintaining US leadership, and yet they tenuously balance the implicit benefit of immigrant STEM laborers. As they note, US higher education and business have greatly benefited from immigrant labor (skilled and migrant alike), not to mention international student tuition dollars. The authors reference the fear, which those familiar with immigrant discourse will pick up on, that we may be educating our global competitors who often either return to their countries of origin or send US earnings back home, sweeping away those attendant concerns with the assurance that these immigrants will contribute to US business. In this way, the report brands immigrant workers as commodities—a product or branded body for policymakers and educational systems to invest in toward supporting the US economic agenda (Wingard).

We can see, then, by way of both reports, that:

> *The ideologies of the digital literacy myth prevail and are used to sweep away other popular social, economic, and xenophobic discourses related to race, gender, immigration and education: digital technologies and their literacies can, and will, be employed toward furthering US interests in the global market and in our own democratic makeup.*

5. Constant assessment will make certain we are (cost-)effectively achieving these goals.

Echoing the neoliberal impulse to conserve profit margins by cutting investment in infrastructure evident in Secretary Duncan's "more with less" directive, throughout *Transforming American Education*, the authors build in constant assessment to ensure that educational structures are, borrowing the private sector's phrase, "cost-effective." Assessment is one of the five areas of education that the report asserts should be restructured to better leverage technology. Many of the suggestions made in this section of the report refrain teacherly hope for technology found in composition scholarship in Chapter 1. The stated end goal for the section, for instance, is to "leverage the power of technology to measure what matters and use assessment date for continuous improvement" (37).

They suggest that we should: 1) use technology to deliver timely feedback to students, teachers, and others toward developing more effective learning experiences for students, 2) develop betters systems for data storage and usage, 3) develop ways of assessing more complex skills in collaborative high-tech environments, 4) use Universal Design for Learning to develop assessment techniques that really measure learning, rather than those advantages that social status generally dictate, and 5) develop a way to share assessment data among interested parties while also maintaining privacy (37-8). In this specific section, technology is credited with the ability to provide more assessable learning, to better assess that learning, to assess skills not previously assessable (especially those used in highly technologized spaces such as virtual worlds like Second Life), to better interpret that assessment data, and to better share that data.

Significantly, while the themes of assessment and cost-effectiveness recur together throughout the report, measurement with financial aims is never explicitly mentioned in the assessment section. In the executive summary, the authors explain that the goals of this National Education Technology Plan are to "be clear about the outcomes we seek," "collaborate to

redesign structures and processes for effectiveness, efficiency, and flexibility," "continually

monitor and measure our performance," and "hold ourselves accountable for progress and results

every step of the way" (ix). The authors state outright that "…we should look to other kinds of

enterprises, such as business and entertainment, that have used technology to improve outcomes

while increasing productivity" (x). I read these goals as reflective of the ideological notion that,

with technology's help, a restructured educational system should draw on business and

industry's models for accomplishing the greatest output with the least possible input, or, as

Duncan put it, doing more with less. Efficiency, flexibility, adaptability, measurable outcomes,

and cost-effectiveness are just some of the terms borrowed from business discourse that circulate

throughout the report, tying together technological and market faith for the proposed betterment

of American public education (for the purpose of national competitiveness in the global market).

Thankfully, the report suggests, technology can efficiently monitor and assess our efficiency.

Notable is the fact that the outcomes that technology is projected to assess are presumed

goods that get no attention or evaluation within the report. Rather, as Chris Gallagher warns

about in "The Trouble with Outcomes: Pragmatic Inquiry and Educational Aims," the means are

totally untethered from the ends—there is only problematic assessment of decontextualized skills

and knowledge, rather than attention to teacher strategies, students' prior knowledge,

infrastructural or institutional realties, or any other contributing factors. This neoliberal rhetoric

of assessment, monitoring, and outcomes is even more obvious in the section "Productivity:

Redesign and Transform," where the authors frequently cite our "tough economic times" (64).

The following passage well captures these explicit connections:

> More money for education is important, but we must spend education dollars wisely,
> starting with being clear about the learning outcomes we expect from the investments we
> make. We also must leverage technology to plan, manage, monitor, and report spending
> so that we can provide decision-makers with a reliable, accurate, and complete view of

the financial performance of our education system at all levels. Such visibility is essential to improving productivity and accountability.

At the same time, we must make a commitment to continuous improvement by continually measuring and improving the productivity of our education system to meet our goals for educational attainment within the budgets we can afford. (63)

This passage reflect one of the central tenets of neoliberalism, as William Davies describes in *The Limits of Neoliberalism*—that "converting qualities into quantities removes ambiguity, emptying politics of its misunderstandings and ethical controversies" (loc. 357). Part of neoliberalism's aim, Davies explains, is to borrow the state's power to "replace political judgment with economic evaluation" (loc. 286), and thus "substantive claims about political authority and the public are critically dismantled and replaced with technical economic substitutes," assuming that the numbers do not lie (loc. 293-296). The problem of this seemingly disinterested measurement, however, is reflected quite clearly in the recent political outcry concerning standardized testing under the Common Core, wherein student, parent, teacher, and administrator protesters reject the tests and their outcomes as an unreliable measure of student learning and teacher performance. However, the state currently supports the tests as acceptable measures of both—reflecting faith in the technological and quantitative as disinterested and neutral, and thus reliable assessments of (often uncritical) educational outcomes. Technology, this reasoning suggests, will provide the means to monitor efficiency and efficacy, efficiently and effectively.

It is along these lines that the report reaches the heights of its digital utopianism, bordering on expressing more faith in technology and its capabilities that in humans' ability to keep up. This is a disturbing motif throughout the report—the notion that technology would be all-powerful and wholly effective in accomplishing the stated goals, if not for human fallibility.

Consider, for instance, the following passage that in which teachers are rhetorically positioned as subordinate to technology in student learning:

> Technology is a powerful enabler of learning, but educators still must teach. They must support their students' engagement with technology resources for learning, highlighting the important subject matter content, pressing students for explanations and higher-order thinking, tracking their students' progress, and encouraging their students to take more responsibility for learning. This requires deep transformations of teaching practices. (44)

And, consider this passage wherein teachers are implicitly urged to catch up with their students' digital literacies:

> The technology that enables connected teaching is available now, but not all the conditions necessary to leverage it are. Many of our existing educators do not have the same understanding of and ease with using technology that is part of the daily lives of professionals in other sectors and with this generation of students. (48)

On one hand, we might notice that the authors rightly recognize that simply adding technology without the proper support may hinder student progress rather than accelerating it. On the other hand, as I will further discuss below, the rhetorical faith in technology in these passages is a blind one, as is the lack of faith in teachers and other individuals. Upon the most cynical reading, the first passage seems to express that it's a shame that the data can't yet process itself. The second passage implies that it's too bad technology can't replace teachers, yet. This is a trend picked up by Culp, Honey and Mandinach in their "Twenty Year Retrospective," as well, when they similarly identified a shift in rhetorics of agency and teachers across the policy they studied, noting that from 1995 on, "Rather than being the natural starting point for identifying areas of need and priorities for improving instructional practice, teachers are now framed largely in terms of what they are lacking" (301).

Echoing this rhetorical shift, the second passage cited above suggests that the capacity of technology far outranges people's abilities to harness its power. There are no specific technologies named here, nor specific teaching practices, nor specific means of integrating

technology to handle particular workflow challenges. Rather, technology writ large is believed to be able to enhance teaching and learning, monitor those bettered processes, and help correct course should any aspect of the cycle need improvement. Under this rhetoric, as Susan Romano critiqued, human fallibility is essentially the only potential roadblock for the good that technology can do. Just as Romano traced in the egalitarianism narrative several decades ago, this rhetoric suggests that *technology can and will transform education for the better*. And, faith in this fact is so strong that, should this notion prove wrong, it is the people involved who would be at fault rather than the technologies themselves. Borrowing from business discourse, and adhering neoliberalism's hidden pedagogy, the authors' rhetoric articulates the belief that technology can help teachers and administrators accomplish more with less through constant monitoring and assessment. This is contingent on our abilities to help people reach the capacity to work on par with technology's more advanced demands. In other words:

> *To preserve and meet neoliberal interests including cost-effectiveness via quantifiable measures, the* Transforming American Education *report insists, teachers must adapt in order to best make use of technology's potential agency in reforming education.*

6. **The state has an investment in and responsibility for ensuring the above goals are met, toward fulfilling the myth.**

The final logical step in ensuring fulfillment of the promise of the digital literacy myth, as can be traced through the *Transforming American Education* report, is that the state should be accountable for building the educational infrastructure that will produce a worker-subject cultivated to meet the needs of the high-tech global market (and thus serve its own interests). The report stipulates that "The Department of Education has a role in identifying effective strategies

and implementation practices; and nurturing collaborations that help states and districts leverage

resources so the best ideas can be scaled up" (xxi). These obligations include bringing together

experts and resources, states, districts, and stakeholders, including facilitation of "collaboration

between states and private and public sector organizations." The report, importantly, also holds

the state responsible for many aspects of the material realities without which its goals are

impossible: the state must "ensure that all students and educators have 24/7 access to the Internet

via devices, including mobile devices, and that states, districts, and schools adopt technologies

and policies to enable leveraging the technology that students already have" (xxii). They suggest

that schools can help solve the access issue in ways similar to free lunch programs; if students

and their families cannot afford capable devices, the schools might provide them (55).

Additionally, the state is working on fulfilling its mandate to update broadband and our power

grid nationwide, as is stipulated in the American Recovery and Reinvestment Act of 2009,

toward greater access (xxii; 57). These objectives are plainly evolved out of the specific current

historical context, reflecting both the goals of global capitalism and the anxiety of globalization.

That the state seems to be investing in altruistic goals of inclusion is merely a way in which the

digital literacy myth's promise toward democracy can seemingly be fulfilled while the state's

actual goals serve the hidden pedagogy of neoliberalism.

    As Selfe identified in 1999, throughout the 1980s and 1990s, the state developed and

implemented a policy that would help manifest the social climate necessary for integrating

technologies and their literacies into our homes and classrooms. She explained that, through

policies like the Technology Literacy Challenge of the mid-90s, the government redefined what

counts as literacy to include technology. Since the literacy myth had already been carefully

stitched into the fabric of American life, it was seemingly natural for individuals, families,

schools, employers, and other institutions to accept that literacy would now include

technology—just what the state needed in order to reach the envisioned goal of a technological

economy in which the US would have the largest share of prepared workers and designers for

some time to come. As Selfe described it, "through these mechanisms, definitions of literacy

play a significant role in creating and maintaining a cohesive hegemonic system in the United

States that affects every citizen's chances for success" (18). In the same way:

> Transforming American Education *seeks to put into place the material, structural, and*
> *infrastructural mechanisms needed to reshape American education with technologies and*
> *their literacies in order to reach their hegemonic goals of maintaining our nation's*
> *current foothold as a global economic superpower.*

Toward a Conclusion, But Really, an Opening

I believe that, like the literacy myth, the digital literacy myth has become a self-fulfilling

prophesy for individuals. That is, in the One-Third World, people are indeed obligated to acquire

digital literacies and their technologies for full participation in the mainstream economy and in

many of the public spheres in which access to discourses on democracy and politics unfold. For

instance, according to a PEW report in 2013, 94% of surveyed jobholders are Internet users, and

over half find email and the Internet to be very important to their job performance (*Technology's*

Impact on Workers). Further, our nation's economic dominance would not currently be what it is

without the decades of neoliberal pedagogy that has articulated the digital literacy myth across

public spheres, including through ideological state apparatuses, private marketing that has

successfully inculcated technology as an essential part of individuals' personal media ecologies

and social lives, and into the home where families now understand computers and other devices

to be necessary for education, entertainment, employment, and social life. And, in fact, the plan

has paid off, in that information and communication technology service exports made up at least

157 billion dollars of the United States' annual economy in 2013 (The World Bank, "Service"),

8.9% of goods exported ("Goods"), and 3/10 people have wired broadband subscriptions

("Subscriptions"). It's true that there are certainly nations whose percentage of exports are

higher, and others whose access is more widely distributed. However, taking into account the

vastness of our total GDP, the diversity of our economy, and the fact that our policies for access

to information technologies for citizens still rest on the rhetorical rather and infrastructural level,

we can recognize the very profitable material and economic impact of the digital literacy myth as

it has complemented and been nurtured by the neoliberal pedagogy.

Further, it's important to remember that policy has real impact in shaping programs and

resources provided to the public. The public-private partnership emphasized throughout

Transforming American Education has since resulted in Digital Promise, an independent,

nonprofit, bipartisan corporation whose mission (determined by Congress) is:

> to support a comprehensive research and development program to harness the increasing
> capacity of advanced information and digital technologies to improve all levels of
> learning and education, formal and informal, in order to provide Americans with the
> knowledge and skills needed to compete in the global economy. (20 USC 9631)

The organization sponsors a project called "The League of Innovative Schools" for school

districts who propose plans to integrate technology into teaching and administration, to monitor

and assess those technologies so as to avoid "wasting scarce tax dollars on products that are

failing our kids," and to "transform the market by streamlining procurement, aligning supply and

demand, and focusing the decisions of purchasers." In other words, school districts receive

support for accomplishing the goals of the *TAE* report to expand technology use and

infrastructure in education, with special emphasis on partnering with private sector developers toward designing more effective and efficient technology.

That better technology needs to be designed through these partnerships in order to save money speaks to an important point regarding the digital literacy myth: the "promise" is not made or broken through particular technologies (though anecdotes can circulate for the support or challenge of technology's good). Rather, what matters according to the myth is that *any* technologies and their requisite literacies be spread and put to use. In this way, technologies of violence or those that are cost-ineffective do not discredit the myth's promise of global competitiveness for our youth, democratic progress, or individual success. Only those technologies that attest to the myth are given credence (as can be seen in the many positive examples throughout the *TAE* report), while those technologies and literacies that do not yield the myth's promise are flawed in and of themselves. Thus, technologies and their literacies are both the means and the goal, and they are tied to larger political and economic projects of the time.

The confounding reality is that both the digital literacy myth and the literacy myth that preceded it, in some ways, have been self-fulfilling prophecies. The more discourse circulates determining a given literacy as important or necessary for individual success, the more material realities for all individuals become tied to attainment of that particular literacy. Additionally, as I will continue to explore throughout this dissertation, social and material good can and often does come with technologies and their literacies, for individuals and for nations. It is for this reason that the early technological faith that I trace above could circulate, face intense critique, and yet resurface once more in composition studies and in other critical and political pedagogical scholarship. Teachers have witnessed amazing transformations in the learning and lives of

individual students, in entire schools, and in communities. As digital literacies and their

technologies become more and more ubiquitous in our relationships, occupations, art and leisure,

politics, and even family lives, we come to depend on those technologies and dream of ways we

can use them to accomplish all our goals. Hope is powerful; but it should not be uncritical.

Throughout the 2010 National Education Technology Plan, as I've been analyzing in this

chapter, the consistent infusion of the digital literacy myth's promise for national

competitiveness (and individual upward economic mobility) and democratic inclusion help make

the "strong rhetoric" of neoliberalism's hidden pedagogy persuasive in this specific site of state

policy. Since the document's purpose is to articulate the state's vision for public education—like

that of any policy statement aimed at fulfilling an obligation to the public—it must seek routes of

persuasion that make a case for meeting the public's needs. As I've traced throughout the

document, the state and private interests reflected in the six-point narrative reveal the hidden

pedagogy of neoliberalism and its uses for technologies and their literacies; the digital literacy

myth is persuasive to citizens as it circulates among political, social, and economic spheres in

our daily lives in ways that serve hegemonic interests.

It is of course possible to understand the privatization of education and technology in

ways that may be counter to the neoliberal context in which these policies are evolving, however.

It could seem that part of the motivation behind public partnerships with private companies like

Apple and Microsoft may simply be the cost-burden associated with developing infrastructure.

Culp, Honey and Mandinach point out, for instance, that:

> Given the nature of education funding, much of the burden for funding would also,
> inevitably, occur at the state and local level, but these reports clearly recommend that
> given the overwhelming cost of establishing an adequate technological infrastructure, all
> levels of government should think creatively about building a long-term and large-scale
> strategy for meeting schools' infrastructure and technical needs. Many reports also note
> that this investment would require not only governmental spending but also input,

leadership, and financial support from public/ private partnerships, local communities, and professional organizations representing both educators and employers (McKinsey & Company, 1995; Office of Technology Assessment, 1988; PCAST Panel on Educational Technology, 1997; US Department of Education, 1996; Web-based Education Commission, 2000). (294)

It is true, as Culp, Honey and Mandinach suggest, that these partnerships aim to offset costs to the state in order to make technological literacies more accessible to citizens and students. However, that does not mitigate the fact that the rhetorical constructs of the digital literacy myth's power for garnering public buy in and the private partnerships that make technology more accessible to citizens and public institutions ultimately work together to accomplish the larger US national economic agenda that Selfe noted began in the 1990s. As she points out, the state relied upon private interests as well as institutions like schools, churches, families, and other public entities to commit to the value and necessity of the spread of technologies and literacies, without which the state's economic plan would not have been possible. Riedner and Mahoney's work helps us more deeply understand the interdependence among stakeholders, noting that: "neoliberal pedagogy is not interested solely in producing specific laboring subjects for the workplace; it seeks to produce subjects whose lives are fully subsumed within the logic of the global market. Neoliberalism is therefore a pedagogy produced in a variety of public spaces, social sites, in civil society, as well as in traditional educational locations" (20). All of those avenues have come together since the 1990s to deeply sediment the desire and necessity of technologies and their literacies, in part thanks to the prevalence and persuasiveness of the digital literacy myth and the literacy myth that had been so ingrained in our collective consciousness prior to the global era and the Information Age.

In fact, the hidden pedagogy of neoliberalism and the digital literacy myth are so persuasive as to help shape not only who we must become as contemporary American workers,

but also who we are as subjects and what we believe on a variety of fronts. Part of the power and persuasiveness of the digital literacy myth is accomplished through a rhetorical shifting of agency from people to technologies and their literacies, one small moment of which I note in the case of teachers and assessment above. True, technological apologists across academic disciplines and non-academic social groups continue to reflect on the ways in which technologies and their literacies can better serve our interests. Many leftist contemporary scholars who give an account of technology, globalization, and the resulting new subjectivities insist that the very tools through which hegemonic powers attempt to generate particular workers and working conditions are the very same tools through which the non-dominant can resist and remake those Othering or objectifying circumstances. For instance, critical pedagogy scholars Michael Apple and Ross Collin, cited in Chapter 1, explore with students the rise in anti-immigration/anti-immigrant sentiment and legislation, and develop digital literacies with these students toward practicing a politics of interruption. The authors explain that the digital literacies are a means of political agency for the students as they:

> … use digital tools to participate in the pro-immigration movement–whether through digital storytelling or by using mobile phones or networked computers to disseminate information about rallies and walkouts–acquire and further develop aspects of the general intellect of technologically advanced socioeconomic systems and enlist this knowledge in a project that challenges these systems in part by exposing their dependence on the wages and unwaged labor of immigrant groups and other marginalized communities. (53)

In this way, Apple and Collin conclude, students can "exploit key tensions in high-tech global capitalism so as to advance the causes of social justice" (53).

The anecdotes these and other teacher-scholars tell are compelling, in part, *because* they confirm the digital literacy myth; our greatest hopes for technology and social good are made real through stories where individuals' agencies are realized or dreams are materialized through

thanks to technologies and their literacies. Our Freirean dream that, through literacy and the process of conscientização, we can work together to remake our political and material realities toward the common good have seemingly been confirmed in recent social moments on the global scale, and their successes have been attributed in Western narratives to the power of technologies and their literacies. In the chapter that follows, I will take up the digital literacy myth as it is connected to ideals of spreading democracy in the global era. Specifically, I will trace Western depictions of the Iranian election protests of 2009, whose rhetorics cast technologies and their literacies as serving the interests of, if not as solely responsible for, democratic action and social justice. Keeping close at hand awareness of US interests in this aspect of the digital literacy myth, I note ways in which narratives of technologies and their literacies as serving democracy help maintain US economic and political advantage, according to our current national goals.

> Given the fact that technology is at the core of the one-third world's ability to dominate —economically, militarily, culturally—the two-thirds world, isn't it also problematic to assume that, with access to technology, liberation from oppressive representational practices is a given? (Mary Queen, 485)

Introduction

In June of 2009, incumbent Mahmoud Ahmadinejad was declared the winner of the Iranian presidential election, while opposition leader Mir-Houssein Moussavi cited blatant violations of the fair electoral process. Rallying for democratic justice and calling for action, supporters of both candidates filled the streets in the largest demonstrations since the 1979 revolution. The authorities applied pressure against the protesters and people died. Moussavi and Green Movement supporters marched with tape over their mouths, symbolizing the government's silencing of their votes, their demonstrations, and the democratic process, and meanwhile the Twittasphere was getting louder and louder.

Similar to WTO, G-8, and G-20 protests around the world, Twitter and other mobile technologies were active in spreading information and ideas about the protests in Tehran. According to the blogsite *Mashable*, at its height during the June protests use of the #IranElection hashtag reached a staggering 221, 744 *per hour* (Parr). Western and One-Third World media outlets described Twitter and other social media platforms as helping protesters to orchestrate physical movement through the streets of Tehran, as well as setting meet up locations and times. Accounts told that Iranians following and posting #IranElection updates with smart phones displaying Twitter feeds could quickly maneuver through the streets, circumventing state attempts to constrain their demonstrations. As Clay Shirky explains in a CNN interview, "These

flat networks of groups, as opposed to one hierarchical structure, allow instant, on-the-ground, mass communication using mobile devices" (Rawlinson). Described like the movement of water molecules when those in front hit an obstacle and those following divert their paths, protesters with the almost immediate spread of information, it was told, used Twitter accounts to quickly reorganize to avoid police barriers.

In political solidarity in the West, the clamoring use of the #CNNfail hashtag prompted expanded CNN coverage of the election protests, and President Obama pressured the Iranian government to maintain Twitter access during the struggles. When the Iranian government did shut down most Internet access, sympathizers like San Franciscan Austin Heap set up and broadcast directions for accessing proxy servers he had set up to circumvent the blackouts. It was exciting times for Westerns who watched in anticipation, seeing in real time how Twitter was helping Iranians organize against a repressive regime, watching as social media was coming to the aid of democracy across the globe. And our very anticipation that (American-made) digital technologies and their literacies could serve these democratic ends assuredly shaped how we saw the situation unfold, largely at the expense of how it actually happened.

Through networking arguments, one of my aims in Chapter 3 is to offer a more complex analysis of technology and social protest that counterposes the US agenda embedded in the digital literacy myth, out of which rhetorics of hope for digital technologies and their literacies circulate globally and shape public understanding of digitally mediated events. More specifically, I analyze US public intellectual debates and the news media coverage's focus on technology's value to the 2009 Iranian election protests. And, I reveal ways in which these narratives complete the telos of the digital literacy myth in order to preserve Western expectations of digital technologies and their literacies as serving of the democratic project. I

argue that these rhetorics of hope render invisible to the Western world a more complex

perception of technology's *actual* use for global social protest movements, particularly hiding

the significant ways in which Iranian women used technology and embodiment to serve their

political project. Following Saskia Sassen, I aim to tell the story of the 2009 Iranian election

protests in ways that look beyond the technical capacities of digital tools and that understands

their use in the context "the social environments in which they get used" (342). In this way I

hope to, following Mary Queen, contextualize and complicate the Western rhetorics of hope to

listen diligently to Iranian women's use of "Internet technology to create and claim identities,

agency, and political activism outside of the circulation of one-third world rhetorics of power"

(481).

Transnational Feminism and the Digital Literacy Myth

In Dingo's *Networking Arguments*, she offers a transnational feminist analytic that aims to watch

movements of texts and arguments across borders, particularly locating how vectors of power

(what Alexander refers to a "constellations") shape the local conditions of women within

globalization. She argues, cited in Chapter 1, that we should "place micro-examples within

macrocontexts" in order to "consider not only a woman's local circumstances but also how

vectors of power–supranational policies, colonial history, global economic structures, even our

practices here in the West–shape women's lives in disparate places" (144). Dingo writes that The

"network" is the appropriate way to think through these arguments about women in globalization

because we can then see how "rhetorics travel and are deployed" in particular

social/economic/political contexts, especially in the neoliberal/neocolonial global era with the

prevalence of permeable national borders (17).[12] Essentially, networking arguments can: "expose how domestic and international policies are transnationally and rhetorically linked through complex neoliberal and gendered ideologies and how the commonplace terms that circulate within these policies are dependent on each other" (19). In this way, Dingo urges scholars to trace how specific and complex microhistories construct networks through which texts and arguments travel, are taken up or coopted, and impact women's lives through policy changes and shifts in public perception.

Within her framework for networking arguments, Dingo uses three tactics of analysis borrowed from transnational feminists including Inderpal Grewal and Jacqui Alexander: transcoding, interarticulation, and ideological trafficking. She points out that rhetorics of gender mainstreaming tend to overlook women's embedded roles in their communities, which positions them as victims and then fails to adequately account for their needs at the state and supranational levels (29). Focusing on the ideological trafficking of "fitness," Dingo draws a parallel between nations trying to "fit" into the global economy, in part through normalization of citizen bodies–specifically those types of bodies that are physically "fit" for work in an industrialized production economy (68).[13] Dingo analyzes Wolfensohn's 1997 speech "The Challenge of Inclusion," the World Bank film *From Exclusion to Inclusion*, and an activist produced documentary called *A World Enabled* in order to reveal "how arguments are networked within a single occasion to show that ideologies traffic across time and texts" (70). In order to do so, she borrows the term "ideological traffic" from Alexander, defining it as:

---

[12] Since this reading is self-consciously politically informed, attending to histories of power and materiality as a starting point for reading connections among networked subjects, it foundationally differs from those versions of networks conceived within actor network theory in Bruno Latour's work and as it has been taken up in rhetoric and composition studies.
[13] In this way, Dingo traces how normalization of disability rhetorics corresponds with neoliberal rhetorics.

...rhetorical "formations that are otherwise positioned as dissimilar" because of the fact that they might appear within a wholly different time, place, or situation (190). Ideological traffic draws attention to history of rhetorical actors, of rhetorics have long circulated, and of the occasions when these actors and rhetorics emerge. Tracing ideological traffic enables rhetoricians to identify and analyze which rhetorical terms are glossed over or taken for granted because they have circulated without question for decades and thus have become ingrained and common sense. ... Following ideological traffic and networking taken-for-granted and historical arguments within a single occasion lays bare the rhetorics that have become naturalized and a common part of our political imaginary. (69-70).

This move to trace historically trafficked ideologies makes visible certain powers that have material impacts on women's lives. In the digital age, trafficking can happen in online spaces, impacting women in ways that would otherwise remain "transparent," as Mary Queen points out in her 2008 *College English* article, "Transnational Feminist Rhetorics in a Digital World."

Queen traces ways in which the Feminist Majority, a US-based neoliberal feminist organization, takes up and circulates the Revolutionary Association of Women in Afghanistan's fight against the Taliban, "to understand how digital circulation transforms texts, and thus becomes an important site of rhetorical action" (474). Choosing to think in terms of "global fields of rhetorical action," Queen seeks to capture some of the fluidity of interacting forces by tracing the "rhetorical genealogy" of digital texts. She aptly explains that we should think of "digital texts as emerging from and circulating within and across cyberfields of rhetorical action that contain innumerable ideological, cultural, geopolitical, and historical forces that interact with these texts." Her analysis makes visible the "re-production by mainstream US news and magazines of RAWA's self-representations to mirror consumers' neoliberal value systems," specifically, the value that the One-Third World can access information from anywhere (since the struggles of Afghan women were now being presented to them via digital networks), and that they could access knowledge of that situation in "unfiltered" ways (479). In her conclusion, Queen poses a question that is particularly relevant to the investigations of this chapter: "In what

ways do digital circulations of texts detach texts from their contexts or make those contexts less important than the frameworks in which they circulate?" (486).

Taking up this question of digital circulation and contexts, and following Alexander and Dingo, I trace the ideological trafficking of the digital literacy myth, noting how it shapes particular Western narratives of the use of Twitter in the 2009 Iranian election protests. The circulation of tweets from inside and outside of Iran that summer was noted around the world as the Twitter community watched the violent and moving protests occur. In some Western interpretations of the #IranElection tweets, however, those 140-character digital texts, taken out of context, become subject to ideological trafficking as they presented an opportunity to express and affirm long-held and evolving narratives about the democratic promise of digital technologies and their literacies. Additionally, as this chapter will demonstrate, ideological traffic does not travel without its own baggage. Ideological traffic, as Alexander noted by recognizing the ways in which the state's trafficking of heteronormativity has material impacts on the lived realities of its citizens, has material costs. In the case of Western narratives of the 2009 Iranian election protests, flattened narratives that attribute political agency to the technology, rather than the people, miss the opportunity to focus on the more significant nuances of the social movement—in this case, the role of women. Rather than recognizing how women engaged in embodied revolutionary activism, Westerners focused instead on a "Twitter Revolution," thereby trafficking the digital literacy myth and erasing the very kinds of bodies the newest iterations of the myth aim to include.

As I have shown in Chapter 2, for instance, the 2010 National Education Technology Plan reflects the Obama Administration's interest and investment in opening the doors of opportunity for and ensuring more representation of women and minorities in education and

careers in Science, Technology, Engineering, and Mathematics fields. Making space for women and historically underrepresented identity categories in these spaces reifies the idea that with the appropriate literacies, our nation and our citizens will be at their best, and that through literacy democracy (and inclusiveness) complete democracy can be achieved. The irony here gets buried by the strength of our ideological commitments to the digital literacy myth; making strategic efforts toward granting the literacy opportunities that patriarchy, capitalism, and institutional racism have impeded to those whose social mobility will assuredly be granted by it *should* open space for critique of the idea that merely granting technological literacies will overcome structural inequity and promise economic progress for individual citizens within the nation. This critique is avoided, however, and instead the government is making room both structurally and rhetorically for women in the literacy myth, assuring that theirs is the success which will then help to propel and secure the nation's economic standing at the global level. In our national narrative, then, extending literacy and education in STEM fields—and presumably functional literacy for associated technologies—helps to sustain the promises of the digital literacy myth by relying on the inclusion of women and minorities to complete its project. It is through this background that Western narratives, especially those in the United States, traffic their technological optimism. The problem is compounded by the fact that the myth will be sustained by those comparable few who will indeed see personal economic gains from their digital literacy education, or who are in fact able to use their literacies for just social action in small, local circumstances. The project of the digital literacy myth is further sustained in US narratives by filling the gaps in domestic potential with women and minorities' access to technologies and their literacies, while locating proof of literacies' democratic progress in more distant locations.

In this way, the compression of time and space works across narratives to maintain the myth that secures US interests on a variety of fronts.

Internet Theory: Narratives of Hope and Hesitation

Since the extensive coverage of the use of Twitter in the 2009 civil unrest in Moldova, each social moment taken up by Western media has seen some consideration of the role of social media. In his 2012 work *Networks of Outrage and Hope: Social Movements in the Internet Age*, Manuel Castells reflects on the Arab Spring, the indiginadas movement in Spain, and the Occupy Wall Street movement, making observations about the role of the Internet and mobile networks in social protest. He theorizes that the Internet, and its social networking, creates a space of autonomy, "largely beyond the control of governments and corporations that had monopolized the channels of communication as the foundation of their power, throughout history" (2). Seeking "bread and dignity," Castells argues, the social movements each began with a spark, some form of injustice that caused enough outrage for everyday citizens to move past their fear and to act. This action, he argues, relies on hybrid networks that meld the "space of flows" (digital social media) and the "space of places" into a "space of autonomy."

The Internet is so significant for contemporary social movements, Castells writes, because it is through the minds of people that society changes, and in what he calls *the network society*, "power is multidimensional and is organized around networks programmed in each domain of human activity according to the interests and values of empowered actors" (7). He continues that: "Networks of power exercise their power by influencing the human mind predominantly (but not solely) through multimedia networks of mass communication. Thus, communication networks are decisive sources of power-making" (7). The co-construction of

public space both online and in historically/symbolically significant spaces through multimodal message diffusion and occupation are an essential feature of the protests and the means through which the people can achieve the "togetherness" that Castells stresses is necessary to overcoming fear. He argues that "the critical matter is that this new public space, the networked space between the Internet social networks and the occupied urban space, is a space of autonomous communication" (11). Along with many Internet scholars, he attributes part of the Internet's power to its hierarchical flatness, the speed of transmission, and authority's relative inability to control its content.

The protests he studies, he argues, were "made possible by overcoming fear through togetherness built in the networks of cyberspace and in the communities of urban space" (21), thereby tying together the local and the global. Castells argues that the Internet is conceived in a sense of democracy and freedom, that it resists control due to its structure and decentralized nature. He notes that, in combination with older technologies (like the talk to tweet movement), people can use the Internet to bypass local government censorship, but these successes are owed to preexisting social networks most of the time (368). Importantly, Castells does note that social media and Internet technology were not the cause of these social movements. "But it is silly," he writes, "to ignore the fact that the careful and strategic uses of digital media to network regional public, along with international support networks in new ways" (105). Although he acknowledges that these media didn't cause the movements, digital media did play "a causal role in the Arab Spring, " he argues, "in the sense that it provided the very infrastructure that created deep communication ties and organizational capacity in groups of activists before the protests took place" (105). In this way, Castells recognizes that the social revolutions were not conceived of, but were perhaps delivered by the meeting of digital networks and local and global publics.

I certainly agree with Castells's point about digital networks bringing together local or regional groups in solidarity with national and transnational supporters and revilers both. We've seen this in recent days with the #BlackLivesMatter protests around the US—indeed most of the demonstrations I've attended in the last several years have been those I found out about via social media networks first. However, we cannot assume simply because there are channels for the public to connect that those connections will be liberatory and democratic. For example, as showcased in the #AllLivesMatter discourse on social media in response to the #BlackLivesMatter movement, just because folks can connect does not mean that the issue over which they're connecting will be resolved toward socially just ends. In fact, socially progressive/leftist/anti-racist rhetorics often circulate both independently and in reaction or response to conservative, right wing, or racist ones. Additionally, there are important concerns to acknowledge regarding the fact that these technical, Internet networks are not a series of random and disinterested linkages.

Saskia Sassen's work importantly explains several of these infrastructural concerns. Disputing the notion of immaterial networks of freedom, Sassen reminds readers that: a) the material modes of access to the Internet are often privately owned and corporate interests are increasingly privatizing the Internet (via anti-piracy and more); 2) government authorities often set standards and regulations for the Internet; 3) the central authority of the Internet Corporation for Assigned Names and Numbers (ICANN) is questionable in its goals and motives (330-333). While Sassen and Castells both argue that the contextual realities of each moment of political protest shape what actually comes from the potential affordances of a given technology, Sassen argues that when it comes to our work in understanding the Internet and other technologies' social impact:

> … we need to avoid focusing exclusively on the technical capabilities; we cannot overlook the social environments in which they get used. Neither can we disregard the specificity of these technical capabilities which enable the formation of whole new interactive domains. […] These technologies cannot be reduced, as is common, to the status of "independent variables," which confines the matter to its impact on existing conditions. As Judy Wajcman (2002) points out, many social scientists see technology as the impetus for the most fundamental social trends and transformations. To this I would add, first, a tendency to understand or conceptualize these technologies in terms of what they can do and assume that they will do; and second, a strong tendency to construct the relation of these technologies to the social world as one of applications and impacts. (342)

Sassen and other scholars would like to see analysis that better puts into relief the ways in which a given moment and its historical context shape and are shaped by a particular tool, rather than thinking about what the tool *could potentially* do and then looking for affirmation of that power in the way we read social events.[14]

What we see happening in the overly optimistic scholarship covered in the first chapter and in some Western media coverage of the Iranian election protests, then, is the playing out of the two analytical strategies Sassen critiques. Because technologies *can* bring people together in their struggle for freedom, we assume that they have and that they will—and, we tell our stories in ways that confirm these political goals, goals which conform to deeply embedded cultural ideological narratives about the inherent links between literacy, technology, democracy, and economic progress. Ideological narratives that, like the American dream, are reified by the few moments in which they come true for some. Only now, Western perspectives are casting a gaze informed by this digital literacy myth upon the social uprisings in nations with complex social

---

[14] I am not saying that Castells does not acknowledge social histories, but rather that his acknowledgement of them works to situate those histories within an already built narrative about what digital media can do, as much Internet scholarship tends to do (see his incredible trilogy *The Information Age: Economy, Society, and Culture*). This is not, by any means, a condemnation of his work, from which I have learned so much, but rather a point about the trends toward optimism engendered by forces like the digital literacy myth that shape how many scholars read the role of digital media in moments of social struggle.

and political histories and realities that we often don't try to uncover or understand. In other words, the digital literacy myth, and the technological optimism it embodies, is trafficked through the ways in which Westerners come to describe the protests. Countering these flattened narratives in which the West projects its own ideological desires (and the signified economic agenda) onto a complex political moment, any conclusions we draw about the technical capacity of a given technology must be rooted deeply in the complex social and historical context of its use. What Sassen demands of us is a more critical view of how digital networks enable communication and connection in ways that are imbricated and embedded in multiscalar social and material constructs in the global era. In the following section I will trace that flattened narrative before turning to a more complex picture of women's role in the protests.

Western Media Coverage of the 2009 Iranian Election Protests

While later heavily critiqued, many early Western media accounts of the Iranian election protests focused on the use of social media and other modes of digital literacies, such as email and texting, for both coordination of on-the-ground organizing and for dissemination of counter-narratives of the political clashes in action. The hype was, in many ways, justifiable for an audience who is intrigued by, and who stands to benefit from, narratives of digital platforms and their literacies as integral to spreading global democracy. Here is an instance wherein a corrupt government sought to smash the capillaries of information transmission both within and outside of the confines of the state, while the people, guided by their just and righteous will to true freedom, exercised their right to free communication through the cunning use of technologies. Or so some told the story. Evgeny Morozov argues in *The Net Delusion* that Western media response to the Iranian election protests showcased our cyber-utopianism, and he urges that in

order to ward off the tangible political dangers of our cyber-utopianism and Internet-centrism, we must replace them with cyber-realism and cyber-agnosticism. Driven by what Morozov calls the Google Doctrine, or "the fervent conviction that given enough gadgets, connectivity, and foreign funding, dictatorships are doomed" (5), these Western narratives seem to confirm our greatest hopes for the political potential of the technologies we love.

In this section, I aim to heed Morozov's call for a more tempered understanding of technology's democratic potential by listening carefully to what motivates our cyber-utopianism in the wake of the 2009 protests. If we first consider the long-standing and evolving US agenda in preserving the myth's guarantees of economic progress and democratic, following the transnational feminist analytic we can note the ways in which Western narratives on the Iranian election protests in 2009 *traffic* the ideological baggage of the digital literacy myth. This rhetorical networking makes visible the ways in which Western conceptions of technology as inherently democratic serve US interests at least as far as to preserve the myth, while (perhaps) inadvertently working to obscure and flatten the specific local history that shaped the protests and the movement of Iranians therein. Most intriguing from among the examples is the way in which the rhetoric of the articles attributes agency to the technologies rather than the protesters. While the complexity of the articles varies in terms of their coverage of the political, material, and historical realities of that particular Iranian moment, each of the following examples from news stories or op-eds published by major Western media outlets takes the step of assigning democratic progress to the technology itself, rather than to the Iranians who used it.

In one of the least overstated examples, an unnamed author for Fox News writes in "Twitter Links Iran Protesters to Outside World" that the Iranian government made efforts to block Facebook, YouTube, and BBC Persian, but that they failed to block Twitter. (S)he explains

that due to this failure, "the simple microblogging service has become Iran's lifeline to the outside, a way for Iranians to tell the world what's happening on the streets of Tehran in real time — and a vital means of communication among themselves" ("Twitter Links"). The author writes that Iranians were using Twitter, primarily in English, to circulate images of the violent protests, links to proxy servers and more. (S)he cites Twitter co-founder Biz Stone, who wrote on the Twitter blog of their choice to delay service maintenance: "'Our network partners at NTT America recognize the role Twitter is currently playing as an important communication tool in Iran'" (qtd. in "Twitter Links"). The author writes that the hashtag "#IranElection" was hitting rates of dozens per second, many of which described the demonstrations in central Tehran. (S)he goes on to cite several tweets from very active feeds claiming to be in Iran (though the article's author casts no doubt on this), including PersianKiwi, moussavi1388, and Change_for_Iran. And, (s)he goes on to sample from the "even larger" crowd of retweeters from around the world who were responding to the crisis, concluding with a Tweet from actor Elizabeth Banks.

Here, Twitter is assigned the status of a "lifeline," implying that Iranians' survival depended upon their ability to remain connected to the world outside their national borders. This connection was facilitated, the author suggests, through the linkages enabled by Twitter. As an illustration of the platform's affordances, the author describes the sharing of images and videos, the use of the popular hashtag #IranElection, the use of proxy servers, and the "insider" and "outsider" representations of the protests. Like other examples, the author cites Twitter's choice to delay server maintenance in Iran in order to prevent possible loss of service for Iranians who were relying on access to the social media platform for gaining or sharing information related to the protests. This article attributes powerful agency to Twitter through a description of its technical and social capacities, thereby trafficking the digital literacy myth and its insistence on

the democratic power of digital technologies and their literacies. Other examples from Western

media coverage of the protests, however, go much further.

In Mark Ambinder's *Atlantic* article, "The Revolution Will Be Twittered," he remarks,

"when histories of the Iranian election are written, Twitter will doubtless be cast as a protagonal

technology that enabled the powerless to survive a brutal crackdown and information blackout

by the ruling authorities." While in the West we would still have gotten *some* information about

the protests against Ahmadinejad, Ambinder concedes, he explains that Twitter served the

protesters by spreading information about on-the-ground circumstances in real time; "In this

way, Twitter served as an intelligence service for the Iranian opposition. There are even hints

that, once Iranian authorities figured this out, they attempted to spread misinformation via

Twitter." Secondly, he argues, the Tweets got the West involved, including the #CNNfail

movement critiquing the news agency's lack of coverage of the protests. He writes that

technology does not determine an election's outcome, but concludes that Mousavi has most

likely not been persecuted, assassinated, or arrested because of the threat that social media could

facilitate backlash:

> Why hasn't Mousavi been arrested or killed? Iran's regime is thuggish, but I don't think it
> wants to risk further alienating Europe or China. And I surmise that because the Iranian
> government knows that the opposition—maybe we should call them the silent
> majority?—has ways of communicating and organizing outside of their control. Mousavi
> would become an instant martyr. Twitter, Facebook, blogs—and the mainstream—are all
> colluding to keep hope alive for the Iranian people.

Ambinder, like Castells, expresses the function of Twitter to connect people in protest within

national bounds, as well as in terms of political accountability via transnational political

networks. In his take, social media helps to spread information in ways that are politically and

socially consequential. More overtly than in the case of the Fox News article, Ambinder's

rhetoric assigns agency and *intent* to social media. The final line quoted above, for instance,

102

features Twitter, Facebook, and blogs as the subjects of the sentence, and "colluding" as their verb. To collude implies that the media are working together with a particular goal—the goal to "keep hope alive for the Iranian people." This phrasing suggests that without the affordances of the social media platform, the light of hope for political democracy and social freedom would surely be extinguished—that Iranians depend on the media to keep their hope (and by extension, themselves) alive. In this case, not only does the digital literacy myth become trafficked into the author's take on the protests, but the democratic power and agency infused within the technology is cast as greater than that of the people themselves.

In a June 15ᵗʰ, 2009 example from *The New York Times*, "Social Networks Spread Defiance Online," Brad Stone and Noam Cohen open by describing Twitter and other social media as an antidote to state media repression, telling of the use of Twitter to spread news and images from the protests. They refer to feeds, such as @moussavi1388 or candidate Moussavi's Facebook page, noting the thousands of followers boasted by each. They explain: "As the embattled government of President Mahmoud Ahmadinejad appears to be trying to limit Internet access and communications in Iran, new kinds of social media are challenging those traditional levers of state media control and allowing Iranians to find novel ways around the restrictions." While they refer to the notion of a Twitter Revolution as a cliché, they write that "Twitter is aware of the power of its service," noting the company's choice to delay maintenance on the servers that could have interrupted Iranians' use of the media. They describe the use of hashtags as an affordance of Twitter, and cite that the tag #IranElection reached 30 posts per minute at one point during the uprising. Stone and Cohen also describe ways in which Facebook, static websites, wikis, and SMS messaging were useful to protesters. "The crackdown on communications began on election day," the report, "when text-messaging services were shut

down in what opposition supporters said was an attempt to block one of their most important organizing tools. Over the weekend, cellphone transmissions and access to Facebook and some other Web sites were also blocked." Stone and Cohen tell of efforts to bypass government censorship and blocked access through use of proxy servers, such as that set up by Austin Heap of San Francisco, who says that about 750 Iranians were using his service at any given moment. Heap says "'that cyber activism can be a way to empower people living under less than democratic governments around the world'" (qtd. in Stone and Cohen).

Stone and Cohen, additionally, tell of the Global Internet Freedom Consortium, a proxy server out of China. They conclude with the insight of Internet scholar Jonathan Zittrain, who explains that the sheer number of ways Twitter can be written to and read is responsible for its resilience to censorship:

> As each new home for this material becomes a new target for censorship, he said, a repressive system faces a game of whack-a-mole in blocking Internet address after Internet address carrying the subversive material.
>
> "It is easy for Twitter feeds to be echoed everywhere else in the world," Mr. Zittrain said. "The qualities that make Twitter seem inane and half-baked are what make it so powerful."

Stone and Cohen's article is interesting in that it is more complex than the others in its analysis. Discussing not only how Twitter's technical capacities provide political affordances through social efforts, such as the choice of Twitter's staff to delay its update, the authors also cover Austin Heap and Global Internet Freedom Consortium's services to help citizens work around government impedances on access, and the ability for Twitter's rhizomic access points to dodge government censorship.

With this extended coverage, however, come more intense attributions of political will and agency to the media itself, as well as to the corporate decisions of the (now publicly traded)

company. Sampled above, we see constructions like "social media are challenging those traditional levers of state media control," and that "Twitter is aware of the power of its service." The authors take their interpretations of Twitter's function in the Iranian election protests and restate them as the media's self conscious and politically-informed interventions into Iranian politics. Such an analysis reflects the critiques made by Sassen above, that Internet scholars and commentators tend to describe digital platforms "in terms of what they can do and assume that they will do," then applying those hypothetical affordances to their readings of social events (342). The desire to read those affordances as democratically progressive, and to read technology's role in social events as actualizing that potential as in the case of the Iranian election protests, reflects the ideological traffic, and hence the persuasive and invisible currency of the digital literacy myth.

In a final example from *Time Magazine*, Lev Grossman reflects on Twitter's presence in the protests on June 17th. He describes the US government's request to Twitter executives to delay an update that might interrupt Iranians' access to their service during a crucial time. He explains that "in the networked, surreally flattened world of social media," foreign government crackdowns and random couples undergoing public breakups in 140 characters become connected through their medium of choice. And, Grossman writes that while coverage of the protests occurred across all media platforms, "the loudest cries were heard in a medium that didn't even exist the last time Iran had an election." He attributes Twitter's usefulness in the movement to its being free, fast, highly mobile, and accessible on many devices. Describing the technical, and thus political, affordances, Grossman argues that "this makes Twitter practically ideal for a mass protest movement, both very easy for the average citizen to use and very hard

for any central authority to control. The same might be true of e-mail and Facebook, but those media aren't public. They don't broadcast, as Twitter does." With growing energy, he recounts:

> On June 13, when protests started to escalate, and the Iranian government moved to suppress dissent both on- and off-line, the Twitterverse exploded with tweets from people who weren't having it, both in English and in Farsi. While the front pages of Iranian newspapers were full of blank space where censors had whited-out news stories, Twitter was delivering information from street level, in real time.

In the midst of celebrating Twitter's ability to broadcast the people's righteous indignation and give voice to their political unrest, Grossman acknowledges that "Twitter's strengths are also its weaknesses." Tempering his claims a bit, he notes that the information that circulates does so with great speed and no verifiability. Grossman also acknowledges that it is unclear from where the protest-related tweets originate, and that much of the buzz may be coming from expats rather than Iranians on the ground in the protests. He even asserts, in the end, that "Twitter isn't a magic bullet against dictators."

Grossman describes the relatively few channels through which Iranians could access the Internet, suggesting that the government could theoretically shut off those channels. He also notes the proxies that have been established in times of government crackdown. Additionally, Grossman very astutely points out that the government may be ambivalent about shutting down the internet because it offers a means of surveilling, or perhaps even thwarting protesters' movements. He recognizes that the Iranian government's failure to block Twitter altogether may not have been a mere failure, noting that "it's quite possible that the government finds Twitter useful as a way of monitoring protesters, gathering data on them and even tracking them down." Finally, Grossman concludes with the assertion that Twitter is not responsible for the protest movement, but that the service does permit dialogue in the face of dictatorship:

> Twitter didn't start the protests in Iran, nor did it make them possible. But there's no question that it has emboldened the protesters, reinforced their conviction that they are

not alone and engaged populations outside Iran in an emotional, immediate way that was never possible before. President Ahmadinejad — who happened to visit Russia on Tuesday — now finds himself in a court of world opinion where even Khrushchev never had to stand trial. Totalitarian governments rule by brute force, and because they control the consensus worldview of those they rule. Tyranny, in other words, is a monologue. But as long as Twitter is up and running, there's no such thing.

The above passage contains perhaps the most direct instances of Western media's trend in constructing Twitter as the most powerful political agent in the Iranian election protests, positioning the social media platform as the actor upon Iranians via the constructions that Twitter has "emboldened," has "reinforced," and has "engaged." Its availability and technical affordances are described in their capacity to thwart totalitarian government tyranny.

Grossman's statement that "Twitter isn't a magic bullet against dictators" may be an ironic acknowledgment of his overzealousness in describing Twitter's role in the protests, but he moves forward with that zeal nevertheless. In fact, most of the articles recognized, to some extent, that Twitter was not the cause of the movement, nor was it capable of winning the battle in place of actual protesters—but the moments in the articles where the authors point to this fact seem like a brief pause in between descriptions that *do* paint the platform as the champion of the Green Movement. It seems that, though they knew they shouldn't, Western-positioned authors were pulled to ascribe political agency and democratic good will to social media like Twitter, working its magic on behalf of the Iranian protesters. That such authors articulated the political agency of the digital platform over that of the people in Iran—that the idea of technology serving democracy across the globe was trafficked into the very verb choices of these commentators even if they acknowledged the overzealousness of such a move—merely speaks to the pressing power of the digital literacy myth as it hails us (Althusser). It is one thing to recognize a contextualized usefulness of ways in which Iranians used social media in their political organizing or public circulations of support and outrage—but in these Western narratives of a

"Social Media Revolution," Twitter is caricatured as a revolutionary political actor possessing agency that it can and did *give* to protesters in and outside of Iran in order to challenge authoritarian corruption and preserve the interests of democracy.

Competing Hopes: Debating Social Media and Democracy in the West

Despite the trends in locating agency in the technology—rather than the people—that I've illustrated above, there was certainly not a homogenous understanding of social media's role among Western reactions. There has been, in fact, some debate in the weeks and years following the protests, especially as events like the Arab Spring and the Occupy Wall Street movements brought new relevance to the question. In an exchange in *Foreign Affairs*, for instance, public intellectual heavy weights (and perhaps significantly, two white males) Malcolm Gladwell and Clay Shirky debate the extent to which social media has been crucial to recent social movements. The debate evolves out of the juxtaposition of Gladwell's 2010 essay, "Small Change: Why the Revolution Will Not Be Tweeted," and Shirky's 2011 piece, "The Political Power of Social Media," respectively. Throughout these essays, and in the interchange that follows, Shirky and Gladwell remain committed to particular iterations of the project of democracy, but their disagreement over the role and potential for social media in protest movements suggests that there are moments of rift, or cracks, in the digital literacy myth wherein different versions of democracy and ideas about technology compete.

In "Small Change," Gladwell argues fervently that "we seem to have forgotten what activism is" (43), and that "social media can't provide what social change has always required" (42). He is rightly concerned about over-attribution of activist agency to technology; and, he angrily recaps moments of overzealous response to the use of Twitter in Iran, and in Moldova

before that. Naming the Obama Administration's request for Twitter to delay maintenance to its

servers and Mark Pfeifle's wish to nominate the social media platform for a Nobel Peace Prize,

Gladwell returns to Civil Rights era activism as the defining example of what *real* activism is: an

activity that requires high personal risk on the part of protesters and a network of strong ties to

incite participation. Social media, Gladwell argues:

> is simply a form of organizing which favors the weak-tie connections that give us access
> to information over the strong-tie connections that help us persevere in the face of
> danger. It shifts our energies from organizations that promote strategic and disciplined
> activity and toward those which promote resilience and adaptability. It makes it easier for
> activists to express themselves, and harder for that expression to have any impact. The
> instruments of social media are well suited to making the existing social order more
> efficient. They are not a natural enemy of the status quo. (49)

As a way to dismiss and paint Shirky's claims in *Here Comes Everybody* as childish and

inconsequential, Gladwell recaps the book's opening anecdote about one man's use of social

media to organize concerned citizens to help retrieve his smart phone from a young woman who

had found it in the back seat of a taxi. His point is that while social media may help privileged

white folks get their expensive devices back from poor youth of color when the police

department seems callous and unresponsive, rights of consequence in the face of brutal and

material oppression will not be won by and for the disenfranchised through slactivist means.

The following year, Clay Shirky's article in *Foreign Affairs* asks how the US government

might compel and shape policy and interests to come. Shirky critiques the US policy of an

instrumental approach to Internet freedom. He is disappointed that the government has chosen

tactics that support "broadcast media," rather than those Internet and mobile platforms that allow

individuals to connect to one another (2). Shirky advocates instead for an "environmental

approach," wherein "positive changes in the life of a country, including pro-democratic regime

change, follow, rather than precede, the development of a strong public sphere" (5). He argues

that a combination of an informed and literate citizenry who is connected enough for exchange

of ideas is necessary for political freedom (6), and that this environment is best evolved slowly

over time. Aiding in the process of coordination, Shirky writes, "Social media increase shared

awareness by propagating messages through social networks" (7). Interestingly, Shirky suggests

that in order to appeal to nations with inclinations toward censorship and repression of its

citizenry, the US government ought to highlight the possibility for financial growth:

> Since governments jeopardize that growth when they ban technologies that can be used
> for both political and economic coordination, the United States should rely on countries'
> economic incentives to allow widespread media use. In other words, the US government
> should work for conditions that increase the conservative dilemma, appealing to states'
> self-interest rather than the contentious virtue of freedom, as a way to create or strengthen
> countries' public spheres. (9)

Note the ways in which Shirky invokes the central tenets of the digital literacy myth, even

signaling back to the classical literacy myth—for Shirky, the digital facilitates the literate

citizenry on its way to achieving and preserving democratic freedom by virtue of its ability to

connect the people. In some ways, his position lays bare some of the economic interests that

assure the digital literacy myth's viability. According to Shirky, the US, which has experienced

economic gains from the development of digital technologies, should encourage other nations to

sustain digital networks for their own economic gain. This explicit urging, he suggests, will have

the less explicitly touted benefit of nurturing a more democratic public sphere. What Shirky does

not explicitly acknowledge here is the ways in which the US's own economic interests are served

by widening the global technology consumer base and therefore fulfilling the economic agenda

that circulates with the digital literacy myth, as was uncovered by Selfe in *Technology and*

Literacy in the 21ˢᵗ Century. In other words, extending his thinking with my analysis, Selfe's

formula becomes: literacy + digital connection + economic incentives for authoritarian nations =

exported democracy + economic benefits for those states (+ US economic interests in the spread

of global investment in technology served).

Shirky's trafficking of the digital literacy myth continues in the article as he takes on the naysayers of the political power of social media, beginning with Gladwell. Responding to his critic's low blows in "Small Change," Shirky writes "The critique is correct but not central to the question of social media's power; the fact that barely committed actors cannot click their way to a better world does not mean that committed actors cannot use social media effectively" (9). In other words, for Shirky, Gladwell's indictment of slactivists as ineffective does nothing to take seriously how engaged activists might be successful with the use of digital technologies and their associated literacies—a point with which I agree. He does, however, go on to acknowledge that just as protesters can use technologies to strengthen their political offences, so can authoritarian states (though, as he alluded to above, states profit economically from commerce that depends on communication technologies, and shutting down those networks can be self-sabotaging). Shirky's conclusions in this article are more closely aligned with Gladwell's faithful rendition of traditional democratic values than he might notice behind the glare of their technological medium: Gladwell values traditional forms of activism, and Shirky values traditional ideas about a literate citizenry needing access to a free and open public sphere.

That these thinkers are debating the question of technology's relationship to democratic social movements, and how we should understand technology to be intervening in the democratic (or not) transformations of nations, reflects the evolving trajectory of the digital literacy myth and recalls its roots in the classical literacy myth that preceded it. Here, the ideological tracks of democracy and literacies and their technologies are at a crossroads brought on by our co-existing national projects of exporting democracy and brokering technologies in order to fulfill neoliberal ambitions and satisfy US economic agendas. Where the classical literacy myth projected the

economic mobility of the individual and the promise of a more complete national democratic

landscape with the rise of literacy, the digital literacy myth in its global context is taken up not

only in the domestic sphere, but also with respect to foreign policy, or "21st century statecraft,"

as Hillary Clinton has called it. As Selfe highlighted in 1999, the initial National Education

Technology Plan emerged out of a US agenda to spread technological literacy and was deeply

rooted in goals of building a particular economic future based on domestic intellectual property

and investment in emerging technology coming out of US companies. In our contemporary

moment, the myth evolves once more as US interests shift to include more overt goals in shaping

its role in the political global landscape.

What the Shirky-Gladwell debate reveals, to some extent, is a crack in the myth wherein

the dual ideological commitments of the digital literacy myth and the project of democracy lose

their cohesion as Gladwell resists the temptation taken up hungrily by other Western narratives

to assign democratic agency to the social media technologies. Carefully paying attention to the

debate, to heed Selfe's advice, helps us further trace the ideological trafficking of the digital

literacy myth and its internal tension, particularly thanks to the crack revealed by the authors'

disagreement. Additionally, the debate neglects to think about the actual bodies of the protesters

who are acting (virtually and in embodied ways) at the sites of conflict. The bodies that *do* get

invoked among these articles are those of Americans in the civil rights era, where Gladwell is

scripting democratic processes as only legitimate and effective when physically present in a

particular space of conflict. American bodies from the past are recognized for their political

agency, where actual bodies in Iran, as well as in Moldova, the Arab Spring, and the Occupy

movements are erased from this representation about the legitimate use of technology in their

protest efforts. Women's bodies, among others, are lost in the crack of the myth, as the

ideologies of digital optimism and democracy are cross-trafficked. Attention to the ways in which women's bodies are particularly at risk fulfills part of the obligations of a transnational feminist analytic, recognizing how circulation of rhetorics, ideologies, and power across global borders has disproportionate consequences for women as a group, but with a mind toward intersectional identities and the complex and varied situations of class and status within and among the One-Third World/Two-Thirds World divide.

A year after their brief interchange described above, the Shirky-Gladwell debate about real activism continues. Drawing from the example of the Internet's limited impact on the way in which Land's End does business, Gladwell concludes that it has not had much effect at all. The questions to be asked, he asserts, are: "What evidence is there that social revolutions in the pre-Internet era suffered from a lack of cutting-edge communications and organizational tools? In other words, did social media solve a problem that actually needed solving?" He points to the fact that revolutions happened effectively before the widespread use of the Internet, and hence, while it may provide some interesting tools, the Internet's impact on social movements is negligible. Clay Shirky responds that, actually, the Internet and the platforms of social media allow insurgents to operate in novel ways that provide a fast, easy, inexpensive, and effective means for people to organize. He writes:

> Digital networks have acted as a massive positive supply shock to the cost and spread of information, to the ease and range of public speech by citizens, and to the speed and scale of group coordination. As Gladwell has noted elsewhere, these changes do not allow otherwise uncommitted groups to take effective political action. They do, however, allow committed groups to play by new rules.

Shirky argues that the new tools alter the way states and people interact in the public sphere. However, as Shirky maintains across publications, the use of social media in an isolated event is not enough to access the political power of these platforms; rather, the promise of social media

lies in their contribution to shaping a public sphere whose fostering of conversation and free

exchange of ideas will promote democratic ends. It is important to note that throughout Shirky

and Gladwell's debate and in many similar conversations about technology and democracy,

social action is portrayed in ideal terms that reflect the Habermasian notion of the public sphere

which "suggests eventful engagement with a peopled world," Tony Scott and Nancy Welch

argue, just as it "turns away from an existing society of unequal relations, hidden interests, and,

at times, open class struggle" (567).[15] Shirky relies on the affordances of technologies as a

promise for just social action in a well-oiled public, while Gladwell shies away from discussion

of what "real activism" might look like in Iran, Moldova, or any contemporary political context

in favor of valorizing the proven-effective strategies of another particular context 50 years in the

past. Thus, these Western public intellectuals are still theorizing the democratic affordances of

social media and other technologies separate from an accountable representation of

contextualized and historicized bodies in real, contemporary places.

As Sassen aptly put it, debates about whether or not social media can *cause* a revolution

are a waste of time. Moving beyond the binary questions about technology and democracy, to get

at the actual impact of a social media-diffuse global public, Sassen writes that:

> The issue here is not so much the possibility of such political practices—they have long
> existed with other mediums and with other velocities. The issue is rather one of orders of
> magnitude, scope and simultaneity: the technologies, the institutions, and the imaginaries
> that mark the current global digital context inscribe local political practice with new
> meanings and new potentialities. The dynamics are also at work in the constituting of
> global public spheres that may have little to do with specific political projects; and they
> do not always work. (370)

---

[15] For a more complex discussion of ways in which rhetorics of digital activism bear forth an
uncritical and therefore harmful ideal of the public sphere, see Scott and Welch's "One Train can
Hide another: Critical Materialism for Public Composition."

In this way, Sassen agrees with Shirky's more subtle point about the spreading of an ambiance of an active global public, one which bridges a given local political event with a global consciousness that is ready to watch, discuss, and participate in local events on a geopolitically distributed level. In this way, more critical theorists are driven to ask the question about how technologies shape us just as we shape them, and what opportunities and challenges arise therein. In other words, it is not only neoliberalism's interests that are served through the trafficking of a digital literacy myth that promises economic progress and an enhanced democracy. The dream of digital technologies and their literacies' potential to rescue us remains compelling—even for those who describe technology as serving capitalism and its attendant material costs for the lived realities of those who pay for the profits of the few.[16] In this way, the digital literacy myth permeates narratives of technology even in those whose work is explicitly critical of such ideological traffic.[17]

By networking arguments, however, we can make visible the ways in which prevailing and powerful grand narratives about technology, narratives that are informed by US political and economic interests and strategy for an evolving global market. Tracing the ideological traffic of that narrative, and the digital literacy myth more specifically, reveals that accounts of technology's role and impact in social uprising cannot, as Sassen advocates, be separated from microcontexts. My analysis of the Western Media coverage of the 2009 protests above reflects our urge to see the teleological fruit of technology as granting global democracy, while the Shirky/Gladwell debate reveals that even among more skeptical accounts about the use of

---

[16] See, for instance, Hardt and Negri's Empire trilogy, wherein they argue that the tools and requirements of the worker-subject in the global era can become the tools through which the multitude reclaims the common.

[17] This project began with my own awe at Twitter's democratic power in the Iranian election protests in 2009, in fact. It has been under careful reflection and guidance from mentors and outside readers that I've come to explicitly critique these rhetorics.

technology for democratic ends, flattened narratives offer disembodied, decontextualized claims that serve better to reveal ideological traffic than to investigate the actual use of technology in the locations that brought on the debate in the first place.

Further, as I will continue to develop below in the microcontext of the Iranian Election protests, I wish to point out that when we do succumb to the role of preserving and trafficking ideologies like the digital literacy myth, we allow cultural scripts and unacknowledged political and economic interests not of our own choosing to speak and act through us. Since these narratives collect and work in the world, as feminist (or simply conscientious) scholars we must take notice of these transgressions and reveal the consequences of such trafficking. While the interests of global economic and state powers work through One-Third World readings of such powerful global events, scholars must remain vigilant to the unintended and invisible material effects thereof, using an analytic like networking arguments to ameliorate their power, particularly for the women of the Two-Thirds World. These rhetorics, left unbridled, will continue to shape the ways that ordinary citizens participate in public discourse surrounding world events. To reveal them begins the project of blunting their power, while allowing for more realistic and tempered understanding of technology and literacy's uses for social movements. The flattening of political complexities during the Iranian election protests for the sake of trafficking ideas of democratic technologies costs, among other things, richer accounts of women's agencies in digital and bodily contexts, both within and in solidarity beyond the borders of Iran. To combat such a flattened narrative and recover a contextualized representation of specific bodies in the 2009 Iranian election protests, I will follow Sassen to recognize how women used were used by technologies and their literacies in the social movement.

Women in the Iranian Election Protests

As my analysis above demonstrates, not all coverage of the use of social media in the 2009 election protests attribute the protests and the power of the movement to the technologies used therein. Reflecting on and critiquing the discourse on the use of social media in the Iranian election protests in her *Time* article "The Twitter Devolution," Golnaz Esfandiari bashes early accounts for their inaccuracy, overzealousness, and lazy reporting. She factiously sympathizes with reporters who told the "Twitter Revolution" version of the story, sighing that it "was an irresistible meme during the post-election protests, a story that wrote itself." Further, she points out that "through it all, no one seemed to wonder why people trying to coordinate protests in Iran would be writing in any language other than Farsi." I read the English-language tweets differently; I see the choice to write in English as one signifying the goal of building cross-border and cross-linguistic global networks of political support between Iranian citizens, diaspora, and English speakers across the globe. (Though, Esfandiari is likely right in her assumption that on-the-ground coordinating would most likely have occurred in the native language of those organizing and being organized.) However, her conclusion about the impact of such narratives is on point:

> To be clear: It's not that Twitter publicists of the Iranian protests haven't played a role in the events of the past year. They have. It's just not been the outsized role it's often been made out to be. And ultimately, that's been a terrible injustice to the Iranians who have made real, not remote or virtual, sacrifices in pursuit of justice. (Esfandiari)

Frankly, those Westerners claiming that technology *gave* agency and power to Iranian activists are asking the wrong question and gathering the wrong answers. These rhetorics have obscured the agency and material realities of the actors involved and have yanked them from their historical contexts, thereby eclipsing the "*physical* body that labors within the global economy"

(Scott and Welch 567). In their efforts to maintain and support rhetorics of hope for the democratic promise of technologies and their literacies, Western narratives have eclipsed a much more interesting and more profound, historically rooted and contextually emergent understanding of technology's role in the election protests. This is one of the many consequences of the digital literacy myth's traffic in transnational networks of literacy and materiality.

Of the many narratives significant to a US audience that could have been told in place of those that transfer agency from Iranians to technologies and their literacies, one is that of the unprecedented numbers of women involved in the campaigning, organizing, and protests surrounding the 2009 elections. That women were involved is less novel than the ways in which they united and built coalitions to make demands that their rights be considered. In the three months leading up to the election, over 40 organizations and 700 individuals came together to form the group Convergence of Women, demanding that presidential candidates take action to consent to and implement the UN's Convention on the Elimination of All Forms of Discrimination against Women,[18] and that they reform those aspects of the constitution and legal system under which women are unequal to men. An understanding of the rich ways women moved through history and into the current moment to use their available means to shape political outcomes breathes much greater life into the 2009 protests and helps us understand that the use of technology at the time was a likely next step given the ways that women and men were building upon already established social networks of all kinds to realize their political agency. Additionally, the presence of women's bodies in the protests and online reflects the ways in which embodiment as a form of political agency is not limited to physical or national borders.

---

[18] It's important to note that the United States has also declined to ratify CEDAW.

Since the 1979 revolution in Iran, women have been actively organizing and working to expand policy reforms to better their social position and structural rights. Among the most significant changes has been the increase in literacy rates among women from 38% in 1980 to 70% in 2000 overall, with impressive rates of 91% in the age group of 15-24 (Moruzzi 11). Under President Khatami, we see a shift in policy language from that in *The First Economic, Social, Cultural Development Plan of the Islamic Republic (1989-93)*, where goals included "bringing about a higher level of participation among women in social, cultural, educational and economic affairs, while maintaining the values of the family and the character of Muslim women" (qtd. in Tazmini 67). In the Centre for Women's Participation's *National Report on Women's Status in the Islamic Republic of Iran*—a complementary report that expanded on women's education as outlined in *Third Development Plan (1999-2003)*—the authors explain that under Khatami's Iran, priorities with regard to women's education include "modifying educational materials in order to portray the correct image of women's roles in the family and society, and of the mutual rights of women, men, and the family at all levels," as well as "revising existing education laws that are gender biased" (67), and "teaching management skills to women with the aim of enhancing their participation in the sphere of decision-making" (68). These shifts at the policy level were occurring in conjunction with the reform movement begun in 1997, when women's participation in the presidential election campaign, appointment and election to positions of public office was at unprecedented levels (see Tazmini 68-69; Haghighatoo 15). And, while none of the 42 women who registered to vie for the 2009 presidential candidacy were approved by the Guardian Council, the role of women's issues in the presidential campaigning showed a promise for possible change, thanks in part to the One Million Signatures campaign.

Evolving out of this history of activism and change, the One Million Signatures campaign emerged in August 2006. The campaign was unique in its issue-based approach; its one goal was the reform of gender discriminatory laws that seep down through Iranian society and help shape the social imaginary that defines women's roles and acceptable treatment of women. Seeking to end legal polygamy to preserve women's rights as the sole beneficiary of the economic advantages of marriage, to reform alimony law to better ensure that women will be financially protected when husbands divorce them, and to put an end to honor killings, the activists of the One Million Signatures campaign sought to gain support through means of "nonviolent street politics" (Khorasani 42). Activists used the networks already established within their daily lives to share information and gain support through face-to-face encounters in friends' homes, hair salons, and other public gathering spaces open to women (42-44). According to co-founder Noushin Ahmadi Khorasani, the campaign's choice to embody an issue-based approach utilizing tactics that are already embedded in volunteers' daily lives helped realize their goals of avoiding the fights over ideology and identity politics that have characterized and presented deep challenges for prior waves of Iranian feminist activism.

Contrasting the 1979 revolution with the activist mood of 2009, Khorasani writes: "To gain a sense of change, one need only look at all the images from this past June showing long lines of demonstrators in which millions of young men and women freely mix with one another, standing shoulder to shoulder in a way that was hardly in evidence during the last days of the Shah's regime or the first days of Khomeini's" (91). Khorasani's discussion of the process and success of the One Million Signature's campaign reflects the ways in which the women volunteers (and even some men) moved their bodies among their social networks in order to spread the message of legal reform. The in-person nature of the movement was significant, in

that throughout the Iranian laws that the campaign sought to reform, women are defined as half-persons. The presence of a woman volunteer speaking out against such laws works to affirm her own wholeness in the face of such laws; the woman-to-women direct education, and the solidarity and plurality that comes from the collection of signatures, stands in objection to those Iranian laws that reduce women's value to half that of men's. In order to prove in court that adultery has been committed, for instance, according to Article 74 of the Penal Code, "whether punishable by flogging or stoning, may be proven by the testimony of four just men or that of three just men and two just women" (136). Women's bodies are similarly valued at half that of men's in Iran's legal code, such as in Article 300: "The blood money for the first- or second-degree murder of a Muslim woman is half that of a murdered Muslim man" (137). My focus on women's bodies here is not to reduce these women to the bodily as their sole worth, but conversely to demonstrate that Western and One-Third World rhetorics about digital technologies and their literacies have material consequences, particularly for women whose bodies are overlooked in flattened narratives. Additionally, the reduced worth of women's bodies articulated in the Iranian legal system was among the most significant political and social questions at stake in the outcome in this election, and hence one of the most significant causes for the protests.

The One Millions Signatures Campaign is, in part, based upon a belief that changing the legal culture of the nation will help shift the social dynamic within which women do not have the freedoms their organization is fighting for. Hence, as the campaign evolved they built on their face-to-face and volunteer-education based tactics, adding an online component to their canvassing and tapping into the changing landscape of election politics to advance their cause. As the One Million Signatures campaign and the Convergence gained support, presidential

candidates Mousavi and Karroubi were compelled to—or, in the very least saw the political

advantage available in the choice to—publicly commit to reform of women's rights were they to

secure the presidency. The Internet was one tool at the disposal of the Convergence and the One

Million Signatures Campaign, but it was hardly the most significant given the necessity of on-

the-ground networks, and it is a fraught tool with a conflicted role in Iranian history.

Internet access and use in Iran is situated within a complex political and social national

history of post-revolutionary Iran, whose combination of democratic and Islamist governmental

structure has struggled to balance interests as a developing nation working to maintain profits

from oil exports and otherwise gaining footing in the global economy with its goals of preserving

an authentic Islamic cultural character independent from Western/colonial impingement. In their

book *Blogistan: The Internet and Politics in Iran*, Anabelle Sreberny and Gholam Khiabany

describe the conflicting social and economic factors shaping Iran's relationship with the web,

showing that "Private capital is challenging the monopoly of the state as government policies

slowly adapt to the marketisation and privatisation of the communication sector, while the

broader national and international contexts make for an intriguing mix of internet and media

developments" (3). Noting the generally repressed political environment during the expansion of

the Internet in Iran, they explain that "the state remains significant as the primary actor in

engineering political legitimacy and the definer of the 'national' character and culture."

State control in this case, they argue, can be explained not by general Islamic principles,

"but rather as the evolution of different periods of the post-revolutionary polity" (87). And yet,

the authors argue, in their policing of public and political organizing, the Iranian government

(particularly under Ahmadinejad) has actually pushed people toward disembodied political

expression via the Internet. As Sreberny and Khiabany put it, "by keeping people indoors, with

little to do but fiddle with computers, the regime helped to induce a generation of digital adepts, the consequences of which it was to rue in the summer of 2009" (116). In other words, the combination of conservative and progressive blocks in the political mood of post-revolutionary Iran with its economic interests in joining and profiting from the global market, has resulted in a complicated scene for activism where it must hide in-plain-sight along already established social routes while also taking to the online global public of the Blogosphere and Twitterverse.

While the Western narratives I discuss above carry the ideological traffic of the digital literacy myth by declaring that Twitter *gave* Iranians a voice, in fact, the idea that Twitter formed the protests, that this was a "Twitter revolution," or even that Iranians from within Iran were Tweeting much at all during the protests has been heavily disputed. Sreberny and Khiabany write that "so much of the tweeting [during the protests], as is increasingly the case with much media content, is a repost or commentary on previously published material. Twitter functioned mainly as a huge echo chamber of solidarity messages from global voices that simply slowed the general speed of traffic" (175). Years later, it seems that far less tweeting than initially described was actually occurring from within Iran at all. Rather, Iranian diaspora, Green Movement sympathizers, and certainly Westerners who read the protesters' actions as a sign of affirmation for their own views on democracy, used Twitter to circulate what information they could and to join in the cause symbolically and from afar.

Using Twitter's ability to share links to photos, videos, and articles, #IranElection users organized and maintained active and growing networks, sharing information and circulating ideological materials—those texts that represented the movement's enduring presence. In fact, many of these virtual texts reflect the complicated ways in which materiality and embodiment cannot be overlooked in evaluating the role of social media. Among the most tweeted in the days

following the 2009 election were links to media about Neda Agha-Soltan, a young woman who was shot by a sniper during a protest. Fittingly, her name means "voice" in Farsi, and she has become a symbol of the Green Movement. Viewers in Iran and around the world have been able to watch this woman's death on YouTube as her body begins to fail in the wake of a bullet wound, her voice coach and frantic strangers by her side. Neda's death was taken up and circulated because of what Iranians were able to graft onto her body for the purpose of their politics. She was like them—a bystander to her government's cruelty.

Participants and sympathizers of the Green Movement constructed images that transformed the death of Neda's body into a symbol of hope or fear for the body of Iran.[19] Consideration of these images will help return materiality, and more specifically women's embodiment, to uncritical celebrations of the "social media revolution."

In this image, for instance, Neda appears in black and white, an orb of white glowing behind her head, perhaps indicating her innocence. The caption: "We are all Neda" moves beyond solidarity to homogeneity. The creator and circulators of the image portray that in the eyes of the militarized Ahmadinejad regime, any Iranian body is subject to death for speaking out.

This image bears a black and white rendering of Neda's face covered in blood. This still from the video footage of her death was used in many such images, as protesters sought to capture the light leaving

---

[19] These images have been circulated so vastly that their origins are obscure and beside the point. For that reason, I offer no citation for them.

her eyes. The blood patterns on her face significantly obscure her own vision and our vision of her, signaling perhaps the censorship of Iranian (women's) bodies under the tyranny of Ahmadinejad and his basij (or, morality police). The background reflects the symbolic color of the Green Movement, and the text "Where Is My Vote" was a common slogan used to challenge the legitimacy of the election. Neda's image featured alongside the slogan rhetorically describes the potential and value of a body as a voice in a democracy—here, they seem to shout, both have been extinguished.

In perhaps the most overt example, here Neda's image has been overlayed with the Iranian flag. Her clothing has been replaced with the green, white, and red of the flag, depicting the flag as a second skin. The symbol of Iran, featured in the middle of the flag, covers the center of her face, almost like a target. Blood splatters appear in the foreground, layered above her body and the flag. The red of the blood almost blends with the red of the flag. At once, this image seems to suggest that Neda's body is one with the body of the Iranian people, and that the Iranian state had targeted that body.

As this final image indicates, Neda's bloodied body was taken up as a symbol not just virtually, but in on-the-ground protests as well. For the Green Movement, to visualize and make present Neda's dying body at the sites of protest seems to have been a strategy to keep alive the voice and the vote that were symbolically and actually extinguished with her death.

In these ways, Neda's death was taken up and re-presented as the death of the Iranian democratic

body. As feminist and Iranian scholar Nayereh Tohidi explains:

> Neda's characteristics are representative of some of the demographic, gender, and class orientations of the current civil rights movement in Iran. Her young age (27 years old) reminds us of the 70 percent of Iran's population below age 30 who are faced with increasing rates of unemployment, socio-political repression, and humiliation should Ahmadinejad's repressive and militaristic policies continue for another four years. (8)

The protesters, Green Movement supporters, and the Iranian diaspora saw Neda's body as the embodiment of their desire for freedom from political repression, and they used that body digitally for their purposes. Green Movement supporters on Twitter frequently circulated links to the video of her death, her image iconized, and articles about her life and the family she left behind. In the recent years leading up to and following circulation of images and video of Neda's body and blood and final breaths on the Internet, Iran was seeing an "increasing number of women who are beaten, injured, killed, or arrested as political prisoners since the June 12 upheavals" (Tohidi 7). In reality, the circulation of Neda's death does reflect the growing commonality of state violence against the bodies of women who use their political voices in Iran.

In addition to the circulation of one Iranian woman's body to reflect the whole body of Iran, individual Tweeters became nodal points for the movement, facilitating the geographical spread of its public reach. Recognizing and tapping into the buzz around the significance of Twitter in the Iranian election leading up to and following the protests, The Web Ecology Project tracked the more than two million tweets making up the Twitter web ecology between June 7th and June 27th (the release date of their report) with hashtags relevant to the situation in Iran. Tracking tweets with the #IranElection hashtag, among others, the study analyzed the use of Twitter in the first eighteen days following the protests in order to trace what they describe as "the Twitter web ecology—that is, users interacting with their technological environment" (1). The study found that almost 60% of those tweeting during their sample period contributed only

once to the conversation, that over 65% of the tweets came from the top 10% most avid

participants, and that 25% of the tweets were retweets of someone else's content (1). User

@Dominiquerdr, for instance, posted 2,817 tweets about Iran between June 7th and June 29th (6).

While she was the top tweeter in the conversation during that time, her own content was only

retweeted 314 times in those 18 days, revealing her relative lack of influence among the Twitter

web ecology participants (7).

    During the protests and in many months following, expat and Canadian-Iranian

@Dominiquerdr listed Tehran as her location in her Twitter profile, and yet, she located herself

transnationally through her linguistic choices. This tweeter wrote in French, English, and Farsi,

linking to articles and websites in all three languages, sometimes using several languages in one

tweet. Around the time of the protests, @Dominiquerdr had over 3,700 followers, and had

tweeted over 200,000 tweets. Given the number of languages used, and drawing on observable

data such as the Twitter users' names and locations, we can see that this single Tweeter helped to

orchestrate a network that crossed languages, national boundaries, and oceans. While

@Dominiquerdr could not be physically present during the protests, she was able to connect to

the political body of Iranians and the Iranian diaspora via her work in curating ideas and

information through her tweets, reflecting that ways in which women both within and outside of

Iran drew upon available networks to exercise their political agency during the protests.

Considering that each of her 3,700 followers had their own networks as well, we can see how

huge the potential circulation is, and why it is tempting when describing Twitter as a political

public sphere to attribute agency to the platform itself.

    @Dominiquerdr's digital, political labor during the protests and in service of the

movement following that summer and autumn reflects the ways in which individual users can

apply different tactics afforded by the Twitter interface, which purportedly affords the ideological and on-the-ground coordinating of a movement within "publics" that produce and circulate 140-character texts. A single tweet can reference multiple authors or circulators, report immediate events, link to media containing news, facts, unsanctioned stories of the people, instructions for future gatherings, and much more—it's true that Twitter should not be dismissed simply as an homage to the inane and narcissistic as it was for so long, but is better understood as a space where texts can articulate and be articulated by a historically contextualized and material global public—too diffuse to be snuffed out, yet too rhizomatous to guarantee success in any given purpose. And, when considering Twitter's aptness for political purposes, we cannot extract the platform's usefulness from its historical context, in fact when we do so we miss the most significant indicators of its impact.

Conclusion

In the case of the 2009 Iranian election protests, stories covering "the Twitter revolution" eclipsed more significant and accurate accounts of technologies and how activists employed them. Trafficking the digital literacy myth, those accounts obscured more reflective analyses of the most significant political networks, many of which had been built from the ground up by women in recent years and without which no political movement would have had footing for demonstrations of such scale. In debating to what extent the role of social media can be used in service of democratic movements, for instance, Gladwell and Shirky's exchange eclipses the fact that images of Neda's body—dying and bloodied in the midst of a revolutionary protest—came to reflect the very political body of Iran, particularly through its circulation across social media networks and geopolitical borders. The ways in which these propagations of the digital literacy

myth encourages individuals to privilege the decontextualized democratic power of technologies and their literacies above historically informed analysis of bodies and their lived experiences further supports Scott and Welch's claim that "when our conceptions of public rhetorical practice prioritize discursive features and digitized form over—and to the exclusion of—historical context and human consequences, we miss how texts may mobilize meaning not to upend but to reinforce relations of power" (565).

Reinforcing relations of power between the West and its Others, such accounts failed to recognize the ways in which Iranian women worked with strategies of embodiment and digital activism to heal and make whole legal devaluations of women's bodies in the legal architecture of the nation. Flattened narratives about the democratic promise of Twitter for Iran similarly made opaque the complex history of feminist activism in Iran, and the difficult position a global network such as Twitter casts for a locally rooted movement. Describing the One Million Signatures Campaign's conflicting goals with regard to networking with transnational feminist groups, for instance, Khorasani expressed significant anxiety about joining with transnational movements, recognizing the need to balance local knowledge and experience with global power and influence (78). Cooptation is merely one risk of opening a movement up to global networks of solidarity. In these ways and more, Western narratives of the Iranian election protests that touted Twitter's democratic results for the women and men of Iran failed us all.

Further, we must consider how these shortcomings in our narratives of a social media revolution speak to the darker economic fears motivating the digital literacy myth. In *Territory, Authority, Rights*, Sassen contends with "easy generalizations" about economic globalization, particularly the notion that the state is in decline due to a distinct set of global forces that act upon what once was the state with predetermined consequences of neoliberalism, opening of

markets, decline of the welfare state, etc. Rather, Sassen argues that we must conceive of the effects of globalization in terms of variation, since global forces "confront considerable national specificity" (227). She notes that the state, ironically, might act through policy in ways that secure the interests of global capital and, in turn, destabilize "some aspects of state power itself" (232). Thus, in acting in its own interests in the short term, the state ensures that economic globalization will prevail, sometimes to the detriment of state power in the long term. It is in a similar vein that we can understand the current state of the US national project on cultivating a digitally literate citizenry.

Working to include global Others in our rhetorical efforts to support the digital literacy myth might support the myth's economic agenda in the short term while risking US advantage in the long term. Arjun Appadurai, in *Fear of Small Numbers*, explained that in the global era, genocide and other racially or ethnically based violence is motivated by a fear that comes from perceived threat of becoming minority. Those groups in power, either through composing a demographic majority or through a historically achieved domination, fear the possibility of losing power to those in the minority and so strike out to reinstate their power. Synthesizing the works of Appadurai and Sassen, we can come to understand the propagation of rhetorics of inherently democratic digital literacies in two ways. First, drawing on Sassen's claims, we can see that the US government's goal of spreading a rich global market based on computer and information technologies to bolster the technological development sector of the national economy (and locally, that of Silicon Valley) was successful in that the global economy and circulation of global capital now relies on the Internet's rapid transmission of information and monies across borders. However, the US, in achieving its goal of global technological progress, has opened the doors for its own downfall in this same economic terrain as developing and

competing nations gain in competition for technological development, manufacturing, and knowledgeable workers. Fear of this very loss of advantage is reflected in public policy like the *Transforming American Education* report, as I traced in Chapter 2.

Thus, fear of decline in economic and innovative status is one motivating factor explaining the current saturation of the digital literacy myth in our cultural ambiance, with its promise for the economic progress of the One-Third World and in compatibility with specifically Western versions of democratic progress. When we network the economic and political interests contained within the digital literacy myth with flattened Western accounts of a "Twitter Revolution" that obscures any historical context for technology or activism in Iran—and one which overlooks more significant stories about the role of women, women's bodies and technology in protest—we can tie such narratives to fear about the decline of the US in the future global economy. The result of this ideological trafficking, as I have shown, is the rhetorical erasure of the political agency and embodied realities of the people who actually participate in the democratic processes the Western commentators are describing. Women's narratives, as I've pointed out, are particularly disembodied and erased. In the chapter that follows, I continue networking arguments about technology in the Western world, this time to reveal that, in consequence, women's bodies in the Two-Thirds World are not merely overlooked but are also violated.

> Cyprien: Once again the riches of the Congo profit Western governments and corporations,
>
> Kambale: at the expense of the Congolese people. (Cry for Peace 14)
>
> The experience of women throughout Congo is one of survival and agency in the face of dire circumstances. (Mukenge 15)

Introduction

While Chapter 3 complicates narratives about the democratic ends of digital technologies and their literacies—demonstrating the complicity of those narratives with Western interests and ideologies like the digital literacy myth—Chapter 4 moves to the under-examined human costs of the material and labor production of technologies. More specifically, in Chapter 4, I investigate narratives that describe rape as a weapon of war in the Democratic Republic of Congo (DRC), where armed groups use women's bodies as symbols of power to gain control over wealth generated from the mining of conflict minerals that go into the making of digital devices—the very same that are claimed to help facilitate activism in moments like the Iranian election protests, the Arab Spring, and the Occupy Movement. Drawing on transnational feminism, I analyze Western descriptions of and responses to the crisis of rape in the DRC. I trace how rhetorics of technology and freedom are entangled with Western and One-Third World subjectivities that evoke consumerism and agency, finding that these rhetorics eclipse material realities and agencies of the Congolese.

The work of this chapter is in presenting a fully dimensional transnational network of literacy and materiality that combats the flattened narratives that traffic the digital literacy myth.

In Chapter 2, I reveal how the digital literacy myth works together with the hidden pedagogy of neoliberalism to further generate a particular American subjectivity that comes with inherited and reproducible rhetorics and ideologies about literacies and their technologies. These rhetorics are conceived with attention to and anxiety concerning the global economy and our nation's status therein. Chapter 3 follows narratives within the West that project the digital literacy myth's promise for freedom and democracy onto the moment of the Iranian election protests, without concern for the histories, bodies, or material realities of the Iranian people. In Chapter 4, I'm working to return dimension to flattened narratives of the problem of rape in the Congo. Presentation of a fully dimensional network fights against the narrowed frame of the digital literacy myth that positions Western advocates as seemingly having to choose between digital technologies and the women for whom they would advocate, or opting instead for a flattened narrative that does more harm than good.

Connecting Chapters 3 and 4 is the fact that women pay a distinctive price for these transnational networks of literacy and materiality—that is, articulating the fully dimensional narrative is the best way to account for ways in which Two-Thirds World women suffer in embodied ways due to these networks. It is the women of the DRC who become the sole caretakers of children and fields in the midst of a coltan-disrupted social fabric, women who are experiencing the most dramatic decades of sexual assault known to history, and women who are branded bare life,[20] victims by the state and by outsiders who do not attend to Congolese women's self-advocacy and agency in the midst of this ongoing colonial disrepair. In other words, whereas so far in this dissertation I've traced rhetorics of technologies and their literacies in the One-Third World, demonstrating the persuasive persistence of the digital literacy myth, it

---

[20] See Agamben.

is the current chapter in which I trace the material impact of these rhetorics across borders.

More specifically, I argue that the digital literacy myth acts as a frame through which it becomes possible for One-Third World people to understand the crisis of rape and war in the Democratic Republic of Congo—particularly as they are connected to the trade and production of coltan. There are several complicating and co-occurring truths related to Western consumption of mobile devices and production of coltan and violence in the DRC. First, rape is systematically used as a weapon of war to control profits from conflict minerals including coltan. One-Third World consumers are often completely unaware of ways in which their consumption of mobile technologies and their digitally literate activities are imbricated in violence in the Two-Thirds World. Additionally, when there *are* advocacy campaigns in the One-Third World to raise awareness and attempt to interrupt this violence, those campaigns rely on those digital literacies and their technologies to gain support. Such campaigns develop and circulate flattened narratives that might actually contribute to worsening the situation on the ground in the DRC. A transnational feminist analytic helps to trace the complicated paths of connection and complicity between One-Third World consumers and activists with sexual violence and production and trade of conflict minerals in the Congo. In this chapter, I present a more fully dimensional narrative that:

- looks closely at US government policy, One-Third World consumer advocacy campaigns, and the use of flattened narratives to garner support and spur action,

- attends to the colonial historical context of the nation to understand how its resources have always been exploited by foreign parties and how this positions the nation and its resources in the global marketplace,

- reflects a material account of the production of coltan,

- considers recent factors that have restructured Congolese social systems—including coltan and the influence of cross-border ethnic violence and genocide, as well as the presence of a Rwandan and Ugandan diaspora,

- and listens to real Congolese women's stories of sexual assault and describes women's changing roles in the face of coltan production's disruption of traditional social dynamics.

While I celebrate the intent of the consumer campaigns I critique, I believe it is important to locate some of the political economic influences that mediate the work of solidarity from the One-Third World to the Two-Thirds World. My analysis reveals how the frame of the digital literacy myth makes possible and encourages particular consumer subjectivities: i.e., the mindless buyer or the digitally literate activist whose faith in the democratic potential of digital literacies and their technologies remains unfettered, even when they are circulating flattened narratives that inaccurately construct causal connections between cell phones in the Western world and rape of women in the Congo. In other words, I reveal how the rhetoric of hope that is tantamount to the digital literacy myth (and that hails US consumers to operate in ways that support the myth's attendant economic agenda) comes with costs for the lived realities of people in the Two-Thirds World.

Framing Flattened Narratives: The Digital Literacy Myth

It is useful to understand the digital literacy myth as a *frame* through which One-Third World consumers and policymakers think about and respond to the crisis in the Congo. Compositionist Linda Adler-Kassner, in her book *The Activist WPA* draws upon frames theory to help articulate how the frames about college-level writing instruction, to some extent, shape what it's possible to do and believe in the teaching of writing. She draws upon sociologist Erwin Goffman,

communications scholar Stephen Reese, and linguist George Lakoff to explain that the frames

within which we work, move, and think can act upon us, or we can work to reshape the frames

toward our own goals. Framing, as she puts it, is "the idea that stories are always set within and

reinforce particular boundaries" (4). Further, these frames "define stories that both reflect and

perpetuate dominant cultural values and interests," rather than developing alternatives or

critiques of those commonly accepted values (11). Further, Adler-Kassner articulates with

support from Reese, that the more we invoke frames, the more power they come to have:

> Frames extend from symbols—words, phrases—to signifiers. The more often the
> signifiers are invoked in association with the word (by producers, consumers, and
> interactions between them), the tighter the association between symbol and signified, and
> the less likely that the signifier (around the word, image, or subject matter) will permit
> "alternative" interpretations. (12)

In other words, as we continually circulate a particular frame it becomes more deeply embedded

in social fabric and hence more effectively shapes what's possible within that fabric. But, of

course, the degree to which the frames and stories therein are effective and productive is

dependent upon a history of political economic factors—the seeds of a particular story must be

nurtured within already circulating ideologies and power. Adler-Kassner points out—what's

really at the heart of her project and my own—that "these stories have consequences," often in

the form of real policies that affect the material, lived realities of ordinary citizens (18). I would

add that such stories are also often consequences of pre-existing relations of power and material

histories. In this dissertation, I use a transnational feminist analytic to identify the constellations

of power (to use Alexander's term) that shape what happens in the world, seeking similarly to

heal (as Adler-Kassner does in her invocation of the Jewish practice of *tikkun olam*), to transform,

and to shape by bringing attention to the material consequences of ideological rhetorics in one

location that contribute to the material reality of another location, made possible by circulations

of capital, people, and resources in the global era. In this chapter, it is useful to think about the digital literacy myth as a frame that shapes what kinds of narratives are likely, if not possible, within the One-Third World, particularly when it comes to rape and coltan in the Congo. In fact, many scholars have already understood literacy as a frame out of which a range of material and rhetorical agencies emerge.

Literacy studies has traced the impact of literacy as a signifier that has historically contained within it ideological articulations of social arrangements—such as Brian Street's work to reveal that a definition of literacy always contains within it whoever's version of literacy is legitimate, and thus who can and should have access to that variety through the support of which institutional structures. Deborah Brandt's book-length study, spanning decades of literacy experience among her subjects, traced how the definitions of literacy, social arrangements, and supporting institutions and figures serving as "literacy sponsors" actually shaped layers of access to various literacy practices and their material consequences in individual lives. Similar work has been done to trace the impact of symbols and structures related to computer literacy, such as in Selfe and Selfe's 1994 article "The Politics of the Interface," (cited above) where the authors reveal the white, middle-class, male, business or office-based subjectivities that were privileged by the symbols captured in the interface design of early Mac computers, namely the brief cases, documents, manila folders, hierarchal arrangement of information, etc. (493-4). They trace how these symbols work together, pointing out that "the alignment of these cultural maps along the articulated axes of capitalism, class, gender, and race creates a set of tangential focus that continues to value approaches associated primarily with dominant ideological positions" (493-4). They further point out that teachers, and others who Brandt would later name literacy sponsors, become complicit in circulating the dominance of these ideologies, enacting the violence of

literacy (Stuckey), when they immerse students in literacy education that relies on these tools and their invoked signifieds. Selfe and Selfe conclude that, in part, as teachers and scholars we must "locate ourselves in relation to the map" (494).

To that very end, a transnational feminist analytic—which maps constellations of power using an analysis that compresses time and space (see Alexander)—reveals how constructions and ideologies of literacy, and their material consequences, are now both dependent upon and actually generate consequences for the lived, material realities of people and resources across borders. Street, Selfe and Selfe, and Brandt have centered their work on the ideology and consequence of literacy primarily within US national borders (although their work has provided significant insights for transnationals living within and beyond those borders). To expand literacy studies for the global era, scholars might use a transnational feminist lens to connect the consequences of One-Third World rhetorics of literacy to material realities in the Two-Thirds World. Toward this end, I consider the digital literacy myth to be a frame through which people understand their digital literacies to grant them democratic agency in the global marketplace. The effects of this frame are prominent in One-Third World advocacy narratives, wherein individuals use their digital literacies toward solidarity with Two-Thirds World women who they position as suffering, in part, as a result of their digital consumerism.

One-Third World discussions of the "Blood iPhone," which holds mobile device manufacturers responsible for rape of women in the Democratic Republic of Congo, can be placed within a historicized and contextualized depiction of the production of coltan and other conflict minerals and the attendant shift in social relationships there. This kind of analysis returns dimension to the flattened narratives that circulate out of (and so reify) the frame of the digital literacy myth. To describe the narratives of the blood iPhone as "flattened" allows me to keep

present the material, political, historical and social stakes and stakeholders as nodes in the network that have previously been obscured. As DRC scholar Séverine Autesserre argues, many Westerners have relied on simple narratives in their discussion of the crisis of violence connected to conflict minerals in the region. Autesserre finds that "the well-meaning international efforts have also had unintended ramifications that have prevented the intervention from achieving its stated goals, and that have even, at times, contributed to the deterioration of the situation in the eastern Congo" (204-205). A material and historicized discussion of the problem in the DRC restores the missing and significant complex factors that might, unfortunately, inhibit consumer advocacy and action in the problem. However, this analysis also points out the many layers of complicity and consequence in which One-Third World consumers understand how digital literacies serve them as actors in global networks.

Drawing on transnational feminist rhetorical frameworks, in the remainder of this chapter, I re-interrogate Western rhetorics of digital literacies and their technologies as inherently tied to democracy and global economic progress via flattened narratives. I analyze the evolution of the United States government's legislative response to violence in the DRC—The Conflict Minerals Trade Act and The Dodd-Frank Wall Street Reform and Consumer Protection Act—to capture ways in which government reactions attempt to hold private companies accountable for their participation in the violence in Two-Thirds World regions, even while maintaining rhetorical allegiance to Western ideas of technological and economic progress. The national-level renderings of the crisis in the Congo are complemented by analysis of several activist campaigns imbricated in the Western rhetorics of technology as democratic—a positionality which, I argue, in turn shapes their (in)ability to recognize the true complexity of the DRC conflict minerals network. Ultimately, I network material production of coltan and

colonial histories of the DRC, One-Third World transnational public reaction, and rhetorics of

technologies as democratic and economically progressive in ways that directly serve the private

and political interests of the One-Third World. This network is nearly never described in its

entirety in public Western narratives; in fact, flattened narratives of the network of technologies

and violence in the DRC serves the enduring interests of the Western consumer, in part by

confirming the democratic potential of social technologies even in discussions of the DRC

conflict.

The Failures and Power of Flattened Narratives

In "Dangerous Tales: Dominant Narratives on the Congo and their Unintended Consequences,"

Séverine Autesserre argues that in the case of the DRC, simplified narratives have focused on

illegal exploitation of natural resources as the primary cause of violence, sexual abuse of women

and girls as the main consequence, and reconstructing state authority as the central solution,

thereby worsening the conflicts they had aimed to lessen. While Autesserre describes these as

simplified narratives, I maintain my term of "flattened narratives" in order to highlight ways in

which power moves in networks across time and space, networks that are multidimensional and

whose dimensionality is *flattened* when we tell more simplified versions of the problem at hand.

In the DRC, this obscuring of networks through circulation of flattened narratives has real

consequences for those already paying for the conflict. More specifically, as Autesserre

describes:

> the attempts to control the exploitation of resources have enabled armed groups to
> strengthen their control over mines; the disproportionate attention to sexual violence has
> raised the status of sexual abuse to an effective bargaining tool for combatants; and the
> state reconstruction programmes have boosted the capacity of an authoritarian regime to
> oppress its population. (4)

She goes on to explain that while "frames and narratives do not cause action," "they make action possible: they authorize, enable, and justify specific practices and policies (such as regulation of the mineral trade) while precluding others (such as resolution of land conflicts)" (6). In other words, how stories are framed has material consequence for *what can be thought* and *what can be done* in a given situation. The more complex a problem, the more dangerous a simplified narrative. This is particularly true in the case of flattened narratives that already fit easily within a particular ideological system, the way that the digital literacy myth fits so well within the hidden pedagogy of neoliberalism as I explore in Chapter 2.

Like Autesserre, Adler-Kassner understands frames to have power in shaping what it is likely or possible to know and to do. She asserts that "if we want to have a voice in the discussion…, then we need to think about frames and the stories that emerge from them" (15). Adler-Kassner argues that attending to the ways in which narratives are framed allows a certain rhetorical freedom toward critique and intervention. It is through the close reading of frames *within their political economic contexts* that we can understand why particular stories have capital and circulate while others get left behind. Participating in the shaping of these frames, she argues, is a form of activism, though we might question to what extent simply telling new or different stories will intervene in histories of exploitation, colonialism, and patriarchy. Reading texts and networked arguments through the lens of an identified frame, such as the digital literacy myth, however, helps us understand what interests and powers are at play in shaping the rhetorics therein. In the case of the DRC, particular One-Third World consumer subjectivities and transnational arrangements are co-articulated through rhetorics *and* material realities of digital literacies in specific social and political locations, framed by the digital literacy myth. In this way, the frame of the digital literacy myth works in conjunction with other naturalized

systems of power, including the One-Third/Two-Thirds World divide. Tracing the digital literacy myth as a frame for how Westerners attempt to "advocate for" women in the DRC takes seriously Schell and Hesford's call to address transnational circulations of power in rhetoric and composition scholarship. Reading the digital literacy myth as a frame helps us start at the ideological factors connecting literacy and power, working backward to trace the historically emergent and material realities at play (often invisibly) in the stories we tell.

Understanding the digital literacy myth as a frame in the global era requires attention to ways in which One-Third World rhetorics about technologies as liberatory operate within local histories in the Two-Thirds World.[21] These rhetorical circulations have economic motivations that work to preserve the Global North's domination over the Global South. Further espousing the need for attention to ways in which political economy and rhetoric work together toward the production of material realities, Victor Villanueva writes that:

> Economies are carried rhetorically. We cannot discuss the ideological and thereby rhetorical reproduction of beliefs about gender, race, class, age, nation, religion or any other of the axes of difference without a grasp of how such axes are embroiled in the economic. In short, rhetoric is tied to political economy, if the work of rhetoric is the demystification of the ideological.

In order to shift the framing of digital literacies to attend to the material costs of technological production, while highlighting the problem of flattened narratives therein, we must consider how rhetorics serve particular political economic interests, made more consequential in the midst of global colonial histories and aggressive patriarchies. The digital literacy myth's promise of technologies working in service of democracy operates as a frame for One-Third World consumers. Even as they critique how material production of technologies enacts environmental

---

[21] Understanding how Western rhetorics of digital technologies and their literacies circulate and come into contact with Two-Thirds World rhetorics and understandings thereof is a significant part of my future research agenda.

and misogynistic violence, One-Third World consumers operating out of the frame of the digital literacy myth subscribe to the idea of technology as democratic as they circulate digital campaigns to intervene in that violence. A transnational feminist analysis helps to identify the frame out of which certain rhetorics and realities circulate in networks of power and consequence. Only when the entire network is made visible can we see the complexities of power at it flows transnationally between digital literacies, production of the devices that facilitate those literacies, those who regulate them and those who purchase them. And only then can we understand the consequences of those rhetorics.

That said, the network is far from static. At any given moment a particular node is subject to amplification or to growing dim as its "connectivities" among and between other nodes shift. As Inderpal Grewal explains in *Transnational America: Feminisms, Diasporas, Neoliberalisms*:

> … connectivity as a metaphor, however, [provides] an argument about its incompleteness, the exclusions produced by it, and thus for a theory in which unevenness, failure, exclusion can be included. This unevenness … foregrounds power relations within different trajectories, translations that go awry, discourses that cannot link agendas as well as powerful connectivities that link, create new nodes, and recuperate the nation and empire. (24)

There are many points at which, in the DRC conflict minerals network, a given node may seem complete in itself as it obviously connects to another node; yet our understanding of that particular relationship cannot be complete without contextualizing it within more covert linkages. For instance, One-Third World consumer use of digital literacies to advocate for conflict-free electronics may seem to connect very simply in a mutually affirming relationship with Western narratives of digital technologies as essential to advancing the projects of freedom and democracy. However, as Rebecca Dingo and Donna Strickland described in "Anxieties of Globalization: Networked Subjects in Rhetoric and Composition Studies," those considering the

complexities and perceived scarcities among geopolitical flows recognize affect as a powerfully motivating.

In the case of faith in the democratic potential of digital technologies and the problem of violence involved in their production, this affect materializes in economic fear, leading Westerners to conflate consumptive subjectivities and democracy (see Grewal). As my analysis shows, the flattened narratives in Western policy and consumer campaigns preserves the very One-Third World interests that their narratives problematize. In other words, through continued sales of the technologies with which consumers express their democratic agency, the consumer advocates support the private interests that they are simultaneously calling to task for their role in the DRC violence. This point drives home the degree to which literacy scholars, who have always been interested in agency, must attend to the ways in which consumerism, ideologies of democracy and freedom, and our nation's economic agenda are bound up in transnational networks of materiality and literacy. In the next section, I look at the evolution of US policy in its attempts to ameliorate the material costs of those networks in the DRC.

Framing a US National Agenda: The Digital Literacy Myth in US Policy and Rhetoric

As my work in Chapter 2 demonstrates, US policy is a significant vantage point from which to locate ideological traffic like that of the digital literacy myth. By way of policy, the US government has recently tried to influence an end to the violence in the DRC. The proposed and passed legislation that I describe here, and the sacrifices and trade-offs in their history, do not immediately implicate literacies, literacy practices, or literate agency. Rather, networking arguments allows me to connect the evolution of this legislation around conflict minerals in the DRC within the larger frame of the digital literacy myth as it circulates through government

rhetoric in other moments that do directly take up digital technologies and their literacies. The purpose in this section, then, is to network arguments revealing how US foreign policy is entrenched in the ideological commitments of and economic agenda behind the digital literacy myth.

Informed by reports from the United Nations and the US Government Accountability Office, HR 4128: The Conflict Minerals Trade Act was submitted to the House of Representatives Committee on Foreign Affairs in 2009. This proposed legislation was revised, and a new version was passed as part of the Wall Street Reform and Consumer Protection Act in July 2010. The "Dodd-Frank Act," as it is commonly called, was offered as a large and comprehensive financial regulatory reform with the goal of preventing another recession of the sort we had just seen; the bill responded to conditions that shaped the American taxpayer bailouts of institutions deemed "too big to fail." Included in the Act, Section 1502 attempts to influence the violence in eastern Congo by requiring that companies assess their supply chain and report to the Securities and Exchange Commission if they are in fact using minerals in their production mined from conflict regions in the Congo. The Act aims at curbing human rights violations being committed by the Congolese Army, as much as those carried out by illegal armed groups. Tracing the history of the Dodd-Frank Act reveals conflicting private interests that have undermined efforts to produce US policy that combats consumer-sponsored violence in the DRC.

Senator McDermott's original bill—H.R. 4128: The Conflict Minerals Trade Act—was presented to the 111th Congress on November 19, 2009. The bill cited numerous international and domestic organizations' regulations, policy, and reports on the links between profits from conflict minerals and violence in the DRC, including: the International Rescue Committee, the

Government Accountability Office, United Nations Security Council Resolution 1857, the

Electronic Industry Citizenship Coalition and the Global e-Sustainability Initiative, and the

Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act of 2006. The

myriad groups represented in the original bill speaks to the complexity of the network its authors

recognize in attempts to intervene in the DRC's plight—attempts that would never be realized in

passed legislation. Section 4, for instance, requires that the UN work with local groups and

NGOs to develop public maps that identify mining zones controlled by armed groups. Further, it

stipulates that this map should be a living document, revisited at least every 180 days to update

known "conflict zone mines." In its "Guidance for Commercial Entities," Section 4(b) mandates

that:

> The Secretary of State and the Secretary of Commerce shall work with other member states
> of the United Nations, local and international nongovernmental organizations, and other
> interested parties to provide guidance to commercial entities seeking to exercise due
> diligence, including documentation on the origin and chain of custody for their products, on
> their suppliers to ensure that conflict minerals used in their products do not—
> (A) directly finance armed conflict;
> (B) result in labor or human rights violations; or
> (C) damage the environment. ("H.R. 4128")

H.R. 4128 seeks to end American companies' reliance on conflict minerals in their supply chain,

but the bill further includes ameliorating efforts that recognize the further strain that would

materialize, should hundreds of millions of dollars suddenly stop flowing into the country

(though it's unlikely that those profits find their way to average Congolese citizen in any case).

Section 5, titled "Sense of Congress on Assistance for Affected Communities and Sustainable

Liveliness" suggests that to lessen the impact of withdrawn financial resources, the US "should

expand and better coordinate programs to assist and empower communities in the eastern

Democratic Republic of the Congo whose livelihoods depend on the mineral trade." Thus, the

bill presents a transnational partnership that tries to account for the complexities of the economic situation while advocating for those affected by its attendant violence.

In its multilateral recommendations for ending consumer-sponsored violence in the DRC—while accounting for the resulting deepening of infrastructural gaps in supporting Congolese citizens whose livelihoods depended on the mineral trade or who were affected by it environmentally, financially, or personally—H.R. 4128 truly *was* an example of the liberal "21st century statecraft" celebrated by Clinton. But this is not the bill that was passed. Signed into law instead was H.R. 4173, the Dodd-Frank Wall Street Reform and Consumer Protection Act, which includes at the very end of its nearly 900 pages, "Section 1502: Conflict Minerals." This version of the bill requires that commercial entities *disclose* annually whether minerals used in their production chain came from conflict regions of the DRC or from adjoining countries. And, rather than offering suggestions in regards to how to provide multilateral support (including funding) to communities in the eastern DRC, Section 1502 suggests that we should support the DRC and others as they attend to the issues on their own. Additionally, as political scientist Michael Nest points out in *Coltan*,[22] the legislation seeks to avoid coltan trade that benefits armed forces, among which it *does not* count the DRC army, which is known to be directly involved in the rape and other violence that has been attributed to the coltan crisis (loc. 1803). In other words, the passed version of the bill serves private electronics industry interests by not requiring manufacturers to omit conflict minerals from their supply chain. Instead, the legislation opts for a neoliberal position of continuing to do business as usual, while leaving both DRC citizens and electronics consumers to their own devices.

---

[22] *Coltan* is an incredibly thorough and highly regarded account of the problem of violence and corruption connected to coltan mining in the DRC.

While both the Obama Administration and Congress recognize the ways in which American companies' investment in conflict minerals in the DRC sponsor violence in the region, particularly sexual violence against women and girls, they fail to fully address the problem through policy and law, or to link their own rhetorical sponsorship in the violence through further circulation of rhetorics that portray technologies as inherently connected to freedom, democracy, and progress in the US and around the world (despite the fact that their manufacturing is not). More specifically, it is important that we see the trajectory of Section 1502 in the context of larger US ideologies about technologies and their literacies. The ways in which the government attempts to intervene in DRC human rights violations through foreign trade policy is elsewhere absent from the narrative shaping public discourse about digital literacies and their technologies in the West. The work of this chapter is to restore the connection between US legislation, our rhetorics of literacy, and how they are tied in contradictory ways to conflict, rape, and murder on another continent. Through an analysis of some recent moves by the Obama administration, I will demonstrate how our national optimism framing rhetorics of digital literacies leaves little room for the complicated attention the situation in the Congo deserves. Rather, these rhetorics affirm Western belief in the democratic potential of technologies, continue to preserve our investments therein, and, as I will attend to below, shape consumerist subjectivities and agency via the digital literacy myth.

In combination with the efforts toward STEM education and the 2010 National Education Technology Plan's focus on "Learning Powered by Technology" that I traced in Chapter 2, the Obama Administration has also focused on increasing access to digital literacy skills for adult learners. In 2011, the Obama Administration released DigitalLiteracy.gov in an effort to help citizens learn and teach the digital literacies required for full participation in the current job

market. In the "Digital Literacy Fact Sheet," the administration cites that "High-speed Internet access and online skills are not only necessary for seeking, applying for and getting today's jobs, but also to take advantage of the growing educational, civic, and health care advances spurred by broadband" (1). These rhetorics traffic the US government's commitment to the myth via education in digital skills as essential to the livelihood of individual Americans and to our nation's overall progress. But government rhetorics celebrating the democratic and progressive potential of digital literacies are not limited to domestic concerns.

In the current moment, as I've been arguing, the digital literacy myth—without attending to the specificities of any given region—promises that technologies will help support the spread of freedom and democracy across global borders. This aspect of the myth has been well represented in One-Third World perspectives on political uprisings in the Middle East and other areas, as my work in Chapter 2 shows. Responding to the Internet shut down by governments facing the Arab Spring, President Obama made public statements that Internet access is nearing the status of an inalienable human right. In an address describing the freedom of speech valued by American ideology and demanding that Mubarak reinstate and keep open Internet access for Egyptian citizens, he argued that Egyptians have universal rights like "the right to peaceful assembly and association, the right to free speech, and the ability to determine their own destiny," describing these as "human rights" that the US will continue to defend ("President Obama"). He immediately follows this list of rights by calling "upon the Egyptian government to reverse the actions that they've taken to interfere with access to the Internet, to cell phone service, and to social networks that do so much to connect people in the 21st Century." While Obama only implicitly connects Internet access to human rights, Secretary Hillary Clinton has been much more direct in her assessment–championing what she calls "the freedom to connect."

149

In a January 2010 address, Clinton connects global economics, human rights, labor struggles, good business, and 21st century statecraft to US efforts to expand global access. She argues in her impassioned speech that "the freedom to connect is like the freedom of assembly, only in cyberspace." She continues that, working together with private entities and nation-states, freedoms like that of Internet access need to be protected because "principles like information freedom aren't just good policy, not just somehow connected to our national values, but they are universal and they're also good for business." She concludes that "By advancing this agenda, we align our principles, our economic goals, and our strategic priorities. We need to work toward a world in which access to networks and information brings people closer together and expands the definition of the global community." In this speech, Clinton adds to Obama's rhetoric cited above, solidifying the democratic good that digital platforms and their literacies enable while also conveying US economic interests in the spread of such a narrative. She makes clear that access to social media and other digital platforms aid the cause of democracy and human progress, *and* they can serve US business interests. In this way, arguments that digital technologies and their literacies grant freedom and ensure economic prosperity are rhetorically disconnected from the larger transnational network of materiality and literacy. The violent and deadly costs paid by women and men in the Congo related to the production of the technologies—so valuable for US economic and foreign interests—are consciously removed from conversations about technology in these instances, thereby flattening the network of material production and the material costs thereof.

When the administration does take on the problem of the Congo, unsurprisingly, the rhetorics of democratic freedom and economic progress are muted. A few months after the

speech cited above, Clinton reflects on the violence in the DRC, promoting the administration's efforts to address the problem of violence there. She explains:

> Last year in the Democratic Republic of Congo, I spoke out against the trade in "conflict minerals" that has funded a cycle of conflict there that has left more than 5 million people dead since 1998, displaced countless more, and spawned an epidemic of sexual and gender-based violence.
>
> President Obama has now signed into law a measure that will require corporations to publicly disclose what they are doing to ensure that their products don't contain these minerals. The DRC has formally expressed its support for this law and has thanked both the executive and legislative branches of our government. This is one of several steps we are taking to stop this illicit and deadly trade.

Clinton here celebrates the humanitarian goals of section 1502 of the Dodd-Frank Act, without discussion of how its contents may be contrary to narratives of digital technologies and literacies as democratic, liberatory, and good for business. In other words, she does not connect our nation's economic investment in production and sales of mobile technologies that rely on conflict minerals from the DRC, and she does not attend to the struggles US companies might face were they mandated to clean up their supply chains.

This oversight can be attributed to the relatively small accountability required of corporations, thanks to the truncated version of the bill passed in Section 1502. Because the law requires mere public acknowledgement of, rather than material disinvestment in, conflict minerals, businesses don't actually suffer and the US can still *appear* to support women in the DRC. Critics, however, have cited expanded violence and other unintended consequences in their derision of the Dodd-Frank Act. DRC President Kabila's six-month ban, and other mining companies' *de facto* embargos on minerals from the DRC—much of which developed out of pressure from international agents like the US—have had a toll on the civilians who rely on the mining economy to survive. As political scientist Laura Seay described in a white paper for The Center for Global Development, "Local civil society activists engaged in the mining sector

estimate that 1-2 million Congolese artisanal miners and those who work in other aspects of the

mining sector are currently out of work. Multiplied by the 5-6 direct dependents that each miner

has, section 1502 has inadvertently and directly negatively affected up to 5-12 million Congolese

civilians."

Here we see some of the material consequences of flattened narratives about DRC

violence as they circulate out of US policy and act in transnational spheres. Even shallowly

attending to the complex and networked relationships between the electronics trade, weakened

Congolese infrastructure, and the rape and human rights crises in the area reveals that things are

not as simple as the stories being circulated suggest. Representing this network in its complexity

helps to return dimension to these flattened narratives, working to trace the transnational material

consequences of the digital literacy myth.

Flattened Narratives in Activism in the One-Third World: Consumerism, Freedom, and Choice

From my discussion of the US policy intervention into the problem of rape and conflict minerals

above, it may already seem like any solution will be incomplete. And, readers may similarly feel

helpless, perhaps even guilty. I am sympathetic to and honor those affective responses, and I

attempt to provide writing teachers with a path forward in Chapter 5. However there remains the

looming truth that this transnational network of literacy and materiality operates in such a way as

to sponsor violence in the Two-Thirds World while benefiting folks in the One-Third World—

whether we would have our literacies participate or not. This is the disheartening reality that my

analysis of One-Third World consumer advocacy campaigns will continue to speak to. Before I

move to critique these campaigns, I want to say that I respect and honor the compassion of their

creators—people who I believe truly do sympathize with and desire to help the women of the

Congo. That said, it is important to consider consumer activism against the background of the digital literacy myth and some of the US policy I've described above.

First, an "ideological reassembly," to use Alexander's term, of US policy and legislation with consumer campaigns helps to articulate how the hope for democratic ends is actually subordinate to the digital literacy myth's hidden economic agenda. Revealed above, the Obama administration has on several occasions directly linked technology to freedom (e.g., naming internet access a universal human right, asking Twitter to delay server maintenance during the Iranian election protests, describing digital strategies as central to 21st century statecraft, etc.). However, my analysis shows the comparative impotence of H.R. 1502 to the original Conflict Minerals Trade Act, as it merely demands transparency on the part of corporations whose supply chains include conflict minerals from the DRC, rather than declaring a moratorium on trade in coltan and other violence-enabling actors in production of digital devices. In other words, the centrality of technological development and an advanced digitally literate (STEM-educated) US citizenry has eclipsed in actual legislation the concern for the democratic virtues of technology.

Second, the digital literacy myth, as my dissertation has been arguing, carries with it an unquestioned faith in the democratic potential of digital technologies and their literacies not just domestically, but on a global scale. This sentiment is revealed through the campaigns I interrogate below that rely on individuals' digital literacies as strategies toward achieving democratic ends, despite the fact that the devices they rely upon for their advocacy are (almost exclusively, they claim) at the center of the violence that they wish to interrupt. In other words, One-Third World activists use their digital devices and supporting literacies to try to intervene in the sexual violence they attribute to production of those same devices. In this way, consumer

153

advocates are stepping into the economic and political subjectivity made readily available by the prevalence of the digital literacy myth and the neoliberal pedagogy in which it participates.

We should, then, think through the One-Third World campaigns against coltan and sexual violence in the DRC as inherently *framed* by two potentially competing values contained within the digital literacy myth; the myth's commitment to democracy on a global scale, and its simultaneous commitment to a technology-based economic agenda, shapes the kinds of advocacy that are both likely and possible in the One-Third World. These competing values also help to explain some of the more obvious tensions within the campaigns' strategies. Michael Nest focuses a chapter in *Coltan* exclusively on the advocacy campaigns working to halt or mitigate the negative social and environmental effects of coltan trade in the DRC, including: The Durban Process for Ethical Mining, United Nations initiatives, a Germany-based project to establish a certification system, a multinational effort to "fingerprint" coltan ores, the Enough Project, US government conflict minerals legislation, "No Blood on My Mobile," "Break the Connection, "Breaking the Silence," and "They're Calling on You." Nest points out that while the Durban Process focuses on interrupting mining practices, the rest of the campaigns target their advocacy to interrupt and impact the coltan cycle at the levels of trade and demand; these distinctions help shape and determine the rhetorical strategies called upon by the campaigns described. In the following section, I focus on the consumer-targeted campaigns that try to move individuals to action like boycotting, petition signing, and culture jamming, each of which relies on digital literacies for circulation of their particular message or participation in their campaigns.

Consumer Campaigns against Coltan-Related Violence in the DRC

In the West, activists who have devoted their attention to the problem of rape and conflict

minerals have used a variety of digital literacies to develop campaigns against the violence in the DRC. Specifically, activists have reduced the problem in the Congo to rape and minerals. Groups like the Enough Project, Raise Hope for Congo, and Global Witness are some of the major players appealing to Apple, other US electronics companies, and consumers to try to influence an end to the systemic violence against women in the DRC through boycotts. Some campaigns have targeted the "Blood iPhone," equating the purchase of an iPhone to the rape of a woman in the Congo, nearly (and sometimes even actually) to the rhetorical effect of a 1:1 ratio. These campaigns, including Break the Connection, Breaking the Silence, No Blood on My Mobile, and The Cell Out, use a variety of literacy strategies to lobby consumer electronics companies, policymakers, and to show solidarity and support for victims of coltan-related violence in the Congo, including postcards, letters, text (and anti-texting) campaigns, voicemail messages, and more. Below, I explore some of the campaigns that circulate in the One-Third World, how they present flattened narratives about the role of conflict minerals in the violence in the DRC, and how they reflect an uncritical faith in consumer agency and the power of digital technologies and their literacies in ways that maintain those Western ideological commitments.

In one example of a consumer campaign, the Enough Project (an often otherwise very thorough and thoughtful advocacy machine) posted the video "I'm a Mac…and I've Got a Dirty Secret" to their YouTube channel in June 2010. Borrowing the staging of Apple's popular "Mac vs. PC" series of advertisements, this video features a conversation between the stuffy suit-clad PC and Mac in his casual sweater and jeans. When Mac asks PC what he has in his pockets, PC reveals the tin, tantalum, tungsten, and gold in his pockets, citing that it comes from the Congo, "where it fuels the deadliest conflict since World War II; 5 million killed in the past ten years, hundreds of thousands of women and girls raped, horrible stuff! Wish you hadn't asked." Mac

indicts PC, explaining further how conflict minerals support armed groups who profit from the violence from selling the minerals to electronics companies. The dialogue ends as PC asks what Mac has in his pockets: "Oh, you know, just some conflict minerals...Guess we have some things in common after all." Following this exchange, actor Brooke Smith explains the goal of the campaign: "We want electronics companies to clean up their supply chains, and we as consumers can make this happen," apparently through participation in an email campaign asking top electronics companies to commit to manufacturing conflict-free products.

What this and other campaigns do not address is just how complicated it is to determine which minerals come from mines in the DRC's conflict zones, thanks to porous borders and the illegal smuggling operations of conspiring Rwandan armed groups. Nor do such campaigns address just how economically devastating it would be to pull all profits from mining operations from Congolese involved in both conflict-zones and non-conflict zones. Rather, these campaigns flatten the network and tell simpler narratives that rely on social media and other digital platforms to inform and incite action, pressuring electronics companies (Apple in particular) to resolve the complex sociohistorical problems of transnational violence and trade in response to consumer advocacy and political pressure. Here, the narrative is flattened in ways that don't take into account the cross-border smuggling and spillover of ethnic violence from Ugandan and Rwandan diaspora who participate in illegal trade of coltan shipped out of Rwanda, rather than the DRC. A more fully dimensional narrative, like that I'm working to portray in this chapter, would reveal that Apple Corporation cannot necessarily identify and reject tanalum powder processed from coltan ore mined in the DRC just because iPhone consumers want to purchase guilt-free products. Additionally, as Nest argues, campaigns that focus on a clean global supply chain fail in two important ways: they are not transnational enough to account for the cross-

border networks of trade, smuggling, violence, and distribution, and they are not targeted enough to address the relevant specificities connected to coltan production in the DRC. In other words, in their advocacy for Congolese women, advocates in the One-Third World draw upon the very materials they cite as cause for the violence without attending to ways in which their literacy agency and advocacy is possible only because of this transnational network of materiality and literacy.

More overtly simplifying narratives can be found in blog and discussion forum posts across the Internet with titles like "A Deadly War Funded by Your Cell Phone," "There's Blood in your Phone," and the hyperbolic, if disturbing, "My iPhone Raped a Congolese Woman." In blog posts like these, conscientious One-Third World consumers use digital literacies to help spread attention to the problem of violence against women in the DRC, motivated by admirable goals of working toward peace. Their narratives, however, have flattened the conflict minerals network, at once revealing and reinscribing the public notion (for those aware of the problem at all) that simply boycotting Apple products will stop rape in the DRC. As Seay recognizes above, boycotts may actually do more harm than good in terms of contributing to further destabilization in the region. Additionally, Seay points out that boycotting strategies that operate out of the one-to-one cell phone-to-rape ratio narrative misunderstand the nature of the violence in the DRC. She argues that "The militarized mineral trade is much more a symptom of the Congolese state's weakness and inability to govern than it is its cause." While well-intentioned, these texts reveal the tendency toward flattened narratives, the faith in consumer agency to shape world affairs, and a testimony-through-action that they can effectively use digital platforms and their literacies toward democratic ends on a global scale.

Tactically, these activist campaigns rely on digital literacies (such as use of social media and digital design) and their technologies to spread awareness about conflict minerals. Yet none of the campaigns directly address this apparent irony. Blogger hungryandmad, of the above-mentioned campaign "My iPhone Raped a Congolese Woman," is no frequently cited blogger, but her content is worth attention for the ways in which it reflects the prevalence of the flattened narrative about the DRC in conjunction with a particular forthcoming-ness about her position as a consumer. After describing several specific anecdotes of rape and murder of "babies 10 months old to elderly women," she asks: "A sad story, but what does it have to do with you?" From here she moves into an analysis of how significant technology is in her daily life and how those products and devices she loves are tied to the violence she has just graphically described for her readers. She recognizes that a boycott could put many legitimate miners out of business, and that there is not yet a reliable enough means for companies to determine whether their products are conflict free. Addressing what the campaigns named above fail to notice, the blogger concludes her post with the following passage:

> So should we all throw out our iPhones? Toss our iPads? Let's not be rash here. But maybe we can use our technology to spread the word, sign a virtual petition, or share this information with our friends on Facebook. There is no better force for change than education and knowledge. We can speak to the rest of the world for the women in the Congo whose voices have been silenced by fear.

hungryandmad has located herself in the One-Third World through her construction of a "we" who own these devices and who are as affectively connected to them as she is (note her quick assessment that to choose against consuming these devices would be "rash"). She explains that the devices can instead be a force for good, as she and her readers can use their privileged perspective to "speak for" the presumably voiceless Congolese women being raped by those devices with which "we" can advocate for "them." Again, while well-intentioned, her rhetoric

158

speaks directly to the point that many of the consumer advocacy campaigns in the One-Third World operate out of flattened narratives that reify faith in consumer agency and faith in the ability for digital technologies to serve democratic goals across borders. These narratives are even more reductive in that they uncritically position a One-Third World consumer as savior to the DRC while not attending to the local specificities of the region that would trouble the actions they're advocating.

This brings me to two significant moments in my analysis. First, the ethnocentrism with which the blogger proclaims women in the DRC to be "silenced" is akin to the rhetorical moves Rebecca Dingo describes in *Networking Arguments*, where she argues that the neoliberal rhetorics of empowerment in UN discourse on women work to "legislate neoliberal practices that actually reinstitute the very structures that limited women's empowerment in the first place" (107). In this case, Western consumerists' beliefs in the democratic power of digital literacies and their devices are persistent; even in the same breath that those devices are located as a key player in violence against the women, the devices are proclaimed to be able to *speak for* the women they harm. Neither in this particular simplified narrative, nor in any of the other activist models named up to this point, has Congolese women's self-advocacy been given stage. The void concerning Congolese women's agency in One-Third World consumer narratives helps flesh out another node in the "vector of power," and to further locate and complicate the costs of rhetorics of digital literacies in the West.

As Dingo points out, "so-called unempowered women are seen as individuals who are not fully formed agents because they do not have a sense of self-awareness necessary to become rational self-reliant actors in transglocal capitalism" (140). However, consumerist purchases and practices related to digital literacies and their devices are partly what grant One-Third World

159

subjects the perception of agency to speak for self and Other. A more responsible move toward

alliance across One-Third/Two-Thirds World borders would be for Western consumer advocates

to work in concert with already operational community-based groups in the DRC, lending their

buying power and digital literacies in service of self-defined goals and needs that recognize a

deeper network of material and contextual reality.[23] This move toward solidarity requires

identifying the organizing that Congolese women are already doing, which I attend to later in the

chapter.

Second, sustained cultural belief that digital devices hold the democratic answer to the

social problems they embody demonstrates the persuasiveness of digital literacy myth. The

logics of capitalism and consumerism—logics in which the myth is embedded—have long been

interwoven to activate a particular sense of agency in the consumer-subject. However this agency

should be understood in its contemporary context of transnational networks of literacy,

technology, and materiality. Inderpal Grewal's concept of transnational "connectivities" signals

both the collection of people in a network and the connection metaphor taken up in discourses on

digital technologies that "are crucial to consumer culture and its dissemination through

transnational connectivities of many kinds—of people, media, and geopolitics," and which are

both "subject-producing and subjectifying" (31). Digital technologies and their literacies have

become inextricably linked to Western consumer narratives of independence, individuality,

freedom, and choice, as is illustrated in the popular and hard-hitting blog critiquing white middle

class culture, *Stuff White People Like.* Each post on the blog interrogates a particular cultural

signifier pertinent to white middle class identity (including "Camping," "Standing Still at

---

[23] Activists should also consider the shifting global markets for digital products, recognizing, as Nest points out, that if "activists with transnational goals are to maintain their hard-won influence over how corporations produce and trade natural resources, they need to follow the example of transnational corporations and engage with Asia" (loc. 2274).

Concerts," and "Wes Anderson Movies"), revealing some aspect of privilege embedded therein.

Regarding Apple products, the blog's author Christian Lander offers this compelling critique:

> Plain and simple, white people don't just like Apple, they love and need Apple to operate. On the surface, you would ask yourself, how is that white people love a multi-billion dollar company with manufacturing plants in China, mass production, and that contributes to global pollution through the manufacture of consumer electronic devices? Simple answer: Apple products tell the world you are creative and unique. They are an exclusive product line only used by every white college student, designer, writer, English teacher, and hipster on the planet. (qtd. in Monkedieck 5)

Apple's advertising campaigns (such as "Think Differently" and "Mac vs. PC") have consistently constructed Apple consumers as unique and creative thinkers who express these aspects of themselves through their purchasing power. Thus, consumer subjectivity has been shaped by private technology companies' interests and the digital literacy myth throughout recent decades.

In the case of hungryandmad, the author expresses sympathy for those facing the conflict in the DRC, as well as a desire to understand the political economic sources of the struggle. She also recognizes her own position and accountability within it, and takes action by educating others on the issue. Her motives reveal aims toward democratic action and she sees her consumerism as both an impediment and a solution to the problem. This reflexive relationship between liberal political consciousness and the interests and affordances of neoliberalism is not new. Tracing the history of feminism to similar ends, Grewal points out that "Since the concept of choice is essential to participation in democracy as well as to consumer culture, feminism was engaged in a struggle with neoliberalism but also dependent on it for its existence" (28).

Though these campaigners are implicated in the network connecting rhetorics of digital literacies as liberating and progressive with the very violence caused by the technologies they use to combat it, their belief in consumer agency and democratic potential of those technologies

remains intact, and usually unquestioned. I want to note that I am not suggesting that activists must avoid digital platforms in order to effectively advocate for women in the DRC. Rather, I would like to highlight that when we understand our rhetorical tools in their larger political economic contexts, we can begin to understand how even our work toward social justice is plagued by our advantaged position in the global economy, and that our location shapes how we perceive the problem and its solutions. Further, I want to emphasize that we can and should use every resource at our disposal to dispel flattened narratives, even when that work might seem to dim the light of potential solution or action. Working through the more-fully realized network of the problem, we can begin to take integral and sustainable steps toward effective transnational alliance.

In reality, the solutions the campaigns suggest, particularly boycotting, may actually do more harm than good in resolving conflict in the DRC—which a more fully dimensional narrative would make obvious. The digital literacy myth's service to a hidden US economic agenda has contributed to a rising demand for digital devices and expansion of mobile technology development in the US and abroad, thus indirectly investing in and profiting from the violence in the DRC. In fact, the myth makes possible flattened narratives like those above that speak out against the violence while still sponsoring that violence via reliance on digital technologies and their literacies. But more concerning still, the solutions posed by these campaigns do not acknowledge the network of conflict minerals, digital devices, and violence in the DRC in its true complexity.

Solutions coming out of flattened narratives are far from harmless, as I demonstrate below. In order to understand how flattened narratives and simplified solutions have deep material costs on the lived realities of Congolese men, women, and children, I must contextualize

162

the history of colonialism (and hence historical transnational claims on the Congolese land and social body) that has given rise to the current conflict. To explore the colonial history of the DRC in its connection to coltan and the changing social landscape returns dimension to the transnational network of literacy and materiality. Articulating these histories helps attend to our complicated role as literacy educators in the One-Third World, given the material histories and contexts of the tools we teach (a problem I take up in Chapter 5). It is only in the context of this varied and difficult history that we can understand the power of the digital literacy myth to promote harmful flattened narratives that continue to oppress in the same moment when they seek to help.

Networking Colonial Histories

Formerly the Lunda, Luba, and Yeke kingdoms and the Kuba Federation, the Congo was given to King Leopold of Belgium at the Berlin Conference in 1885. He named the nation the Congo Free State before carrying out some of the most egregious colonial atrocities in history, including enslavement, abuse, and murder of the Congolese people toward the production of rubber and the profits from its export. The colony became the Belgian Congo in 1908, and was ruled by white Belgian elected officials until the establishment of the Republic of Congo in 1960 with the help of the UN (though Belgian colonists transferred over $12 billion back to Belgium from the Congo between 1950-1959, leaving the country's wealth ravaged) (Kisangani 11). Rival leaders seeking legitimacy led rebellions against the new government from the Katanga, South Kasai, and Orientale provinces. In addition to Belgian colonial histories and interventions, the US has colluded with outside interests to intervene in Congolese politics, largely due to material and economic interests maintaining access to the region's rich natural resources.

University of North Carolina, Chapel Hill historian Georges Nzongola-Ntalaja explains in a *Guardian* article that "With the outbreak of the cold war, it was inevitable that the US and its western allies would not be prepared to let Africans have effective control over strategic raw materials, lest these fall in the hands of their enemies in the Soviet camp." He further concludes that the US-involved assassination of Patrice Lumumba in 1961 was so significant for Congolese people and politics in the months following the nation's independence because "it was a stumbling block to the ideals of national unity, economic independence and pan-African solidarity that Lumumba had championed, as well as a shattering blow to the hopes of millions of Congolese for freedom and material prosperity" (Nzongola-Ntalaja). For centuries, the DRC has suffered colonial oppression due to its natural wealth. Following the trend of Western intervention in Congolese political institutions, in 1971 US-backed, anti-communist President Mobutu took office and changed the country's name to Zaire. In 1997, amidst spillover from the Rwandan genocide and tensions with Uganda, Mobutu fled the country and President Kabila assumed power, renaming the country the Democratic Republic of Congo. There have been 17 civil wars in Congo since its independence from Belgium in 1960 (Kisangani). And the most recent conflicts have been named the most horrendous violence the world has seen since WWII, with over 5 million estimated deaths since 1998 (Raise Hope for Congo).

Women have paid an inordinate and embodied price for this history of war and colonization, primarily in terms of sexual assault. Congo has been referred to over the last decade as the least developed nation in the world, the worst place on earth to be a woman (Kahorha), and the rape capital of the world (Wallström). Studies reflect wide-ranging figures: common estimates suggest that 500,000 women and girls have been raped since 1998, another suggests that 12% of women living in the DRC have been raped (Mansfield 4), and another

estimates that 1,152 women are raped per day (that's 48 per hour) (Peterman, Palermo, and

Bredenkamp). Armed men, including rebel groups as well as the Congolese army, commit over

80% of these rapes. The systematic nature of the assault (with gang rape representing the

majority of these figures), suggests that sexual violence is being employed tactically as a weapon

of war (Meger). Women and girls raped in the Congo have described brutal scenes of being gang

raped, tied to trees, penetrated with guns, batons, and other foreign objects, and have borne

children conceived during these assaults. They have faced traumas to limbs, had breasts cut off,

gentalia mangled, wombs ravaged, bladders torn; they have contracted HIV and have been

abandoned by their husbands and families (Mansfield).

Among the most powerful reflections on the violence I've come upon in narratives of

sexual violence in the DRC are the following field notes from researcher Joanna Mansfield,

wherein she describes an interview with a regional pastor providing comfort, counseling and

services to survivors:

> *I move closer to Pastor Antoine and sit on the sofa where the women have been sitting.
> […] I suddenly feel dampness and realize that the sofa I'm sitting on is soaking wet. I
> discreetly try to shift to a dry patch while listening to the pastor, but he notices and stops
> mid-sentence. "It's wet?" he asks me. I nod suddenly too overwhelmed by feelings to
> speak.*
> 　　*In that moment, it becomes too real. My skirt is wet with the urine of these women,
> who have had their bladders torn by rape. I suddenly become aware of the strong smell.
> It is to my shame that I feel embarrassed to walk around outside with the smell lingering
> on me. The women with fistula have been leaking incontinently, uncontrollably since the
> rape, which for some has meant ten years of pain and shame.* (Mansfield ix)

For this researcher, proximity to the pain suffered by women targets of the war is nearly

unbearable. Fistula is far from the only or the worst long-term costs of sexual assault for these

women. As one doctor described to Human Rights Watch, "he had never seen evidence of such a

level of brutality as among his patients: women with parts of their genitals cut off with a razor

blade, women shot in the vagina after rape." Thus it is for good reason that sexual assault in the

DRC has been spoken about (and captured in popular media like *Law and Order: SVU*) with such severity; as one women explained it, "I have the feeling that if you are born a woman in this country you are condemned to death at birth" (qtd. in Brittain 598). While the violence against women is horrific and carried out with sickening frequency, it is not simply individual acts of male-against-female violence—a savage symptom of patriarchy everywhere. Rather, rape in the DRC is specific to its current moment in transnational and geopolitical and economic complexity—and this complexity is tied to networks of literacy and materiality. But the locality of the problem, with its regional particularities, must be fully traced in order to fully contextualize how and why the digital literacy myth and the consumer campaigns it shapes are so deeply problematic.

While Congolese law recognizes rape as a weapon of war, the nation's social and judicial cultures inhibit justice for survivors. DRC legislation on rape is written in such a way as to emphasize its systematic nature, stipulating that "all sexual violence with the intention of destabilizing, dislocating a family and eliminating an entire people constitutes a crime against humanity, punishable by law" (qtd. in Mansfield 18). The prevalence of rape carried out by armed groups and the DRC army itself has made this legislative language necessary, and the law speaks to the fact that the state understands the function of the violence and its purpose. Describing her experience with one such armed group, one survivor explains: "FDLR militia attacked our village, looted and burned houses…. My father was burnt in one of the houses and my mother was raped and killed. I was taken away by the militia for seven months. Every day, I was obliged to have sex with any of them until I managed to escape" (qtd. in Khorha). In another brutal story of assault, a then 26-year-old prisoner of Mitwaba prison shares her story:

> I fled from the Mai Mai who had raped me and ran to Mitwaba. Then once I got to
> Mitwaba the government soldiers arrested me and said I was a Mai Mai since I had been

166

with them. I told them that the Mai Mai had forced me to stay with them, but it didn't matter. The soldiers put me in prison for two weeks and hit me every day and raped me. Every time there was a guard rotation I was raped again. Often it was three or four soldiers one after the other. They also beat me with bamboo sticks on my back and my buttocks. Sometimes the beatings would last for more than an hour. I was kept in a cell with other women and they were raped and beaten as well. At the time I was arrested I was four months pregnant but I aborted in prison due to the beatings and the rape. I still don't feel well even though it has been a year since I was released. (qtd. in Human Rights Watch)

While the women who survive these gruesome attacks have come forward and told their stories to reporters, NGOs and activists, and despite the fact that the law recognizes the systematic nature of rape in the DRC, factors like corruption in the government, fear of ostracization, and a generally weak infrastructure have contained the number of officially-reported rapes, and even further that of prosecutions (Mansfield). Several moves have been made at the state level since 2000, including the signing of the 2002 Peace Accord, formation of the Commission on Peace and Justice, the Parish Committees on Peace and Justice, the UN Joint Initiative on Sexual Violence, signing of UN Resolution 1325 on "Women, Peace and Security," and growing circulation of the plan for "Ending Impunity on Sexual Violence" (Mukenge 11). It is clear, however, that the mass level of rape committed in the Congo is connected to a fierce colonial history, conflict between rival factions who compete for control of resources and legitimacy, and ultimately, to a deeply scarred social body, as I will continue to unpack throughout this chapter. While the mining and trade of conflict minerals is surely not the sole *cause* of rape in the Congo, it has been tied firmly to explanations of the violence in Western narratives. These are the regional specificities that, if attended to in the flattened narratives represented above, would trouble the simple solutions they offer, as I explore below.

In including reflections of women who have experienced trauma, or the publicly circulated memories of those who have witnessed these women's trauma in one way or another, I

take seriously Wendy Hesford's concern that we must "avoid reproducing the spectacle of violence or victimization and erasing the materiality of violence and trauma by turning corporeal bodies into texts;" and, I am working to resist "co-optation of the suffering of others and commodification of their stories of pain, trauma, violence, and injustice" (14). Additionally, I hope for these stories to "expose oppressive material conditions, violence, and trauma, give voice to silent histories, help shape public consciousness about violence against women, and thus alter history's narrative," while also revealing "how individual and collective struggles for agency are located at the complex intersections of the discursive and material politics of everyday life" (18). As Hesford reminds us, there are great risks involved for survivors who share these narratives, and deep costs for silence (35).

I hope the re-circulation of these already-shared stories honors the costs these women have paid to do so, thus recognizing their agency in speaking out and representing their voices as deeply invested human actors within particularly difficult contexts. Attention to the material production of coltan in the next section will help describe some of the specific features of that context and its history, thereby adding dimension to the flattened "blood iPhone" narrative. This work extends my project of transnational feminist analysis of the digital literacy myth, accounting for the materiality of literacy in its transnational networks, recognizing the labor, production, trade, and embodied costs upon which digital devices depend. Without this material history, we are left with flattened narratives of iPhones raping women, or simply with rhetorics that intentionally separate the material from the digital freedom and progress we celebrate. Thus, ways that rhetorics of digital literacy travel in transnational networks *matter*.

Networking Contexts: Material Production of Coltan and Sexual Violence

In narratives of the "blood iPhone," like those described above, rape in the DRC is directly attributed to the production of coltan—the columbite-tanalus ore that is refined into tantalum powder, which is then used to absorb excess heat in mobile devices. The story goes that women in the DRC are raped because of One-Third World demand for cell phones and other mobile devices. Circumstances concerning the mining and trade of the mineral, however, are rarely captured in such narratives which forego deeper analyses of the social structure and transnational history that contribute to the violence against women. Some of the most significant social effects of the artisanal coltan mining industry include a reduction in agricultural investment, amplification of armed violence and ethnic conflict, interruption of traditional gender roles and familial dynamics, increased prostitution and heightened sexual violence, an increase in child labor, an increase in school dropout rates, an inverse in the rural to urban food route (food is now cheaper in urban centers, which for the first time provide more access to food than rural production—see Pole Institute), environmental devastation including the death of gorillas, and according to anthropologist James Smith, an interruption in the assurances of incremental time wherein ordinary people can base life decisions on an expected progression of circumstances over time.

Attention to the material production of coltan, the most prevalent of the conflict minerals mined in the DRC, will help to add dimension to the flattened narratives I've highlighted thus far. To locate and trace the *matter* and embodied costs of coltan and its manufacturing honors Mortensen's argument in "Reading Material" that "…it remains our responsibility, as persons who profess expert knowledge about the cultural and cognitive dimensions of literacies, to understand as fully as possible the material implications of literacies and to act decisively to

ameliorate those literacies' potentially toxic legacies" (421-22). I begin the act of amelioration by unearthing the materiality that is rendered invisible in the digital literacy myth and the flattened narratives it frames.

Material Production of Coltan

Coltan is the common name of the mineral columbite-tantalite, which is more easily mined than many other highly desired natural resources. In addition to its ability to resist acids, its high capacity to absorb heat makes the mineral attractive to electronics manufacturers, who ground the extracted tantalum by-product into a powder for use in capacitors and resistors. In cell phones and other mobile devices tantalum powder can absorb heat and efficiently conduct electricity, protecting the tiny components needs for smaller devices and keeping those devices cool to the touch. Coltan also has military applications, and has in the past been cited by both the European Union and the US Department of Energy as a strategic mineral (Nest). These governments have, at various points in the last several decades, acquired stockpiles of the mineral for use in defense applications.

As opposed to other minerals that require expertise, large financial investments in chemicals, machinery, and a large, well-trained labor force, tantalum can be extracted in small artisanal mining operations. The fact that tantalum does not require chemicals and heavy equipment besides generators, water, and hand tools to mine and separate means that the ore is available to support small-scale mining opportunities (see Nest, loc. 573). This material aspect of its cultivation renders the mineral's production subject to control by armed groups who can take possession of an ore deposit and defend it in order to reap the benefits of its profits. Every single step of the cultivation chain is mired in exploitation, uncertainty, and hope. Miners must pay

often large sums to rent or buy small plots of about one by six meters on which to mine, but these are quickly left behind when rumors spread of more profitable locations elsewhere (Pole Institute 11). There are no guarantees how much ore will come from a given plot, nor how high-grade the coltan found there will be. Corruption at every level of the trade further abets this exploitation.

Bribes can shape the assessment of ore purity, as is described in an anonymous interview with several miners in late 2000, early 2001. The miner explains that the prices are not fair, but "We have no choice. The buyer who fixes the price also analyses our samples. There are crystals which we know are rich in tantalum, which improve the grade of our samples and thus the kilo price, but we have to pay the sampler up to 100 dollars extra to include these crystals in the sample" (Pole Institute 11). Market price uncertainty and negotiations lead to consistent exploitation of those who actually do the mining labor. In fact, miners are often sent into the mining regions of the jungle without cellular access intentionally to circumvent their knowledge of going rates of the ore on the market, leaving them vulnerable to accepting below-market rates per unit—something Smith describes as "just one among many processes that lend a surreal and unpredictable quality to life in the Kivus for Kivutiens themselves" (Smith 21-22). The shift to the informal economy characteristic of Congolese coltan mining and trade has been made possible by and has further enabled cross-border smuggling and ethnic violence, as well as having contributed to a changing social and economic fabric for men, women, and children across the region (see Jackson). However, this trade has a path paved in the DRC's colonial history.

Mining and extraction of natural resources for trade on the international market has a long and complicated history in the DRC, beginning with King Leopold's control of the profits

171

from rubber exports in the 1800s. Other resources have included diamonds, cobalt, gold, cassiterite, and tungsten, and more; these resources are highly coveted by the One-Third World, that desire rendering the DRC subject to exploitation by corrupt and colonial leaders who seek to profit despite the country's unequal power in economic trade relationships. Hence, traditional and tribal social arrangements have been intersected by intervention from foreign profit-seekers, in addition to the spillover of ethic violence between the Hutus and Tutsis from across the Rwandan border.

Congolese are far from naive about the strategic political economic involvement of the West related to coltan and other mineral extraction, and while the specific roles may be misperceived or unknown, there is a definite suspicion among miners and civilians that their labor and resources are being exploited for the profit of powerful foreign entities (see Smith; Nest; and Pole Institute). It is the material properties of coltan that make it prime to support artisanal mining, informal economic activity, and violence. Thus, as Mortensen advised, understanding the materiality of the substance that is used in our digital devices is essential to illustrating how literacy's matter is significant to tracing the social costs of the digital literacy myth.

Coltan and Shifting Social Structures in the DRC

Many who look at the crisis in Congo wonder why the miners don't simply stop participating in such an oppressive trade. The answer lies in hope. While the feeling of hope seems to propel so much of the mining industry, NGO worker Christine Kizimana observes that "many will not see their dream come true" (Pole Institute 14). As many interviews with Congolese miners and organizers suggest, the profits from mining can and should be reinvested into a

stronger infrastructure (Kennes). The hope that mining profits will restore a safe and healthy

social fabric is pervasive among mining communities in the DRC, as is captured in an interview

with Faustin Ntibategera of the NGO Upaderi, who explains that: "The authorities and the public

services must establish control and taxation mechanisms and encourage the reinvestment of

coltan profits in farming and cattle grazing and also in other infrastructures like roads, health

centres and schools" (Pole Institute 12). Yet these reinvestments do not come to pass.

The cycle of continued violence, degradation of social structures including the intact

family unit, education, roads, access to affordable food, and more, most of which can be

attributed to the mining boom, have in fact destabilized social arrangements and those of the near

future. As Smith describes, "The dispossession of Congolese from their capacity to produce

predictable time is a major feature of their violent and unequal insertion in global capitalism"

(21). And yet, through continued work in the mining sector, Congolese invest their hope in

coltan profits' ability to sustain their long-term future goals: "They work to transform and locate

a potential telos for themselves and society by forging social networks around things that become

meaningful because of the possibilities they evoke and the work that goes into rendering them"

(Smith 32). In some ways, the hope that coltan's profits will restore what coltan's extraction has

disrupted actually further propels that disruption, since mine workers and people involved in the

informal economy supporting coltan trade seek enough money to support their families before

reinvesting in social and infrastructural institutions like agriculture, roads and

education. Similarly to Westerners who have faith that their digital literacies can be used for

justice despite the material costs I've noted throughout this dissertation, for Congolese, mining is

seemingly the best path out of the consequences of that same system— the solution ensures the

problem.

In fact, new social networks have evolved in recent decades in the Eastern DRC to support and respond to the demands of coltan mining and trading, in ways that have shifted a number of formerly traditional and long-stable social dynamics. For instance, given that mining can be more lucrative than agriculture, men who have traditionally done the farming have abandoned their fields and have travelled to seek mining work, leaving women to tend the crops and raise children on their own. Meanwhile, the resulting income instability has left it difficult for many families to afford school tuition for their children. Hence, many youth have dropped out—estimates suggest about a third of students have left their schools, seeking work in the mines instead (see Pole Institute and Nest).[24] These children have been exposed to the same rough work and social conditions as their adult counterparts, including risk of mudslides, drug use, drinking, violence, and more. As one teen mine worker put it, "Those whose parents are unable to pay their school fees can come and join us. After all you don't only earn a living with studies. Look at some of the traders who never went to school; they are better off than the teachers who studied" (Pole Institute 16). In other words, traditional courses of work, particularly for males, have been disrupted with the rise of mining in these areas since agriculture is risky and requires the kind of sustained attention that seems to hold less promise than coltan production; and education, too, seems to cost more than it rewards.

Other consequences of the combined weak state, prevalence of armed militia, and financial incentives for coltan mining include Mai Mai rebels groups taking up operations in Kivutien national parks, despite its illegality (Nest loc. 729-854). Inhibiting public access to national park land, participants in the mining sector have also contributed to devastation of

---

[24] Importantly, the relationship between education and literacy rates and the place of material production for the stuff of literacy here parallels that traced by Mortensen in the US, where he noted low literacy rates and less financial investment in schools in the town where the paper mills were located.

gorilla populations and other local flora and fauna (Nellemann, Redmond, and Refisch). In other areas, grazing land has been sacrificed to mining operations by force under threat of violence, illegally, or by landowners seeking to share the profits. Across the region, war and insecurity have made it impossible, or at least inadvisable, for individuals and families to invest in agriculture. Farmers are particularly at economic and personal risk because income is delayed, dependent on the harvest, and requires labor of family members who are likely to be recruited to or abducted by various armed groups. Thus, agricultural workers have abandoned their fields in favor of coltan mining, whose daily toils are long and dangerous, but that pay consistent sums (though rates fluctuate unpredictably). This is only one way in which coltan has symbolic connections to food in the region. As Smith describes that in addition to people preferring the immediate profits of coltan to the slow investment of agriculture, as well as the problem of poor roads and reduced access to public markets, "agriculture is even more insecure than mining because there are no governing authorities in the fields to protect people from youth with guns, be they members of militias or not (the state follows the money, as they say, and the money is where the mines are); fields are the places where women are most commonly raped" (29). Thus, coltan mining, food, and rape are intimately connected in the literacy's materiality in the DRC.

Supporting Smith's analysis about the inverse relationship between coltan and food, the most commonly cited problem reflected in the Pole Institute's interviews is that the profits from the coltan industry are not reinvested into the infrastructure that supports those citizens involved in the system. What's more, many Congolese are fully cognizant of the ways in which coltan mining has interrupted agriculture and others previously stable food production activities, such as grazing, as is captured in the segments of Pole Institute interviews. For instance, Faustin Ntibategera, explains that "The large coltan mines are often found in former mining concessions

which were used as grazing land" (Pole Institute 11). He explains that "Once security is assured,

agriculture should be restarted or rehabilitated," but that "Coltan mining will come first. The

miners earn more money with coltan and other activities seem to be subordinate to coltan" (11).

Ntibategera highlights here the lure of coltan mining's promise for wealth, at the cost of

sustainable agriculture that had traditionally provided access for rural people in Congo.

The problems and solutions are obvious to miners and non-miners alike, but the move to

invest in those solutions seems out of reach and hasn't yet come to pass on an institutional level.

Other signifiers indicate the metaphorical and symbolic connections between food and coltan as

well. Nest explains that the mineral is often measured in units of "dessertspoons," which are used

to determine weight for sale to traders or even payment for labor, goods or services in the mining

sectors. Additionally, coltan ore is often carried from the mines to trading sites balanced upon

the head in food baskets, some of which are printed with "USAID" (Nest loc. 699, see also

Smith). Congolese miners seek to put food on their families' tables through the profits of their

labor, yet the structure of the work they perform is the very same that promotes disinvestment in

food as a source of sustenance. Thus, despite its cycles of destruction, coltan is widely hoped to

nourish the physical and social body of the Congolese people. While all Congolese suffer these

embodied costs of the coltan trade named above, women pay the highest price.

Coltan and Sexual and Gender-Based Violence in the DRC

Speaking back to flattened narratives of iPhones raping Congolese women, this section considers

some of the specific social history of the DRC that will contextualize the problem of rape

connected to coltan. In a 2010 report, the Global Fund for Women's Muadi Mukenge describes

how decades of foreign intervention and manipulation, as well as Mobutu's reign of repression

and corruption, have all helped shape a space in which it has been very difficult for women to organize against sexual violence. These realities, in tandem with traditional roles for women, have resulted in a situation in which: "even today, political and gender oppression force women to remain absent from public life and deny them the opportunity to reach their full potential. Across the country, women are relegated to very gender-specific roles, own very limited economic resources, and reap limited benefits from their labor" (Mukenge 10).

The centrality of women to the home, the family, and the community in care-taking roles, according to Sara Meger, may in fact contribute to their status as targets in systematic rape as a weapon of war. She describes that we should understand rape in the Congo as intertwined with problems of hypermasculinity among armed groups, wherein women become the antithetical bodies upon which to mark one's own identity as masculine. Further, women's traditional roles make them a symbol of the enemy, treating "a direct attack on an individual woman as a representative of her gender or her community" in addition to "sending a message to a second target, be it the woman's husband, father, or other men of her community" (Meger 130). Adding to the problem, Mukenge points out, are further consequences of the violence against women, including: very low literacy rates among women (near 45%), maternal mortality rates that are among the highest in the world, and the spread of HIV (10). Added to Mansfield's analysis of insufficient legal or institutional support, we can safely conclude that women pay the highest bodily price for the coltan trade.

A more highly dimensional analysis of the problem reveals, then, that the prevalence of sexual assault has been spurred by cross-border revolution and conflict, an armed diaspora, movement of tribal people to new lands in search of mining profits, destabilization of agriculture, and other related trends evolving out of economic and social restructuring in the DRC. Women's

situations have been deeply changed by the social relations that have evolved around coltan mining. While there is a small representation of women among the laborers who find and salvage the ore, women's roles have shifted in response to the new social networks described above. In Michael Nest's study, he found that the fact that most of the population in working in the mining plots are young and male "contributes to the extensive sex industry at mine sites. Of the Bisie mine's estimated 13,000 inhabitants, 65 per cent were men, 30 per cent were women and 5 per cent were children" (loc. 670-672). Mr. Gashabizi, Chief of Numbi, describes in an interview with the Pole Institute that "Almost three quarters of the women living in Numbi are unmarried and come from elsewhere. Some cohabit permanently with young miners, others are ordinary prostitutes who sell their services to all the miners" (18).

Hence, some of the women who have been displaced by armed conflict in their own villages, who have been unable to support themselves or their families, who could no longer afford school, or who have found themselves in one of many similar circumstances, have come to the mines to work in the sex industry. Aside from sex work and mining within those communities, women whose husbands have left home to work in the coltan mining and trade have had to take over the childrearing, domestic work, agriculture, and address any other needs that once would have been met by the male head of the family. These are just some of the modes of social restructuring that have occurred with the rise of the coltan industry that have contributed to an atmosphere that is increasing unsafe and unstable for women.

Importantly, and in some ways contrasting Meger's discussion of traditional gender roles in the Congo described above, Mukenge asserts that "The type of sexual violence taking place in eastern Congo over the last decade has no basis in Congolese culture" (10). "In fact," she goes on:

Congolese culture prioritizes women's role in birthing children and nurturing families. The current rapes, however, are reminiscent of tactics used by King Leopold II of Belgium in his rule of the Congo from 1885-1908. It includes an unimaginable array of rapes in front of husbands, forced rapes among family members, sexual torture, the introduction of objects into women's bodies, and kidnappings. Communities are "taught a lesson" by being required to watch rapes. (10)

Hence, colonial histories may have served as models for hypermasculinity and control in the use of rape as a strategic weapon in this region. These colonial histories, materiality of coltan and its specific impact on traditional social dynamics and the development of informal economies are some of the small, significant details that would breathe dimension back into the flattened narratives reflected in One-Third World campaigns and efforts to intervene in the violence in the DRC. Having represented those material and historical details as a richer context, I'll turn now to an analysis of the mitigating factors in simplified solutions proposed by flattened consumer narratives, with attention to the more fully dimensional network as I've articulated it above. And, I will describe the single most significant stakeholder group left out of the flattened narratives altogether: Congolese women activists.

Flattened Narratives, Simplified Solutions

My work in returning dimension to flattened narratives about rape and conflict minerals in the Congo suggests that considering the consequences of this transnational network of literacy and materiality might eclipse all just social action. In fact, claims toward action based upon simplified narratives can be dangerous for the most vulnerable groups. While many reads on the problem of rape in the DRC deduce that eliminating the demand for coltan would end violence against women there, because of the realistic material and transnational complexities of the coltan production cycle, its historical social chains, and layers of instability there, most experts

agree that simply boycotting coltan and other conflict minerals coming out of the region would

not have much impact. The flattened narratives, while they come out of a good place—the desire

to help—circumvent many relevant factors in the transnational network of materiality and

literacy that would problematize the solutions they come to. For instance, boycotts are an "easy

solution" to the problem that:

> … would only result in the concerned firms either continuing their activities, but in an
> even less transparent way, or simply moving to other locations to continue the coltan
> trade in the same or a similar way. The people of the Kivu would not gain, but would lose
> one of their very few remaining sources of income. The challenge is not to erase the Kivu
> from the coltan mining map, but to institute a fairer and less harmful way of mining and
> trading coltan. (Pole Institute 4)

Stakeholders, in other words, fear that to simply rip out from under the feet of the Congolese

what has become one of the most important sources of income, what has disrupted most other

traditionally sustainable avenues of income, would simply throw the people into a state of greater

chaos and desperation. Rather, experts recommend a fully dimensional framework that would

help rebuild some of the more traditional structures that generated and supported reliable food

and income. The state and judicial routes to prosecution of sex crimes also need to be

strengthened over time. These are solutions that also remain blind to colonial history, however,

and rely instead on solutions that take for granted a stable and benevolent nation-state.

Rather, any solution must consider the fact that the transnational networks of non-state

actors and international councils who have been attempting to intervene in the violence may in

some ways actually be perpetuating it. According to James Smith, some believe that armed

groups use systematic rape as a tool for leverage in bargaining with NGOs and international aid

organizations. Smith describes that it seems that commanders…

> …order their troops to rape with the intention of attracting media attention. This theory
> actually has it that rape occurs not because of a lack of international presence but be-
> cause the international community is watching. According to this concept (which has

been supported by some reports from human rights groups), commanders hope to convert their violent assault on other people's capacities to build incremental futures into sustainable, predictable futures for themselves (e.g., when a militia rebel agrees to stop his soldiers from pillaging and raping in exchange for a salaried job in the Congolese army or an appointed political position). As a once high-ranking military officer who had been imprisoned and then released for his alleged involvement in a high-profile assassination put it to me, "Jimmy, what I really should do to get ahead is to just get some of my men together and seize a mine, then order them to rape all the women in the area. Then the Red Cross will come and ask me what it will take for me to stop. They'll talk to the government and suddenly you'll find I have my old position in the government back." (Smith 22-23)

To the extent that this is a reliable interpretation, transnational advocacy may actually propel greater sexual violence as a means to secure power and resources with which to commit further atrocities, to better control mining profits, or to more effectively gain ground in ethnic conflicts. That One-Third World aid might actually be complicit in the violence it is trying to stop is one of the most significant problems with the use of flattened narratives to gain support in the One-Third World to fight against sexual violence in the DRC. The lack of a historically rooted and materially grounded account of the complexity of the violence, thus, leads to compressed narratives of the problem. When those flattened narratives lead to misguided action, do-gooders in the One-Third World may actually be furthering their participation in the violence beyond just the purchase of mobile devices. For these actors, too—just as in the case of the DRC miners who want to use profits from mining to solve the problems mining has contributed to—the solution might reify the problem.

To further contextualize sexual violence contributing to the power of rape as a weapon of war in the transnational network of literacy and materiality, we need to attend to the geopolitical and economic realties shaping multinational investment and disinvestment in conflict minerals in the DRC. In "Footnotes to the Mining Story," Erik Kennes works to combat easy conclusions that commentators were making around the turn of the century that the violence in the DRC was

being funded by multinational mining corporations. He argues instead that these companies

actually pull out of areas with weak infrastructure that become immersed in chaos and violence

unless they have no other options—"depending on supplies from war zones is not good business

practice" (605). Rather, Kennes argues, we should consider the history of the global mining

market in the context of the crumbling state and rising military power; in this way we can see

that the traders and transporters are actually the stakeholders who profit from instability, as well

as corrupt government entities who can collect taxes and demand bribes at transport sites (605-6).

DRC state power has been affected to some extent by international calls for an end to violence

connected to conflict minerals, but perhaps not meaningfully so.

In the last decade there have been quite a few significant moves by international actors to

end violence associated with mining in the DRC. In the fall of 2010, President Kabila instituted a

ban on mining in the Kivus and Maniema provinces in order to abate violence committed against

civilians by armed and rebel groups involved in the coltan trade; it was ended six months later as

the mining minister "claimed the ban had served its purpose" (Sutherland 17). Other efforts have

included Belgian-backed scientists researching ways to chemically fingerprint coltan ore in order

to determine its original source (see Nest, Chapter 3), and the institution of tagging systems that

seek to monitor movement and trade of authorized minerals in the DRC and neighboring

countries. And the H.R. 1502 requires manufacturers to reveal DRC-based minerals in their

supply chain, thanks to the network of advocates who have traced sexual assault and violence to

multinational corporations' investment in the coltan trade there. The UN has reported, however,

that the complex trade and informal economic networks between the DRC and its neighbors has

had challenges for this method of interrupting the violence: "The credibility of the mineral

tagging system in place in Rwanda is jeopardized by the laundering of Congolese minerals

because tags are routinely sold by mining cooperatives. Several traders have contributed to

financing M23 rebels using profits resulting from the smuggling of Congolese minerals into

Rwanda" (UN 2012, 4). In other words, tracing minerals is almost impossible due to colonial

histories and cross-border violence. Besides, moves that focus on the minerals alone simply fall

short of addressing the problem.

Even the Enough Project, who has enough dimensions reflected in an aerial view of their

various campaign strategies to indicate their deep understanding of the complexity of the

problem, relies upon flattened narratives to provoke action. As Nest assesses their work:

> The conflict minerals campaign is a broad-based campaign cognisant of the complex
> relationships between conflict, mining in war zones, development and governance. It is
> realistic about the integrated approach required to address these issues, including the
> importance of action at the international, regional and local levels. However, in publicity
> material these complexities are dropped in favour of simplistic messages – persuasive and
> skillful messages – linking consumers to the perpetuation of far-away conflicts and
> emphasizing the ease and urgency of legislative reform and consumer action. (loc. 1768-
> 1772)

This is despite the Enough Project's own awareness that "measures to deal with rape as a weapon

of war in isolation will fail and fail miserably. If we truly want to end this scourge we must move

from managing conflict symptoms to ending the conflicts themselves" (qtd. in Mansfield 81).

The Project's reliance on more truncated messages is, at times, understandable given the

extremely difficult nature of this particular cause. As Nest points out, there are many challenges

facing those who would seek to mitigate the human and environmental costs of coltan mining in

the DRC. He notes that, unlike in other successful transnational activist causes, there is no single

event to trigger outrage, no single figurehead to rally behind, no provocative image that can

capture the complicated relationships between stakes and stakeholders in the coltan network, and

no simple solutions. While I take up what the problem of literacy and materiality means for

writing teachers today in the next chapter, the costs of flattened narratives and simplified

solutions that emerge from them are important to rhetoricians, feminist scholars, and literacy educators who want to better understand just how our work is implicated in the rhetoric of the digital literacy myth.

The challenges for advocates that Nest describes make salient Autesserre's point about the reliance upon simplified messages to garner support and action—simplified solutions enable action where fully dimensional narratives would inhibit action. However, while the flattening of the network of coltan, sexual assault in the DRC, digital technologies and their literacies by One-Third World activists might be understandable, it is no less damaging. As Nest critiques, these campaigns rely upon an "intellectual sleight-of-hand, portraying sexual violence in the DRC as being the direct result of armed groups trying to win control of coltan (and other) mines, or a decision to recycle a mobile phone as directly reducing demand for coltan in the Congo" (loc. 2208-2210). "Both claims are nonsense," he asserts, given the lack of any way to *know* that a given device contains coltan or if the relationship between the purchase of a particular smart phone in fact sponsors violence anywhere in the world, let alone in the DRC. Additionally, as Nest, Autesserre, and other critics worry, these campaigns are yet another example of One-Third World entities attempting to act and speak *for* the Congolese. As Nest points out that it is unclear what Congolese think about these campaigns since no one seems to have actually asked (loc. 2093); further, "Advocacy, campaigns and initiatives organized without Congolese input run the risk of once again making foreigners the architects of the Congo's future" (loc. 2147-2149). For this reason, and as an ethical scholarly act, I spend the rest of this chapter attending to what so many others have silenced in their flattened narratives: the voices and agency of Congolese women.

Congolese Women's Activism

Flattened narratives of rape in the DRC, by not capturing and reflecting their embodied agency, brand Congolese women as victims—a brand which, as Wingard describes, "[creates] an evacuated representation of one group of bodies…. in order to create a coherent and even seamless vision of another community of bodies" (14). In these constructions, One-Third World folk get to be digitally literate advocates, while Congolese women are represented as bare life— statistical collections of those-who-are-raped. As Mary Queen has critiqued of feminism in transnational digital publics, this form of transnational advocacy sometimes fails in the way it "reinforces a global hierarchical system in which One-Third World US feminists act as 'saviors' of two-thirds women imprisoned within oppressive, violent, traditional/fundamentalist patriarchal structures of underdeveloped nations" (472). Thus, to combat the rhetorical cost paid by Congolese women in flattened narratives, this section works to restore their activism to the transnational network of literacy and materiality I've been describing. Flattened narratives like these are neither historically rooted nor materially grounded, and they circulate brands of Congolese women as powerless victims and black African male bodies as violent criminals and sexual predators—images that are already readily available in the affective economies connected to racism and patriarchy in the American consciousness. Counter to these flattened consumer narratives that circulate in the One-Third World, women in the DRC are not mere victims.

In a report called *Funding a Woman's Movement against Violence in the Democratic Republic of Congo: 2004-2009*, Global Fund for Women seeks to change the discourse surrounding rape in the DRC, insisting that "the type of sexual violence taking place in eastern Congo over the last decade has no basis in Congolese culture" (Mukenge 10), and "the experience of women throughout Congo is one of survival and agency in the face of dire

185

circumstances" (15). To this effect, Mukenge describes the Congolese women's groups working in the DRC to meet and preserve women's needs in the face of the challenges this chapter has described. To make sure that I, too, am capturing the powerful local efforts against which we can contrast the One-Third World consumer narratives described above, I'll summarize a few of the grantees and their efforts below:

Umoja Wa Akina Mama fizi: this group specializes in training women in documenting human rights violations, including those acts that counter stipulations of the UN CEDAW document, signed by the DRC. They also work to make women vote-ready with appropriate documentation and access, and they even make small financial loans. (see 15)

Appui aux Femmes Démunies et Enfants Marginalisés au Kivu (Support to Marginalized Women and Children in Kivu): Working in the South Kivu province since 1999, this group of women leaders specializes in training women on human rights and providing support for women who are sexual assault victims. The specialize in providing and training others to provide counseling for sexual assault trauma. With their 19k grant, this group "also provided economic assistance to sexual violence survivors, produced radio programs to raise awareness of legal options in cases of sexual violence, and organized a 'Say No to Sexual Violence' march" (16).

Solidarité des Femmes Activistes Pour la Défense des Droits Humains (Women Activists in Solidarity for the Defense of Human Rights): Groups working together under this grant take community structures as their starting point, working to integrate support, training, and resources through collaboration with local chiefs and building on a given region's

ongoing social structure. They are primarily paralegals who help local authorities support

women through legal channels and through training local leaders. They also organized

"village peace committees [to conduct] massive community awareness campaigns,

reaching more than 6,000 people, to draw attention to the link between gender violence

and HIV prevalence" (18).

These are only a small few of the groups that the Global Fund for Women assisted at the time of

the report, and in 2008 brought together in a convention to network grantees and to listen to their

collective assessment of the needs and challenges they face going forward. Global Fund for

Women explains that in their work with these community groups, they learned that the narratives

that "[portray] Congolese women as powerless victims, unable to change their circumstances"

must be replaced by those recognizing "that the rampant sexual violence in DRC is a microcosm

of the violence tearing at the country's sovereignty and compelled by its vast mineral wealth" (7).

In other words, counter to many versions of the story that circulate in the One-Third

World, especially in flattened consumer narratives about rape in the DRC, women in the DRC

are not merely victims with no agency. Despite their own trauma, women have organized and

shared resources to better their circumstances through economic opportunity, alleviation of labor

burden, access to legal services, passage of national laws, breaking the taboo around speaking

out about sexual violence, hosting public events to raise awareness, development of literacy and

strategic use of a range of advocacy media and tools, training in counseling support and human

rights and gender discourse, and building solidarity across local, regional, national, and

international women's groups. Nevertheless, the groups in their convention described a host of

material challenges that contribute to the ongoing prevalence of sexual violence that

unfortunately makes their continued efforts so necessary. For instance, DRC government efforts

to settle armed conflict has focused on urban centers, thereby pushing armed groups into more rural communities further jeopardizing the women there (24). These challenges reflect just some of the reasons why simply boycotting coltan or mobile devices will not solve the problem of rape in the DRC as flattened consumer advocacy campaigns suggest.

In fact, these women and their organizations have developed complex and sophisticated analyses of the crisis in their nation, complete with suggestions for how to attend to many aspects of the colonial and material problems I've explored above. Global Fund for Women's report synthesizes their grantee's findings and shares them as insight for Westerners who would wish to become involved in advocacy work in the DRC. I share the complete list here to demonstrate just how complex the needs are, and how they might add dimension to consumer advocacy narratives when those narratives take into account some of the more complex challenges of the struggle they wish to represent. The grantees found that:

- Peace, stability, and development are not achieved through elections alone. Human rights and women's rights movements need continued support
- Congolese women are still alienated from local and national decision-making and seek support for leadership training
- Rape by civilians is becoming more commonplace and needs a focused strategy including advocacy and human rights education
- There is a need for support of empowerment of rural women and a focus on food security
- Assist Congo to finalize the integration of various armed factions into the national army in order to restore national security and stop the use of rape as a tactic of war
- There is need to develop and strengthen a functioning and responsive judicial system
- Local communities are quite capable of implementing a range of programs. Funding

should be directed toward local groups and not just international NGOs (25)

Further, in order to establish long-term peace, the grantees concluded that the following are essential:

- Existence of the rule of law and ending of the culture of impunity and corruption

- Stable and accountable governance that is able to implement effective economic policy without foreign intervention

- Equal access to educational and economic opportunities across the country

- Independence and strength of civil society

- Ability to ban weapons coming from foreign sources, expel foreign rebel groups, and redirect benefits of Congo's natural resources toward national development (25)

I rely so heavily on this document because it is one of the only US-based sources I have found that tries to intervene in the violence in ways that recognize the deep complexity of the social, historical, and material factors contributing to rape in the DRC. And, it is one of the only that mentions, let alone directly supports, the agency and organizing efforts of Congolese women rather than portraying them as victims. If readers wish to take up political activism in the problem of rape and conflict minerals in the DRC, it is my sincere hope that they will begin with *these voices*—taking into account the knowledge and experience of the women paying the highest embodied cost for the transnational network of literacy and materiality I've been tracing. Partnering with the women who are organizing in the DRC combats the branding in flattened narratives, the One-Third World arrogance, and the blinding power of the digital literacy myth toward effective, rather than simplified, solutions.

Networking The Costs of Hope

This chapter has sought to trace the transnational network of literacy, identifying the embodied

and material complexities that are overlooked under the frame of the digital literacy myth.

Advocacy campaigns like The Enough Project's "Mac vs. PC" video operate with the (noble and

democratic) intent of intervening in the mineral-sponsored violence in the DRC. The activists use

appeals of varying complexity to reveal the connections between some of the nodes in the

network I've been tracing, though each of their narratives remains partial. Only hungryandmad's

blog post recognized the complicity of her advocacy platform in the problem she names,

whereupon she reconfirms her belief in technology's potential for democratic action anyway.

This line of analysis affirms Grewal's claim that:

> it is only by examining the production and circulation of consumer culture and consumer
> goods within the context of biopolitics and geopolitics that we can see how identity
> politics operate at the complex nexus of political economy, national imaginaries, and
> related mobilizations of desire and individuality within liberal and neoliberal politics"
> (28).

hungryandmad's desire for and performance of political subjectivity is constrained by her

position as One-Third World consumer within the transnational network of literacy and

materiality, bound as it is by the digital literacy myth and the neoliberal pedagogy it supports.

This constraint is disheartening for those of us who truly want to help end the violence.

Remembering Autesserre's argument about dangerous narratives from which I launched this

analysis, simplified narratives can help people conceptualize a problem and envision that there is

some *good* possible course of action, which is "critical to helping deal with such complexity:

they identify salient issues, dictate urgent action, and help determine who is worth supporting

and who should be challenged" (208). As we can see in many of the examples of policy and

activism coming out of the West, individuals and groups often recognize the complexity of the

situation in the DRC but turn to flattening their descriptions of the network in order to mobilize

for what they understand to be action toward justice.

In the One-Third World, the digital literacy myth and its attendant political economic

context frames the stories we tell about the good of technologies and their literacies, just as well

as it frames our belief in what we can achieve as consumer advocates when we put those

literacies to work in support of a given cause. While we can't stop violence in the DRC simply

by telling a different narrative, even a more fully dimensional one, recognizing the productive

quality of the digital literacy myth as frame can reveal our own interests and complicity in the

networks of literacy and their material costs across borders. As discussed in Chapter 2, in

Technology and Literacy in the Twenty-First Century, Cindy Selfe traces government

investments in the development of a particular narrative about technological progress that she

translates into the equation: science + technology + democracy (+ capitalism) + education =

progress + literate citizenry (122-3). She explains the US government's interest in using public

education as a venue for cultivating citizens with the computer-based literacies that will create a

sustained domestic demand for consumer electronics (50-51). In addition, she writes that:

> Building such global technology systems will help reverse our flagging economy by
> creating jobs and expanding the computer industry. The systems themselves will increase
> our competitiveness, allow us to open new markets for American goods, and help us
> spread both Democracy and free-market capitalism around the world. (123)

It was clear to the US government and its investors back in the last quarter of the 20th century

that the spread of an ideology of investment in technologies and their associated literacies would

benefit the nation on domestic and international social and economic fronts. Schools and parents

quickly adopted the sentiment and helped circulate and solidify the frame of digital literacies as

inherently good and necessary for individual and national progress. The digital literacy myth thus

emerged out of willfully accepted faith in technology as serving individual interests, and has

since developed to meet the demands of the current moment in the global ear—digital

technologies and their literacies promise, we believe, economic progress not just for the

individual in the national realm, but for the nation as we compete in the global economy. Digital

literacies promise a participatory citizenry not just in the US, but in democracies across borders.

And our belief in these promises, as I have shown throughout Chapters 3 and 4, have material

consequences on a global scale.

The naturalization of the digital literacy myth has contributed, in part, to the celebratory

assessments of social media and other digital platforms' role in efforts toward political freedom,

like that we saw in narratives of the Iranian election protests. In other words, even simplified and

aggressive campaigns that speak out against the violence associated with conflict minerals and

production of "Blood iPhones" have not been strong enough to chip away at our belief in the

inherent democratic good and progress of digital technologies and their literacies, since those

narratives are themselves framed by the myth. The situation in the Congo is tangled in local and

global contexts and histories almost too complex to trace, but doing so intervenes in the

commonly circulated flattened narratives by returning dimension to the network. Through

networking arguments and texts, I have drawn attention to the way in which seemingly positive,

or at least innocuous, rhetorics around digital literacies participate in the circulation of global

capital and production chains, which reinscribe violent and hidden consequences on Othered

bodies. As Raymie McKerrow reminds us, a critical rhetoric[25] will critique rhetorics of

domination and freedom, and when we think rhetorics of digital literacies in the West and

---

[25] In "Critical Rhetoric: Theory and Praxis," McKerrow describes that: "critical rhetoric seeks to
unmask or demystify the discourse of power. The aim is to understand the integration of
power/knowledge in society -- what possibilities for change the integration invites or inhibits and
what intervention strategies might be consider appropriate to effect social change" (91).

practices of violence and oppression in the DRC together, we have the opportunity to critique both at once.

When One-Third World "advocates" brand Congolese women as victims (to use Wingard's term), as Mary Queen puts it, "we shift our own vulnerability to and culpability in the violence of US patriarchal and capitalist practices onto the backs of Two-Thirds World women, and claim agency and self-representation for ourselves while denying this same capacity to them" (472). In order to interrupt this kind of rhetorical violence, we must work to return dimension to flattened narratives by acknowledging colonial histories and material realities, even when this work inhibits the seemingly effective political strategies at our disposal in transnational advocacy. Attention to constellations of power, made visible through a historical and geopolitical reading practice that employs time-space compression as a technique for unveiling asymmetries of power is a defining method within transnational feminist scholarship. In my work in this chapter, for instance, the nodal points of power across time and space include systematic rape as a weapon of war, DRC women's agency and resistance, One-Third World consumer advocates, colonial histories of the DRC, the material production of coltan in its impact on social dynamics in the DRC, and the digital literacy myth and its operation as a frame that shapes US subjectivities. Through this constellation, I have traced circulation of power among the actors as they are differently positioned, particularly against the background of rhetorics of technologies and flattened narratives of the foreign other—the rhetorical branding of Congolese women by One-Third World consumer advocates.

Flowing through a flattened network, "costs" and "hope" operate in a mutually propelling relationship. Consumer activists in the West and One-Third World cling to the hope that their purchasing power can help sway electronics companies to end their sponsorship in the sexual

assault and other traumas inflicted on the Congolese by those seeking to control profits from sales of conflict minerals. The consumers do not stop buying the products, but rather maintain their faith in the democratic potential of the devices to solve the very problem of their production. The true cost of these "democracy-building" devices is in part, paid for by women and men in the DRC (though even this conclusion needs to be complicated and contextualized, as I've shown). From the women whose rape might be motivated by armed groups' power-seeking to the miners whose livelihoods are subject to shifting state response to international policy and campaigns against conflict minerals, DRC people experience real, lived consequences in response to these flattened narratives. However, hope for those technologies' potential also works to make space for consumerism and its construction of One-Third World agency, patriarchy, neoliberalism, and the circulations of capital in the high-tech global economy. Ultimately, in exchange for hope, individuals, groups, and governments often revert to simplified narratives that merely perpetuate neoliberal, patriarchal, and capitalist interests. As a result, the violence on the ground continues.

The complex network I've traced above connects rhetorics of digital literacies and activism to consumerist subjectivities, agency, and action. As literacy educators, rhetoric and composition scholars and writing teachers have a distinct role within the transnational network of literacy ad materiality as I've defined it. Part of that role is to become cognizant of the material histories, costs, and consequences of the *stuff* of our literacy work. We have to attend to the larger political economic forces shaping how we understand literacy, and we have to connect those values and motives to the hidden environmental and embodied impact that the manufacturing and use of literacy's products demand. Further, we must follow these costs as they maintain and/or disrupt already beaten paths on which power travels across the One-Third

194

World/Two-Thirds World divide. Feminists, of course, will want to pay special attention to the bodily and psychic costs paid by women in particular.

As literacy workers, we are obligated to teach our students the rhetoric and technique of contemporary writing, using the technologies and literacies that are framed by the digital literacy myth. My goal in Chapter 5, then, is to help reshape disciplinary conversations about digital literacies and their technologies in order to account for our One-Third World position and complicity within these larger global circulations. As a response to the complicated transnational network of literacy and materiality I've traced throughout this dissertation, I argue in my concluding chapter that writing teachers should enact a critical digital pedagogy that attends to this material network, designing assignments using a "layers of literacies" framework.

> "It is possible to think critically about technology without running off to the woods — although, I must warn you, it is possible that you will never be quite so comfortable again about the moral dimensions of progress and the part we all play in it. I know that I'm not." (Howard Rheingold, "Technology 101")

Introduction

Though taking seriously Rheingold's warning above, it is in the spirit of hope that I offer this classroom-centered chapter for those of us whose livelihoods center on literacy education, and whose agency is bound up in the transnational network of materiality and literacy I've begun to uncover in this project. In the pages that follow, I return to the US composition classroom in order to investigate how and where we might use the lessons of the previous chapters to reshape our pedagogical practice. Taking seriously Hesford's call that we remain attentive to "the links between education and empire" and ways in which "the humanities are being co-opted" by government and private interests (796), this chapter asks: How do we most conscientiously teach digital literacies in the global era?

To answer this question, I temporarily step away from explicit discussion of the digital literacy myth,[26] focusing instead on pedagogical practices that I hope might intervene in the myth's material wake in some small way. In synthesizing and updating several models of digital literacy education within an adaptable "layers of literacies" approach, I articulate a framework for critical digital literacy education through which we can prepare students to use their literacies in ethically informed ways, no matter what sort of careers they take up. My own approach to the layers of literacies framework will attempt to straddle the line between preparing students for

---

[26] I return to the problem of the digital literacy myth and literacy work in the global era in the concluding chapter.

success in the global information economy (including those who may work for companies whose actions support global sociopolitical stratification) with a critical education that positions students as conscious, ethical and rhetorical future workers. Further, I present principles of a transnational feminist pedagogy to apply in conjunction with a layers of literacies approach. In combination, these pedagogies offer a path forward for teachers who wish to use their classrooms as a place for students' writing to matter in the world by recognizing and addressing global problems with and through digital technologies and their literacies.

While it is clear that we cannot, strictly by way of our composition pedagogies, resolve the problem of rape and activism in the Democratic Republic of Congo or reverse the ways we overlooked women's embodiment in the 2009 Iranian election protests, I do believe that we can design an ethical writing pedagogy that interrogates and interrupts the digital literacy myth. This model takes seriously the work of radical literacy scholars and critical pedagogues who have argued fervently for literacy learning as a space for intervention, agency, and political opportunity. Such a pedagogy must be historically emergent and contextually rooted—as technologies and literacies are—seeking to work within and against a neoliberal ambiance toward a retooling of our social future.

Just as access to literacy has been a problem for critical pedagogues in the decades before digital literacies became a concern, for many critical educators who have taken up possibilities of technology in the classroom, access has been a challenge and a promise. While for decades access was a signifier in these conversations for the rupture between digital haves and have-nots (see Monroe; Moran), access under the digital literacy myth has come to mean that digital technologies and their literacies grant access to the public sphere and to democracy around the globe. In other words, the discourse oscillates from technology as a barrier to technology as a

gateway, or meaningful access, to the global public sphere. Nowadays, we speak more readily about the ways in which technology *grants* access to social goods than we do about the lack of accessible technology for our students. Rather, we are in a moment that is frequently described with Henry Jenkins's term, "participatory culture."

However, access to the projected benefits of digital literacies, as we know, is just as unevenly distributed (particularly among axes of race, class, gender, sexuality, ability, etc.) among social groups as access to the technologies themselves once was in the US, and largely still is on a global scale. As Jenkins put it, "A focus on expanding access to new technologies carries us only so far if we do not also foster the skills and cultural knowledge necessary to deploy those tools toward our own ends" (8). To the extent that the digital literacy myth has been a self-fulfilling prophecy, then, digital literacies in the US are indeed connected to the problem of access to social goods. In this way, critical educators face an ethical problem. It is our obligation to teach our students the literacies that matter, yet as I've shown throughout this project, those literacies and their technologies have consequences that circulate on a global scale.

Like print literacy, digital literacies are tied to social histories and political and economic power, unevenly distributed. Describing the two-sided coin of access to technologies and literacies, Brandt argues that "Expanding literacy undeniably has been an instrument for more democratic access to learning, political participation, and upward mobility. At the same time, it has become one of the sharpest tools for stratification and denial of opportunity" (2). As critical digital educators, it is our obligation to work carefully and closely with students as they begin to more consciously navigate the spaces and contexts of writing across contemporary modes. Our minimum goal, I argue, should be to work toward—in very tempered ways, of course—making the democratic and economic aspects of the digital literacy myth *less* mythical and *more*

attainable for students in the contexts of their own lives. We can do this by helping students to cultivate literate agency via a critical digital pedagogy that scaffolds practice and development in layers of literacies through carefully designed assignments and pedagogies.

However, we must do what we can to mitigate the consequences of the transnational network of literacy and materiality through critical, political, and problem-posing work that helps students read and interrupt those circulations of power and oppression. My definition of a critical digital pedagogy is built out of my own thinking and practice in nearly a decade of teaching writing, but also shaped by and in reflection upon the work of several other teacher-scholars who write about what it means for students to be "digitally literate." These frameworks are comprehensive, but are not oriented from the material and transnational as mine is. In what follows, I will define a "layers of literacies" approach before naming several models that have influenced my thinking in detailing my own framework and its departure from those less overtly global approaches.

Layers of Literacies: Articulating a Framework for Critical Digital Pedagogy

> And do digital participants understand the central importance of human agency in accomplishing social progress? …What people know and do with their social media literacies matters. (Rheingold, *Net Smart*)

Grounded in a tradition of digital literacy frameworks (explored below), and in response to the questions shaping this dissertation, I am advocating for a critical digital pedagogy that will take up a layers of literacies approach to designing digital literacy-learning. These layers of literacies represent what can be understood as categories or collections of a given type of literacy practice. It helps to think of the layers as groups of literacies that get at a particular type of literate skill, a repertoire that reflects a valued set of literate knowledges or approaches. Naming the layers

ultimately allows a teacher to articulate what kinds of literate practices they wish to highlight and intentionally cultivate with students. In other words, a teacher's given pedagogical and ideological commitments will be articulated, in part, through the layers they choose to work with and apply in their assignment design.[27]

The particular layers I've named aim to work together to develop students' literate agency—an agency that is ultimately grounded in informed reading and production of digital texts, as well as overall mindful and contentious/ethical use of contemporary writing technologies and their historical and material contexts. While individual teachers will gravitate towards literacies they prioritize given their individual positionality and instructional situation (including layers not named here), the layers of digital literacies that I feel most passionately about include the following:

1. Functional Literacies

2. Information Literacies

3. Network Literacies

4. Participatory Literacies

5. Mindfulness

6. Material Literacies

7. Critical Literacies

These particular layers have evolved for me over the last decade of classroom practice and reading in rhetoric and composition, computers and writing, communications, and literacy and Internet studies; they are distilled out of the incredible community that has coalesced surrounding the questions of technology and pedagogy. The specific layers I include here reflect

---

[27] For more on ways that values are communicated through assignment design, see Navickas.

moments in own teaching where I've witnessed particular needs of students, such as a non-traditionally aged student struggling with accessing email for the first time, students who remark that a particular assignment really enhanced their understanding of their digital audience in a given social network, or a student whose tablet's operating system struggled to play a particular kind of video format, among many other small but significant moments.

My personal approach to this framework is rooted in my own experiences teaching at a large state university and a large private university, thus comes with particular contextual values and possibilities, as does any pedagogy in practice. Further, my approaches to material literacies and critical literacies are motivated by the ideological and scholarly commitments I personally hold, and which are present throughout this dissertation—other teachers will come with their own interests and constraints given their sociopolitical locations, ideological leanings, and institutional contexts. While functional literacies, information literacies, and network literacies may be appropriate for the majority of writing teachers, some may prefer layers of literacies that work with students to queer digital texts, to focus on design-based literacies, or to read and write for activism. In these ways, a layers of literacies approach is highly customizable, and will be deeply personalized by the teacher who takes it up.

Regardless of which specific categories are named, I understand each "layer of literacies" as always existing in the plural, as literate practices are always evolving, emerging out of varying contexts.[28] It is partially for this reason that "layers" is an apt metaphor, as different qualities, aspects, or modes of any given category may be activated in a given literacy experience, while others may be muted for that particular moment. These specific aspects, layered together with

---

[28] This move speaks to a conscious rejection of autonomous models of literacy, as well; literacies are never complete, fully defined sets of predetermined skills. And, this move takes into account that firm definitions of literacy and illiteracy have material consequences for the lived realities of individual and groups. (See Street; Graff; Brandt; Stuckey; and Selfe.)

representative practices from other literacy categories, might be understood as sedimented into the foundation of a literacy-learning activity. Further, it is the connections, flows, and interarticulations among the active layers that build a unique and meaningful literacy-learning opportunity. In fact, it is the interaction among the overlapping layers that is truly the strength and opportunity of this model. A more complex range of layered learning experience over the course of a term, a degree, or a lifetime, may result in access to a more fluid range of emergent, contextual, and interactive literacies (see Shannon Carter's work on rhetorical dexterity for similar lines of argument). Thus, a layers of literacies approach to conscientious digital assignment design is, to my mind, effective for helping students cultivate meaningful literate agency in the global, digital era.

A Brief Review of Prior Frameworks for Digital Literacies

Critical digital literacy is certainly not a new concept, and it has been explored not only in our own field, but in literacy studies, education, and educational technology as well. In their article, "Five Resources for Critical Digital Literacy: A Framework For Curriculum Integration," Juliet Hinrichsen and Antony Coombs describe an approach to critical digital literacy education that they hope will combat the functionalist and determinist perspectives that "are translated into curriculum content, delivery strategies, institutional strategies and investment" and shape "the perceptions of academics in their engagement with digital technology." Their model extends the four resources for critical literacy articulated by Allan Luke and Peter Freebody several decades ago, aiming to update the goals of critical literacy pedagogy for a digital context. The original model defined reader roles as code breakers, meaning makers, text users, and text analysts, and Hinrichsen and Coombs define the repertoire of critical digital literacy to include the resources of

decoding, meaning making, using, analyzing, and persona.

While these resources are inherently shaped with critical thinking as a foundational necessity, and there is a clear concern for a rhetorical approach to reading and writing digital texts and contexts, I find their model to be too general for our work in the writing classroom. Each of the resources they describe might be meaningfully accessed within each of the layers of literacies I describe below. It will likely be obvious to the reader, for instance, that decoding, meaning making, and using are all essential to work that takes up functional literacies, just as they are for participatory literacies, as I will define them. Another concern for me is that, while these resources promote critical thinking, they do not include a specific political project captured by digital pedagogy, which my own layers include and scaffold. Hence, readers might keep Hinrichsen and Coombs' resources usefully in the background as I build upon these important foundational literacies within my own framework, and as I explore Selber and Rheingold's models next.

Among the most cited frameworks for digital literacies is Stuart Selber's model of multiliteracies, an approach combining functional literacy, critical literacy, and rhetorical literacy. These literacies, he writes, must be understood together in order to "participate fully and meaningfully in technological activities" (24). He explains that writing teachers need to address the how-to, or functional, literacies necessary to successful meaning-making in these spaces, in addition to the critical literacies that would help students read and write within the political contexts that shape digital meaning making. Further, emphasis on rhetorical literacy grants writing teachers the space to draw upon their area of expertise to help students understand how to make an impact via digital writing spaces. For Selber, rhetorical literacy "concerns the design and evaluation of online environments; thus students who are rhetorically literate can effect

change in technological systems" (182). While I draw from and extend his categories of functional and critical literacies in my own framework, described below, I dissolve his category of rhetorical literacy, assuming the rhetorical to be central to and embedded within the other layers of literacies that I describe. Rhetorical literacy should not be understood just in terms of production of interfaces informed by rhetorical strategies of persuasion, deliberation, reflection and social action, but rather as a repertoire built into and relied upon in each of the layers of literacies I describe and the literacy-learning activities that I've curated.

In another recent example taking up the multidimensionality of digital literacies today, Howard Rheingold's *Net Smart*[29] argues that in order to mindfully thrive in online communities, we need: attention, participation, collaboration, "crap detection," and network smarts.[30] These literacies are so essential to folks today because "the emerging digital divide is between those who know how to use social media for individual advantage and collective action, and those who do not" (252). This line of argument is significant in terms of the discussion noted above regarding the ways in which conversations about access and digital literacies have shifted as the digital literacy myth and its consequences have become even more deeply ingrained in our popular consciousness, as is explored throughout this dissertation. Critical educators, like myself, are concerned about how to best prepare students to find meaningful agency in the changing literacy landscape. As Rheingold writes:

> The proliferation of literacies and divides that accompany them are a real problem. It isn't easy to maintain a high level of basic reading and writing literacy, and the percentage of the population that can afford the time and money to learn additional

---

[29] While *Net Smart* is aimed at a popular audience, I find that his categories for effective digital literacy span a useful range, even for writing teachers whose goals for student literacies are shaped by particular ideological and contextual perspectives.

[30] Because I attend to these specific skills in such depth within my layers of literacy model, I'll just name them here.

multiple literacies is undoubtedly going to remain small, but that doesn't mean it has to be an elite. The multiliterate can be a public— a networked public. (254)

While Rheingold is optimistic that digital literacies can interrupt the firm striations in social locations from which people have found meaningful access, I am less certain. This point is a salient bridging of Brandt's fear (also quoted in Chapter 1) that "as the rich become richer, the literate become more literate" (169), and the urgency represented in Selber's work (and that of many teacher-scholars across computers and writing and educational technology) that the quickly evolving and increasingly immersive digital-embodied nexus through which we experience reality may have drastic consequences for those *without* a rich digital literacy education.

A complete digital literacy pedagogy must include a range and variety of skills that are both general enough to be applied across the infinite possible rhetorical contexts in which students will read and write, as well as specific enough to be helpfully transferred from situation to situation. Additionally, a critical digital pedagogy should have at its center an attention to the complex ways in which various forms of power work to constrain and enable folks of particular identity positions, especially within literacy-mediated spaces. For me, this work is captured through an emerging transnational feminist pedagogy, which I develop below. Without this critical work (and perhaps even with it), we will never break free of the oppression that flows within and through the transnational network of literacy and materiality.

Layering Literacies

While there are quite a few models for digital literacies frameworks, my own concept of "layers of literacies" aims to get teachers thinking explicitly about how to incorporate several kinds of literacy-learning goals into any given assignment in the writing classroom. This approach, while

it includes many of the *kinds* of literacies suggested by Rheingold, Selber, and Hinrichsen and Coombs, offers a contribution in its explicit attention to the fact that many literacies can be intentionally overlapped in our writing assignments to promote adaptability and rhetorical dexterity (Carter). I advocate for layers of literacies in assignments that *always* include critical literacies as a foundation.

In my own teaching, the critical is the beginning and end goal of all writing work, and the epistemology that guides my own emerging approach to critical literacies is rooted in transnational feminism.[31] To demonstrate what a critical digital pedagogy that takes up layers of literacies might look like in practice, I offer a transnational feminist pedagogical framework and a sample assignment that features many of the layers I describe below. Through pedagogical approaches like these, I believe writing teachers can work to interrupt the neoliberal pedagogy that shapes the digital literacy myth and the digital literacy-learning that is too often uncritical in contemporary formal education. Thus, I agree with Riedner and Mahoney's conclusion that, "becoming attentive to how language," and, I would add, literacy "shapes and is shaped by our world is a mode of agency where language [and literacy] users, writers, students, faculty, cultural workers, activists, and others can create the material conditions in which they live" (33). Digital literacy education is one mode through which, as writing teachers, we can access our own agency and that of our students via critical assignment design. In what follows, I will describe each of these "layers" as I understand them, before turning to sample assignments that speak to

---

[31] I recognize that not every teacher will be interested in or able to take up a transnational feminist pedagogy, and that despite this there are many valuable critical pedagogical approaches teachers might take up in the writing classroom. I will expand on the particular assets of a transnational feminist approach, and how it works for a layers of literacies model of critical digital literacy education in more detail later in the chapter.

ways in which the layering of literacies affords a complex and critical digital pedagogy to enhance ethical literate agency for our students.

Functional Literacies

As critical educators concerned with ways in which our students' literacies are gateways to opportunity for personal success and community investment, we must also be concerned with the fact that basic skills are often the minimum competencies necessary for cooptation of individuals' labor power. As literacy educators, we have to balance our obligation to provide students with access to rhetorical agency and the fact that those skills make students subject to exploitation, as well as participation in larger global circulations of capital, power, and violence, as I have explored. Scholars have addressed the ways in which, for many, basic or functional literacies fuel the undervalued and oft disenfranchised class of wage earners who garner much larger profits for those who exploit that labor. As Selfe reflects on the problem:

> The economic engine of technology has produced not only a continuing supply of individuals who are highly literate in terms of technological knowledge but also an ongoing supply of individuals who fail to acquire technological literacy, those who are termed illiterate according to the official definition. These latter individuals provide the unskilled, inexpensive labor necessary to sustain the system just described; they generate the surplus labor that must be continually reinvested in capital projects to produce more sophisticated technologies. (139)

To some degree, our work in higher education can be said to contribute to sustaining that surplus labor pool, only now the pool includes those who have the most entry level functional skills such as typing and emailing. The fact is, through our digital literacy work in writing classes, we do prepare students for entry in/exploitation within the high-tech global economy. However, leaving students to be bereft of functional skills is actually a far worse economic, and now social, fate for individuals and groups. Hawisher and Selfe, for instance, write that: "Today, if students cannot

write to the screen–if they cannot design, author, analyze, and interpret material on the Web and in other digital environments–they may be incapable of functioning effectively as literate citizens in a growing number of social spheres" (642).

To this point, that functional literacy is a matter of access for students, Selber argues that writing teachers have unfortunately failed to attend enough to the functional, favoring instead the critical. He explains that: "attentive to crucial questions of power and social justice, these approaches fail to expose students to the wide array of literacies they will need in order to participate fully and productively in the technological dimensions of their professional and personal lives" ("Reimagining" 472). But for Selber, functional literacies are essential if students are to reach real agency in the critical realm as well. Noting that computers can be empowering, Selber specifies that students should develop "the ability to harness the power of technology in an increasingly systematic way."

While in my own approach, I prefer to combine the functional and critical in tandem, I take to heart Selber's argument that taking the time to teach the technologies we're asking students to read and write with is a fundamental obligation and an ethical act. For me, this includes interface literacies, as well, or the ability to "identify available resources and use contextual cues" to effectively read and write within a given digital space (Turner, Sweany, and Husman 41). What's most important when considering functional digital literacies is that we're equipping students with the opportunity to *learn how to learn new technologies and spaces*, or to teach themselves with guides, tutorials, and help tools within and beyond a given interface. Therefore, when designing assignments from a layers of literacies approach, teachers attending to functional literacies might scaffold into the writing process the kind of tasks that will promote

and enhance students' systematic understanding of how to move, read, and work (individually and collaboratively) within digital spaces and creative sites of production.

Information Literacies

Information literacy as a field of scholarship is largely situated within library science, however the literacies this scholarship explores are the central concern for writing teachers whenever we teach writing from sources. According to the ALA's 1989 Presidential Committee report, information literacy is the ability to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." Building upon this understanding in 2000, the Association of College and Research Libraries (ACRL) released standards articulating competency for informationally literate individuals, including the abilities to "determine the extent of information needed," "evaluate information and its sources critically," and "use information effectively." These principles have long been central to best practices in the teaching of research writing in rhetoric and composition classrooms across the nation. However, in a changing landscape of higher education, the roles of students, teachers, and librarians come with perhaps more responsibility than ever before.

Recognizing this evolving responsibility, the ACRL has just (February 2015) released a new *Framework for Information Literacies for Higher Education*. In their framework, they reorient information to a series of values and dispositions based on the concept of metaliteracy, "in which students are consumers and creators of information who can participate successfully in collaborative spaces." The metaliteracy-based framework will resonate well for rhetoric and composition teacher-scholars who have long understood the rhetorical and constructed nature of information, including premises like "authority is constructed and contextual," "information has

value," and "scholarship as conversation" (ACRL, "Framework"). The ACLR notes that the

principles of the framework require that teachers address the "affective, attitudinal, or valuing

dimension of learning," which I believe can be located within effective assignment design that

appropriately layers literacies. It is significant to note, however, that while the general principles

of this framework are fitting for our work in writing studies, neither the ALA or the ACLR's

documents explicitly take up ways in which information literacy is complicated within the digital

sphere. To build upon their understanding within a more explicitly digital context, I return to

Rheingold's work.

Another of Rheingold's five interrelated literacies that make a "net smart" and

empowered user of digital media is what he playfully terms "crap detection." He recalls showing

his daughter the well-known example of an apparently reputable webpage on Martin Luther

King, Jr. that is actually a work of propaganda run by the racist organization Stormfront.

Rheingold explains that crap-detection as a literacy is actually a pretty complex set of skills:

> Like smart Web searching, good credibility testing is a process, not a one-shot answer.
> Simply deciding to perform more than one search query, use more than one search
> engine, or look beyond the first page of search results is the first step in tuning your
> critical information consumption skills, just as observing your own attention is the first
> step in learning mindful media use. (79)

In more clearly articulating these "critical consumption skills," Rheingold suggests practices that

are familiar to writing teachers who have worked with undergraduates to develop careful

research strategies, including: identifying and determining the ethos of a texts' creator(s) and

sponsor(s), attending to design of the source to assess how professional or amateur the author

(and hence their ideas) might be, practicing cross-referencing or "triangulation" techniques to

verify the accuracy of information based on multiple reputable sources (78-80). He also explains

that understanding the structure of search engines and how algorithms shape and influence what

seems like reliable information, let alone what is easily accessible, is an important aspect of crap detection, considering that "the entire profession of search engine optimization involves the craft of manipulating the opinion of search engines, just as public relations involves the craft of manipulating public opinion" (83-84). Beyond understanding how the internal structure of the space might construct what information a search engine returns, Rheingold advocates learning how to effectively customize spaces and adjust personalized media filters to open up a larger range of possible perspectives. This aspect of what he calls "infotention" requires, as Rheingold puts it, "knowing how to put together intelligence dashboards, news radars, and information filters from online tools, like persistent search and RSS, is the external technical component of information literacy" (98).

Navigating the rushing digital streams of information, then, includes the layering of functional literacies, social literacies, and network literacies. This concern for how back-end structures can influence and shape what information is accessible and appears reliable (or, "algorithmic authority, as Clay Shirky calls it) is addressed by Randall McClure, as well, in his 2014 article in *Writing Teacher*, "It's Not 2.0 Late: What Late Adopters Need to Know About Teaching Research Skills to Writers of Multimodal Texts." As he puts it, "the multimodal assignment should be research-based from the beginning in order to teach students to interact with and understand the information that surrounds them." This work requires the layering of information literacies—the ability to locate and evaluate sources—with functional literacies necessary to effectively and rhetorically use search engines, composing spaces, curation platforms, and other research spaces to find and work carefully with a range of texts. In other words, information literacy in digital spaces requires privileging the dialectical relationship

between the concepts and dispositions articulated in the ACRL's framework and the functional

literacies through which information is structured, accessed, and processed in digital spaces.

Network Literacies[32]

Because we live in a global economy, economy and society cannot be thought separately—this is

the networked context in which our students practice their literate agency and to which we must

attend in our pedagogy. As Castells explains, "Networks organize the positions of actors,

organizations, and institutions in societies and economies. … Because networks shape in an

uneven way societies, segments of society, social groups, and individuals, the most fundamental

social distinction refers to the position in a given network" ("Information Society" 57-58). For

Castells, networks arrange and rearrange, articulate and are rearticulated by power. This concept

of networks is the same kind of thinking that led me to pay homage to Canagarajah's title

Geopolitics of Academic Literacies in naming this dissertation. Rhetorics of digital literacies and

their technologies flow through global networks, just as the process of academic knowledge

making does, and those networks are shaped by unevenly distributed power and yield unevenly

distributed material and social consequences. This is the kind of network I've been describing

through a transnational feminist analytic—the transnational network of literacy and materiality.

For Castells, those networks can, in some cases, be used toward political agency; digital

networks are places that activate and extend social networks, and agency is located among such

crossings. Also thinking about networks in terms of circulation and power, in *Networking*

---

[32] There are many ways in which networks have been taken up in rhetoric and composition
theory, and many among them might be relevant to the current discussion on layers of literacies
in developing digital writing assignments. That said, I should specify that much of that work—
such as that building on theorists like Latour—influences, yet remains outside of, the scope of
my own interest in networks for this project. Rather, my own use for networks and network
literacies concerns the thinking of Castells, Dingo, and Rheingold.

Arguments, Dingo explains that networks are useful metaphors to rhetoricians as we are "thinking through how discourses travel, circulate, and are disbursed across the globe (Grewal 23) and how transnational power relationships impact these representational practices" (16). I prefer versions of network like Dingo's and Castells' that take histories of oppression and moments of agency as their foundational focus; as I hope my own work has shown, even the ways that we describe digital networks have networked consequences for individuals and agency.

Conceiving of networks and networked spaces in terms of power, colonial histories, neoliberal pedagogies, and political agency, writing teachers can help students think about the risks and rewards of their own texts and others' as they circulate among innumerable digital and non-digital networks. Whereas Castells may over-celebrate the revolutionary and liberatory potential of social media networks in his analysis of the uprisings of 2011-2012 (*Networks of Outrage and Hope*), his point that digital and face-to-face networks can converge toward social action is well taken. Of course, digital technologies can and are often used by state and non-state actors for vile, violent, and oppressive purposes as well. It is for those reasons that Ridolfo and DeVoss's work on "rhetorical velocity" is so significant to my discussion of network literacies. In "Composing for Recomposition: Rhetorical Velocity and Delivery," Ridolfo and DeVoss explain that students, and writers in general, are producing multimodal and digital texts at incredible rates; and given the ways in which digital texts are delivered differently than their print predecessors, we need to think differently about how we teach composition. Specifically, DeVoss and Ridolfo are concerned with "the speed with which artifacts can move and be remixed across networks, audiences, and contexts," and they emphasize the ways in which

multimodal texts can be taken up, repurposed, and used in ways outside of the creator's meaning and intent.

To address these concerns, they offer us the concept of rhetorical velocity—a way to consider and measure how delivery in digital networks might shift our multimodal composing strategies. It is "the strategic theorizing for how a text might be recomposed (and why it might be recomposed) by third parties, and how this recomposing may be useful or not to the short- or long-term rhetorical objectives of the rhetorician" (Ridolfo and DeVoss). Further, rhetorical velocity is "the understanding and rapidity at which information is crafted, delivered, distributed, recomposed, redelivered, redistributed, etc., across physical and virtual networks and spaces." Ridolfo and DeVoss encourage us to consider ways in which the texts we create may be taken up in positive, neutral, and negative ways. Considering how circulation of texts we create in digital networks may move beyond our influence is a significant part of how I am thinking about network literacies.[33] In a global networked public—in which each node is situated within and contributes to historically constructed and emergent power differentials—we should help students read texts for ideologies they may carry (or may have left behind). And, we should help students compose texts with an understanding of the risks and possibilities that come with circulation and rhetorical velocity.[34]

---

[33] Another way to think about the value of networks for digital literacies is in terms of Gee's affinity groups or peer networks of sharing. For Rheingold, users can assemble networks to build social capital and to make room for a variety of ideas and perspectives, as "diverse networks are collectively smarter and provide a richer variety of resources to participating nodes" (251). We may also craft assignments that attend to this aspect of network literacies—that we build personal learning networks (or what some call personal media ecologies), and these networks can be powerfully dynamic and illuminating or ideological echo chambers depending on our purposes and how carefully we cull our online connections.

[34] See Ridolfo and DeVoss's article for some great ideas of how rhetorical velocity might be taken up in the classroom. Certainly many writing teachers have thought with students about

Participatory Literacies

Participatory literacies are those that acknowledge and rhetorically respond to the inherently social and interactive quality of writing today. Reading and composing in digital spaces often means adhering to or breaking emergent or established conventions of a given digital public. In "Confronting the Challenges of Participatory Culture," Jenkins, et al., describe participatory culture as a networked public accessed through digital literacies. Drawing on Gee's notion of affinity groups, they argue that these relationships in a participatory culture can benefit the traditional educational environment in ways that highlight the collaborative nature and civic consequence of knowledge-making, text producing, and learning, thereby empowering students through literacy (10). In her 2004 CCCC address, Yancey presages this idea for writing teachers, arguing that there are civic consequences for our digital pedagogies, as we "foster the development of citizens who vote, of citizens whose civic literacy is global in its sensibility and in its communicative potential, and whose commitment to humanity is characterized by consistency and generosity as well as the ability to write for purposes that are unconstrained and audiences that are nearly unlimited" (321). Here we witness echoes of the digital literacy myth and the persuasive belief in the democratic potential of digital literacies. However it's important to note that, while digital literacies do not always and necessarily result in democratic ends as we tend to hope they will, (historically situated) digital publics are very real, and access to many of the spaces of knowledge and meaning making in the US democracy and global public does materialize via participation in digital spaces.

In their white paper, Jenkins et al. describe a (slightly idealistic) participatory culture with five defining characteristics, including "relatively low barriers to artistic expression and

---

circulation of texts in digital spaces within discussions and assignments, and examples are available.

civic engagement," "some type of informal mentorship whereby what is known by the most experienced is passed along to novices," and "members who believe that their contributions matter" (7). Building upon this definition, Rheingold sees participatory culture as "one in which a significant portion of the population, not just a small professional guild, can participate in the production of cultural materials ranging from encyclopedia entries to videos watched by millions," echoing Jenkins' et al.'s point that contributors must "believe they have some degree of power" (115). Additionally, I collapse into the participatory literacies what Rheingold calls "virtual communities." Rheingold establishes in *Net Smart* and elsewhere that to be a part of a virtual community, one must have the social literacies it takes to join effectively, including becoming aware of the norms, genres, values and other discourse and etiquette features that unite a given community. Along these lines, Rheingold explains that a net smart individual will consciously participate in curating via selecting, tagging, and circulating curated materials to well-defined niche networks—an invaluable service through which individual users build the social web. Once a person has a good sense of the community, membership comes from sustained contribution that becomes meaningful to other group members (164). This sense of user power or meaningful contribution described by both Jenkins et al. and Rheingold should be complicated, however, by considerations of ethos in digital spaces, such as Laura Gurak explored in *Persuasion and Privacy in Cyberspace.*

Taking seriously such critiques of ethos and (usually unevenly) distributed power, participatory literacies are based upon the idea that there are digital spaces in which folks come together with a shared purpose, commitment, or concern, and that they can and do participate through some degree of meaningful contribution. Extending Yancey's argument, in the best and perhaps the worst-case scenarios, these literacies have civic and material consequences.

Rheingold, for instance, argues that users must think about the profit-motive of the companies that build free platforms for curating, blogging, and social media services. He reminds readers that "social media are free of visible financial charges for a reason. Knowing that reason is at the heart of informed consent online. Go ahead and improve the market value of the latest vowel-truncated social media start-up by tagging media. First, know why and how your labor is being used" (135-36). Further, he explains that individuals must be aware of "the digital footprints and profiles" they build as they write, share, link, and otherwise participate across the social web, since these acts coalesce into an overall persona over time that has real consequences (140). In these ways and more, a sense of consequence is important to informed participation and agency in digital networks.

Thus, participatory literacies should be understood to contain within them a cultivated caution against the naiveté of the Habermasian public sphere—a free, equal, and non-exploitive space open to all. Further, this understanding of participatory literacies naturally overlaps with much of what I describe in the network literacies section. While I see participatory literacies as more overtly concerned with the social, this overlap speaks to the point that digital literacies are well thought of in terms of layers, as I have been arguing. Each of these modes of reading and contributing to the public construction of ideas and texts are included in my understanding of participatory literacies, and I am especially taken with Rheingold's inclusion of the concern for ways in which digital labor may be exploited and coopted for nefarious purposes. Functional knowledge, rhetorical savvy, and an ethical concern are all central to what it means to be digitally literate in a participatory culture.

Mindfulness

It's true that mindfulness is not a literacy in and of itself, however I think it deserves to be thought of as a quality of literate action that will benefit students and all writers in digital spaces. Mindfulness, a practice emerging out of Buddhist meditation but secularized and popularized in the West by thinkers like John Kabat-Zinn and Thich Nhat Hanh, emphasizes a breathing technique that promotes bare attention and a pause before reaction to impulse. Mindfulness practitioners find that these exercises, over time, reduce stress, improve physical health, ease suffering from mental illness and depression, and strengthen personal relationships. The wisdom found in the mindfulness community has recently been studied and affirmed by scientists who find that regular practice actually forges new neural pathways, cultivating a new experience of the mind, the body, and the world. Most significant to my thinking about layering literacies for digital writing assignments, however, is the emphasis on observance and non-reacting.

So much of our own and our students' interactions with digital devices is moved by impulsive, compulsive, and/or automatic behavior; I believe helping students (and ourselves) learn to pause, to observe what they're doing, locate intention, and to act with that intention will yield benefits in all digital writing scenarios, be it within a texting conversation, a response to a blog or tweet or Facebook post, or before accidentally hitting reply all for an email response. And I'm not alone in this belief. In today's overwhelming media marketplace, in which "every two days, humans produce as much information as we did from the era of cave paintings up to 2003" (98-99), Rheingold sees learning how to effectively harness and direct our attention as an essential skill. This literacy practice, he argues, can be cultivated via mindfulness "for anyone who is trying to swim through the infostream instead of being swept away by it" (64). So, while mindfulness is not a literacy, per se, I believe that developing the space for students to pause and

observe what they are doing as they interact with digital writing technologies and spaces is an excellent practice to layer into assignments. As a quality, mindfulness might also be understood to permeate and strengthen each of the other layers of literacies. Imagine, for example, what might result from the mindful attention to one's tone in a text message, or if upon learning a new interface, a writer paused to really take in what the visual icons signal as writerly possibilities. In this way, mindfulness might enhance each of the other layers of literacies when it is built into the foundation of an assignment (for an example, see Bill Wolff's assignment below).

Material Literacies

Materiality is the one aspect of digital literacies that has largely been missing from pedagogical scholarship, thus emphasizing the major contribution of this dissertation. Material conditions and histories shape the rhetorical situation in which any digitally literate act occurs, and those acts may have immeasurable consequences on the material world. As Lester Faigley writes in "Material Literacy and Visual Design," "literacy has always been a material, multimedia construct but we only now are becoming aware of this multidimensionality and materiality" (175). Material literacy learning ought to help students understand the ways in which technologies and their literacies are imbued within larger systems of labor and capital, cultivation and processing of raw goods from the Earth, social class in global constellations, real human and animal bodies in the world, and circulations of power writ large. Technologies and their literacies are made from and of material resources, and they have material effects on people's lived realities. For these reasons, some rhetoric and composition and literacy scholars have addressed what is easily overlooked when considering literacies and the digital—that materiality matters, with significant economic and social consequences.

Taking on such problems in "Reading Material," Peter Mortensen models the kind of material analysis that is central to the material literacies work I'm advocating for the writing classroom. Not only is paper manufacturing located in areas where there are fewer people consuming print materials, but, as Mortensen suggests, the environmental devastation that follows papermaking actually works to reduce literacy rates among the populations of the rural South where mills are based. Or, as he puts it, "literacy tied to the mass consumption of print—the literacy of cities and suburbs—might be implicated, at least partially, in the suppression of literacies near the rural manufacturing communities that make such consumption possible" (397). Similarly, in her consideration of the problem of planned obsolescence of digital technologies and its significance for writers and writing teachers, Shannon Madden "Obsolescence in/of Digital Writing Studies" argues that we ought to "help students think critically about relationships between bodies, technologies, and social groups, and about how cultural values are instantiated in machinery and emergent through human-computer interactions" (35). Madden asks students and teachers to think critically about the social and economic implications of the fact that the digital devices and writing spaces we adapt to are subject to market logics, with important consequences for our own literate and pedagogical practices.

Another vein of material literacies might address the ways in which digital literacies and their technologies operate to support already-disparate access to wealth and power. The fear of amplified marketing and the forces of monopoly capital—like that Richard Ohmann warned of in 1985—has not, it turns out, been unjustified when we consider the algorithms that search our email messages for keywords and then display customized ads for baby gear, travel discounts, or diet systems accordingly. It is for this reason that Kellner and Khan contend with rhetorics of multiliteracies that tout desirable outcomes of digital literacy skills for the 21st century job

market, instead offering "a critique of the new media economy as technocapitalist" (241). This move toward critique of the material consequences of digital literacies is also resonant in Selber's "postcritical" stance in his multiliteracies approach, as he argues that "teachers should be mindful of the ways in which they can unwittingly promote inequitable and counterproductive technological practices" (8). As writing teachers, we make literacy the object of our work. As such, it is essential that we face the ways in which that labor is bound up in larger economic, political, and social functions not of our own choosing.

As described here and in Chapter 1, concern for the ways in which digital literacies *matter* in the world is present in our scholarship and thus can and should be brought into the classroom as we ask our students to engage with such technologies. Through the material literacies layer, we might practice having frank conversations with our students about issues like how and where the devices that support our literacies are manufactured. We might ask students to investigate where our devices go when we're through with them. Additionally, we can dialogue with students about the politics and economics behind citation of open source articles, use of open source software and apps, the debates surrounding piracy, product licenses, copy left, and net neutrality. Always at stake in these conversations and projects with students should be the questions: Who benefits? Who pays? What are the hidden costs for people and the environment? And, how are we participating in these cycles through our own literate practices? These questions are best attended to with attention to transnational networks of literacy and materiality, and can be well achieved by layering material literacies with critical literacies, as I explore below.

Critical Literacies

Considering the complexly layered transnational and material consequences of the rhetorics of technologies and their literacies that I've described in this dissertation, the critical literacies layer attends to the ethical problems and obligations facing writing teachers in our current moment. Several of the thinkers and scholars I've cited throughout this chapter have thought carefully about critical literacies in connection with the digital. Selber, for instance, argues that critical digital pedagogues "should be able to recognize and articulate the ways in which power circulates in technological contexts," and he hopes to see our discipline "develop a full-scale assortment of meta-discourse heuristics with a critical bent" ("Technological Dramas" 193). Kellner and Khan, similarly, see critical digital literacies, or what they call technoliteracy, "as a site of struggle, as a contested terrain used by the left, right, and centre of different nations to promote their own interests" (243). They hope to see "educators (along with citizens everywhere) …devise ways to produce and use these technologies to advance a critical oppositional pedagogy that serves the interests of the oppressed," just as neoliberal and state entities have used them to serve their own interests.

JuliAnna Àvila and Jessica Pandya argue in their chapter in *Critical Digital Literacies as Social Praxis* that critical digital literacies are "skills and practices that lead to the creation of digital texts that interrogate the world; they also allow and foster the interrogation of digital, multimedia texts" (3). They write that these literacies will especially serve to "empower traditionally disenfranchised learners" (4). And, in a recent essay, Jesse Stommel argues that a critical digital pedagogy must be designed collaboratively, in collaborative spaces, and as "a method of resistance and humanization. It is not simply work done in the mind, on paper, or on screen. It is work that must be done on the ground." It is true that the feeling of hope, so central

to the digital literacy myth, is resonant throughout these voices. I sense, though, that this hope is of a different character than that which is branded, commodified, and broadcast in the digital culture economy—the kind engendered through partnership between the digital literacy myth and the neoliberal pedagogy. The hope reflected in the digital literacy myth does harken to the historically rooted American appeal to freedom as a moral good—under the myth, we *hope* that digital literacies will help people alleviate conditions of disenfranchisement and political suffering. However, the myth's service of an underlying agenda of economic domination tarnishes the spirit of its hope. The hope captured in critical digital literacy discourse is different in terms of guiding purpose—the critical perspective comes out of Marxism, feminism, and critical race theory (among others), and seeks to tear down structures of economic disparity, rather than to rhetorically support them. Additionally, while the rhetorical patterns assembled under the myth locate political agency in technology or Western actors, critical digital pedagogies subordinate technology to the agency of the people who will use it.

A critical digital pedagogy will blend this sincere hope and practice together with the above scholars' complementary and overlapping concerns. Some scholars concentrate on critique of multimedia texts and questioning the role of technologies and their literacies in larger structures of power, as Selber describes in the critical literacy section of his book. This understanding of critical literacy depends upon the belief that to be able to "read the world" is a fundamentally political and empowering act (see Freire and Macedo). Others focus on the opportunity to have students create digital texts and spaces that critique, interrupt, or counter oppressive practices in solidarity with those who suffer, such as Ross Collin and Michael Apple envision when they describe how "students and educators may appropriate the tools of high-tech global capitalism for use in the construction of more just orders" (46). Similarly, Kellner and

Khan hope that critical digital literacy work with students will "allow for popular interventions into the ongoing (often anti-democratic) economic and technological revolutions taking place, thereby potentially deflecting these forces for progressive ends such as social justice and ecological well-being" (241).

In my own model, critical literacies contain both of these goals—the critical and the creative. Critical digital pedagogues can design digital writing assignments that begin from the critical and layer in literacies described above as seem most useful for their goals and students' interests. While any given assignment may layer in only a few of the literacies, beginning with the critical is crucial due to my particular political and pedagogical commitments. Since, as Henry Jenkins argues, "both producers and consumers may now be understood as 'participants' in this new media ecology, while recognizing that they do so from positions of unequal power, resources, skills, access, and time" (15), it should be our project as educators to help students most effectively read and create within these networks as ethical, literate agents.

Whether or not we incorporate digital technologies and their literacies into our classrooms is in and of itself a political choice that has likely small, but still significant consequences for our world as our students go on to read, write, and contribute to our emerging reality. In a perhaps surprising statement, Gee writes that: "In the end, we might say that, contrary to the literacy myth, nothing follows from literacy or schooling" (162). Rather, he explains, what has real influence are "the attitudes, values, norms, and beliefs (at once social, cultural, and political) that always accompany literacy and schooling." Highlighting the material consequence of literacy education, Gee writes:

> A text, whether written on paper, on the soul (Plato), or on the world (Freire), is a loaded weapon. The person, the educator, who hands over the gun, hands over the bullets (the perspective), and must own up to the consequences. …Literacy education is not for the timid. (163)

While I do not love the gun metaphor Gee invokes here, I think it does capture the material and lived consequences related to literacy and literacy education. In addition to helping students delve into the realm of critical reading and production of texts to uncover, dispute, and interrupt those social and economic practices contributing to oppression anywhere it may occur, it is important for critical teachers to develop and refine a clear sense of their own politics. Some critical teachers may work with digital literacies to focus on labor, prison writing, racism, community publishing, language politics, or other concerns of power and language; all of these foci draw together the strength of teacher positionality and commitments with locally relevant opportunities for student learning. For me personally, this means developing a critical digital pedagogy that puts into praxis the important work of transnational feminism and other theoretical disciplines that advocate for our highest humanity. Informed by a transnational feminist politic, I aim to shape a critical digital pedagogy that affords students the opportunity to design texts that offer some critique and craft of their social world. In the sections that follow, I will feature several assignments that demonstrate what layers of literacies might look like in practice in the writing classroom, before moving on to my own layers of literacies assignment that reflects a transnational feminist approach to critical digital literacies.

Layers of Literacies at Work in Critical Digital Assignments

As writing teachers, the writing assignment is perhaps the most significant opportunity through which we can work with students to access, develop, and practice a range of literacies. As Selber explains, teachers who want to help students hone the digital literacies they bring into the classroom and build new ones must consider "how to scaffold instructional activities that

illuminate the relationships and interdependencies between these multiple literacies" (25).

Similarly, Byron Hawk, in his final chapter of *A Counterhistory of Composition*, provides a great

way to understand how and why assignments are a good opportunity to design these literacy-

learning experiences for students. He argues that writing teachers "need to build smarter

environments" that think "about classrooms as ambient interfaces" (249). He continues:

> These environments are constellations of architectures, technologies, texts, bodies,
> histories, heuristics, enactments, and desires that produce the conditions of possibility for
> emergence, for inventions. Heuristics, then, cannot be reduced to generic, mental
> strategies that function unproblematically in any given classroom situation. They are
> enacted in particular contexts and through particular methods that reveal or conceal
> elements of a situation and enable or limit the way students interact with and line in that
> distributed environment. Attending to this level of specificity in our classrooms is
> ultimately a fundamentally ethical act that should no longer haunt
> our pedagogical practice. (249)

Thus, the assignments I showcase aim to demonstrate the kinds of learning environments we can

design as writing teachers who wish to take up the ethical problem of helping students develop

the critical digital literacies with which they read and act within the world. More specifically,

complex digital assignments like these present students the opportunity to simultaneously

activate and cultivate a range of literacies in the same project. They overlap, or layer, functional

literacies with participatory ones. The assignments I hold up as examples below call for students

to critique *and* create. Students are positioned to be mindful, to attend to materiality of interfaces,

to learn the codes of a given discourse community, and to reflect on their role in a networked

public all at once. Thus, the following assignments are examples that, while they were not

conceived from a layers of literacies approach, model the kind of multidimensional approach to

digital literacy learning advocated in this chapter.

Twitter vs. Zombies

I present first an assignment that highlights functional, network, and participatory literacies—in this case, effective participation in social media networks. The game "Twitter vs. Zombies" is described in its rule manifest as "Part flash-mob. Part Hunger-games. Part Twitter-pocalypse. Part digital feeding frenzy. Part Micro-MOOC. Part giant game of Twitter tag." This game/class assignment is described in Pete Rorabaugh and Jesse Stommel's article "Twitter vs. Zombies: New Media Literacy and the Virtual Flashmob," in which they argue that "that mass-collaboration is essential to what we do as pedagogues, asking students to band together in deconstructing the hierarchies implicit in most educational institutions" and connecting students in the classroom with folks outside the classroom as well. In the game of virtual tag, players connect on Twitter and use the hashtag #TvsZ to make their moves—including #dodge, #swipe, and #bite—with the goal of staying human or making as many successful zombie conversions as possible. New rules are crowdsourced and implemented on an ongoing and emergent basis, and scores/records are kept in a public collaborative space (like Google Docs).

 Over the course of the game as Rorabaugh and Stommel ran it, students began using and integrating other digital genres and spaces, including vlogging and remix; these creative acts were wholly outside of the realm of the original game as conceived by its creators and reveal how "players were intrinsically motivated to investigate Twitter and its capacities." As Rorabaugh and Stommel describe their experience inventing and teaching/hosting the game:

> Over the course of the game, players new to Twitter learned to tweet with a hashtag, insert a link into a tweet, build lists, follow other users, publish media to WordPress and YouTube, watch individual feeds, use Twitter as a collaboration tool, direct message, and archive content in Storify. They wrote to save their lives, they negotiated, and they reflected on their learning about a tool from both within the tool and outside it.

Within the game, we see participatory and network literacies developing as individuals come to develop and master the functional literacies of a particular networked, public platform (Twitter), and they learn to coordinate those literacies with literacies of other spaces (like YouTube and Google Docs). Students might also quickly watch how power moves in and through the network (as some players gain influence as humans or zombies or rule-makers), and how collaborative decision-making is possible in networked publics. While the zombie game version of this activity may not be appropriate for all classroom contexts, the blueprint of a collective set of goals that are collaboratively negotiated in a particular network over time may be adaptable for many classrooms, and would certainly activate the functional, participatory, and network literacies layers of assignment design for teaching and practicing digital literacies.

Diary of Writing Technologies Interactivity

One approach to mindfulness and materiality in the writing classroom is to help students become more reflective upon the digital literacies they already put to use, thereby interrupting the invisibility their technologies' commodification has engendered. In a Spring 2015 course called Writing, Research, and Technology, Bill Wolff (who has circulated these materials both via his website and Twitter) asks students to perform a 48-hour self-study of their cell phone usage. During the two-day period, students are required to log each time they use their devices "for the purposes of *social interactivity* and/or *textual interactivity*," as defined by Nancy Baym. Following the data collection period, students are tasked with preparing a blog post in which they first quantify, then reflect upon their usage. What makes this, to my mind, a great example of a critical digital literacy assignment is that its goal is not to teach students a new form of writing or to acquaint them with a new writing space. The students in the course each already use their cell

phones, blogs, and the pens and paper with which they record their activity. Rather, the assignment asks students to pause.

The recognition with which students must treat their phone usage interrupts literacy acts that might otherwise occur more automatically. Wolff recognizes in the description of the assignment that this process might *change* the nature of the actions it seeks to interrogate, and he opens that point up for reflection, offering students the opportunity this way:

> …if you changed your use of your phone activity during the course of the assignment, as many of you said you did, you might consider how you were, perhaps, reacting against the external pressure to use technology and how your technology use might fit within ideas on *social construction of technology use* or *social shaping of technology use*.

In other words, Wolff invites students to investigate the ways in which their use of cell phones and their literacies are negotiated within specific social contexts. The goal, as Wolff describes it, is to design the occasion (to use Hawk's phrase) in which students might come to "better understand the complex relationships we have with our technologies and to think about the implications of those relationships." I understand this assignment to be a fitting example of critical digital literacy work in the writing classroom for the ways it asks students to build upon already sophisticated knowledges and rhetorical savvy, using a mix of modes and genres to pause, record, quantify, and reflect upon their digitally literate activity toward ever-deepening awareness of how that literate action is shaped by social practices. Further, the assignment layers in mindfulness with material literacies, as the students work to interrogate how the technologies of our daily lives—in all their invisibility and ubiquity—shape our embodied social practices. In this example, we see that a critical digital pedagogy will not merely teach new modes of writing, but will employ a full spectrum of writing technologies with multiple layers of literacies to help students reflect upon how literacies operate in particular social contexts.

Designing Social Medial Platforms, Designing Subjectivities

This final example features an assignment that activates the layers of participatory, functional, material, and critical literacies. In their collection, *Composing (Media)=Composing (Embodiment)*, editors Kristin Arola and Anne Wysocki offer assignments emerging out of the contributing authors' thinking on digital media and embodiment. In this example, students are asked to select a social media site and to perform an analysis of how the space's design affects users' constructions of self, understanding of others, and participatory choices. The goal is that "through examining such interfaces, students confront how various multimodal design choices shape our understandings of self and each other" (260). Students are asked to create a profile on their social networking site of choice and to interrogate how profiles are constructed. They look at what aspects of user profiles are highlighted, what identity markers or information is privileged via design, and what similarities and differences exist among the corpus of profiles they analyze. Next, as a whole class, students discuss the following questions:

- How do different SNSs emphasize different aspects of personality and/ or identity? Consider age, ethnicity, class, religion, able-bodiness, occupation, location, values— any qualities that shape people.

- Does it seem that the layout of the SNS asks users to experience their relationships with their friends in particular ways? For example, how does Facebook's layout allow you to view/ engage with your friends as compared to Twitter?

- Does the SNS ask you actively to think about the relationships you are establishing with others through the interface? Is there anything in the interface that asks you to stop and reflect on what you are writing or linking and how what you write or link might affect

others and your relationship with them? Why might the SNS be designed to encourage—

or not— such reflection?

- Is the SNS you examined one you already use? If not, is it one you might use if you had

  friends there? Why or why not?

- What type of people do you think are best suited to use the SNS you examined? Why?

  (Arola and Wysocki 262)

These activities lead to individual student reports in which they identify what kind of person a

given social networking interface imagines as its ideal user. Next, the authors suggest that

students should develop their own social networking site, attending in conscious and informed

ways to how their design choices might shape how users participate in the space. Through this

series of thinking, discussion, and writing activities, the assignment sequence invites students to

develop their participatory literacies by thinking about ways in which the spaces of a social

networking site has real effects on what kinds of user subjectivities, and hence participation, are

possible.

Students practice functional literacies by focusing on interface design, while material

literacies are invoked as students begin to investigate the relationship between interface design

and individuals' lived and embodied experiences. Critical literacies might be layered in as

students question ways in which corporate social networking sites make space for particular

subjectivities while limiting, constraining, or even repressing others (there was a time when

Facebook required users to select a sex identifier of either male or female, for instance, whereas

contemporary users can select up to 10 gender terms at a time from among over 50 options). The

complexity of this assignment, and its effectiveness for helping students deeply engage with

important problems in digital culture while honing their reading and writing abilities, rests in the skillful layering of literacy-learning opportunities.

Principles of a Transnational Feminist Pedagogy

While I deeply respect each of the assignments I've named above, to best honor my own political commitments, a critical digital pedagogy that is rooted in layers of literacies should also be informed by what it means to teach in the age of globalization and neoliberalism. The assignments above each enact some form of critical literacies layering in their design—be it through honoring the role of students in co-determining the direction and nature of an assignment in collaboration with people beyond the university, in examining the problems and opportunities that emerge when our technologies become ubiquitous and invisible and shape our social practices, or by inviting students to recognize how current interfaces shape our identities and social environments before working to consciously design more inclusive spaces. However, none of them explicitly offers students the opportunity to practice or investigate their digital literacies in connection with global problems.

In presenting my own approach to the layer of critical literacies, I suggest that writing teachers can consider the many gifts of a pedagogy conceived out of transnational feminist theory. While each of the transnational feminist thinkers that shape what follows has attended explicitly to pedagogy in their work, we have yet to see a clearly defined framework for a transnational feminist pedagogy, especially specific to writing studies. Out of this exigence, and to describe the specific political lens through which my critical digital pedagogy is enacted, I will

articulate four principles of a transnational feminist pedagogy.[35] Once I've named and described

these principles, I'll turn to an assignment I've used in my writing courses that reflects a layers

of literacies approach to critical digital pedagogy—one that hopes to embed these transnational

feminist principles heuristically for students.

Transnational feminism has been put to work as an analytic in scholarship across fields

like women and gender studies, cultural studies, education, anthropology and in rhetoric and

composition via works like M. Jacqui Alexander's *Pedagogies of Crossing*, Chandra Mohanty's

Feminism without Borders, Rebecca Dingo's *Networking Argument*s and Eileen Schell and

Wendy Hesford's 2008 special issue of *College English*. Mohanty, for instance, argues that the

best practice for feminist scholarship would be "attentive to the micropolitics of context,

subjectivity, and struggle, as well as to the macropolitics of global economic and political

processes and systems" including "grounded, particularized analyses linked with larger, even

global, economic, and political frameworks" (223). While feminist transnational rhetorics and

scholarly practice like that Mohanty describes have powerful influence, their potential for the

classroom are still less developed in composition studies. From this body of socially just theory

in the global era, I've named the following four pedagogical principles through which we can

work from transnational feminism with undergraduates in the writing curriculum. These

principles are complex, but I think they're productive and can occasion the kinds of problem-

posing that students will find generative in their ethical writing practices.

Principle 1: In my estimation, **a transnational feminist pedagogy should help students**

to recognize and trace complex histories of colonization, capitalism, racism and patriarchy

across global borders. Under this principle, students might take up a single problem such as sex

---

[35] This work is a partial beginning to scholarship that I hope to more fully develop in the near
future, and it appears in truncated form due to the many purposes of this chapter.

trafficking, E-waste, or water scarcity and would narrow a site of investigation that looks at a history of power and exchange across national borders. Through tracing a single, complex problem in this way, students can come to see ways in which power, economy, and patriarchy are linked outside of the container of the national construct. Eileen Schell, for instance, has recently advocated a pedagogy focused on global food production that asks students to think, research, and write "in systematic, critical, and interconnected ways and in ways that help them combat the neoliberal literacy framework," allowing students to connect "feeling, action, and ethical self-making" in their practice of literate agency (50, 51). In other words, under the mantle of food, students can trace how big business manipulates resources and knowledges of indigenous people around the world. Students can then reveal how we are complicit in these systems and how we might find agency and alternatives to combat them.[36]

Principle 2: Along those lines, **transnational feminist pedagogy will ask students to trace their own position in relation to global constellations of power.** This pedagogy begs us to recognize how our intersectional identities are negotiated within complex social histories that are not of our making, but from which we inherit specific pains and privileges. As M. Jacqui Alexander argues in *Pedagogies of Crossing*, we need a pedagogy "which brings subconscious positionality (the sense of place and space) to the knowledges we produce, the contradictory positions we occupy and the internal systems of rewards and privileges we derive from those very positions." (112) These positions shape us, and to know and understand them is to gain agency within them. Students working from an intimate understanding of their positionality can compose more ethically and attentively to the specific demands of a given site of analysis.

---

[36] See also Schell's work with students on sweatshop labor and tracing global linkages in "Gender, Rhetorics, and Globalization: Rethinking the Spaces and Locations of Women's Rhetorics in Our Field."

Principle 3: A transnational feminist pedagogy will also work to position texts and voices as speaking in/for/of themselves without recolonizing those voices. As scholars who are sensitive to the ways in which the academy has historically stolen the knowledges of the indigenous and displaced, has intellectually shaped and interrogated "the Other" and has turned human subjects (especially queer bodies and bodies of color) into objects, we must tread carefully and train students to ethically wield the tools of academic knowledge making. A transnational feminist pedagogy will not *make from*, but rather will *make with* the perspectives of others, paying special attention when working with texts and voices that cross the One-Third World/Two-Thirds World divide.

Rather, we have to resist those academic impulses to recolonize through scholarly endeavors. As Mohanty explains, this "resistance lies in self-conscious engagement with dominant, normative discourses and representations in the active creation of oppositional analytic and cultural spaces" (196). Our task, according to Mohanty and the transnational feminist tradition, "is to decolonize our disciplinary and pedagogical practices. The crucial question is how we teach about the West and its others so that education becomes the practice of liberation." (200). In fact, those of us who take up representations of race, women, religion, sexuality, and the many dimensions of academic discourse in our classrooms are already well practiced in helping students use language that acknowledges and speaks back to oppression. Under this principle, we extend this work to move beyond talking about others in ethical ways, to listening to and making meaning alongside each other.

Principle 4: Finally, **a transnational feminist pedagogy will help students locate and trace ideologies, arguments, and power across time and space**. We can put these first three principles into action by working with students to enact what Dingo has described as

networking arguments. Through tracing ideologies and arguments across borders, we can work

with students to understand how ideas in one location circulate and operate upon the lived

realities of people in another location. In this way, we can help student writers "place micro-

examples within macrocontexts" to make knowledge that acknowledges complex histories of

power, locates themselves within that constellation of power, and thereby works to make new

knowledge that resists recolonization (144).

Layering Transnational Feminism and Digital Literacies: The Righteous Remix[37]

The transnational feminist framework I've developed out of the thinkers I name above is an ideal

toward which I strive in my teaching, and one that is not always easily blended with a layers of

literacies approach to critical digital pedagogy. However, I believe that layering literacy

education with knowledge work and activism for justice in our classrooms is one small oar we

can use to navigate the rapid currents of a fraught digital and global era. When blended together

with digital writing assignments, the transnational feminist pedagogy I've described above can

work to interrupt the digital literacy myth and to reveal for students many problems implicit

among the One-Third World/Two-Thirds World divide. For me, the orientation of a transnational

feminist pedagogy is what affords students practice with ethical knowledge making as they

develop their literate agency. As I design the occasions for my students to practice multiple kinds

of digital skills through the layers of literacies approach, it is paramount that the activities and

their products grant space for students to learn to work carefully within the systems of

knowledge and power that contextualize their compositions. I will conclude this section of the

---

[37] For a complete version of the assignment and an extended analysis of this assignment's ethical promise and problems, see "Remixing Ethical Composition."

chapter with a sample assignment of my own and a discussion of how the assignment reflects the

layers of literacies and transnational feminist pedagogy frameworks I've articulated.

Righteous Remix: Stepping into Public Networks

The Writing Situation
In the first unit of this semester, you each traced the scholarly networks wherein globalization has come to be defined. In the second unit, you researched a globalized problem and traced public and scholarly networks to produce an argument driven essay in response. In this unit, you will create and circulate a video remixed argument that employs your research skills to engage other public stakeholders about your chosen global problem. You will need to draw upon various digital and academic literacies to participate in the culture of the meme and the remix by glocalizing your selected problem. In the process of this project series, you will work with digital photography and video, iMovie, video-snatching applications, along with Photoshop, Flickr and other software.

Digital witness and activism are fast-growing ways that citizens around the world are sharing information and spreading awareness about local political struggles–including contemporary slavery, governmental abuse and oppression, rape as a weapon of war, famine, racial violence, and women's rights issues among many, many more. In this project, you will choose a globalized problem and you will construct a remix wherein you present a public argument for a local audience.

Your Task
The goal of this project is to make a 10-minute long video remix on the globalized problem you've selected, and to make it relevant to the Syracuse University community—your aim is to motivate your viewers to agree with and support the position advocated by your video. More specifically, your video will be assessed on how well you use relevant rhetorical tactics (see 10 Tactics below) toward positioning a local audience as invested in the issues of the video and to pose a possible course of action for that audience. You will mix into your chosen video a combination of live-footage, text, images, and borrowed and original sound and video clips that will help your audience understand why the issue described in the video is relevant to them, now. I also expect to see you incorporate your research to provide compelling evidence for both your presentation of a problem and a solution. More specifically, I'd like you to include media (original and sampled) that give a sense of how the US is involved in or responsible for the problems and solutions addressed in your video. Furthermore, I'd like you to give a sense of what SU students can and should do to help solve the problem, and why.

Learning and Assessment Goals
Your 10 minute Righteous Remix will be assessed on how well you have accomplished the following:
 • Does your video present a globalized problem in a compelling way that intrigues the viewer and helps them understand its relevance?

- Does your remix present an argument about how the problem is relevant for a *local* audience at the national **and** state or city-levels? In other words, have you shown how the US is involved and how the problem is tied to Syracusians?
- Do you suggest a convincing course of action for the local audience to become involved in solving the globalized problem you've described?
- Do you incorporate a good range of public and scholarly evidence in your exposition of the problem and proposition of a solution?
- Does your remix include a good mix of image, text, video, and audio to make it a rich visual experience?
- Does your remix follow the fair use guidelines we've discussed?
- Is your video technically sound: In other words, does it play error-free, is there visual consistency in your formatting of similar elements such as source attribution and transitions between scenes?
- Have you used public networks such as Twitter, Facebook, and relevant blogs to circulate the link to your video to help it get more views?
- Have you submitted a one-page individual reflection statement?

In the "Righteous Remix" assignment, students are asked to choose a global problem to investigate and research—that is, any problem with stakeholders and consequences that cross national borders. In the past, students have taken up issues like fair trade coffee, representations of women in hip hop around the world, sex trafficking across the Nepali-Indian border, and the US-Columbian cocaine trade. The project is designed in ways that take up the principles of transnational feminism—the critical literacies layer of the assignment—in several ways. By asking students to address "how the US is involved in or responsible for the problems and solutions" of their chosen site, I am asking them to perform some political economic analysis that nearly inevitably opens up larger questions about histories of power as they circulate. In this way, students work through the heuristic of Principle 1 to "recognize and trace complex histories of colonization, capitalism, racism and patriarchy across global borders."

Often, in group consultations, we address together the role of the United States, locating what policy measures or sanctions the government may have undertaken related to the issue at hand, and what that says about how the government is taking or shirking responsibility in various

ways. For instance, one group who composed their remix on the US-Columbian cocaine trade did research into the US's popular cultural representations of the glamor of cocaine use, and they interspersed that larger argument with critiques of the War on Drugs and its devastation on the economy and agriculture of an already-poor nation. In order to reveal the material and political connections among global powers, in this way, students must also fulfill Principle 4, as they "locate and trace ideologies, arguments, and power across time and space." In their research in digital and face-to-face contexts, and as they assemble narratives composed of many sources and by many stakeholders, students are invited to engage with power as it works across global histories, united by the tread of a singular problem.

Further, by asking students to localize their videos and to make an argument about how a local audience can work toward a solution to the problem they've investigated, students are faced with their own positionality in relation to the transnational issue and the complex network of political histories thereof (Principle 2). As students select texts to remix and record videos with local figured, they find space to work through questions of Principle 3, seeking to "position texts and voices as speaking in/for/of themselves without recolonizing those voices." Through workshopping, discussion about visual design and rhetorical arrangement of sources and information, we complicate how students are invoking the voices of Others.

This is not a neat process, and of course not every student walks away having fully immersed themselves in the deeper transformative goals of the assignment as I've intended. But I do think it's a great opportunity for students to explore complicated global issues and to use their digital literacies in positive and complex ways. Additionally, these are not easy or natural kinds of writerly moves for freshman or even upper-level writing students, and the project both requires and rewards teacher investment throughout the process. I recognize that many teachers

239

may not feel prepared for this kind of work in addition to composing with new media technologies. That said, I have witnessed great success in students' critical literacies in digital contexts through their righteous remixes. I understand the "Righteous Remix" assignment to begin with the critical literacies layer, informed by transnational feminist principles. That said, this assignment also takes up several of the other layers of literacies that I've described make up a critical digital pedagogy.

The assignment layers in functional literacies as students learn to use the iMovie interface to compose their videos, but included in that work are many complex literacy acts. Students must watch video tutorials to learn the interface and experiment with what's possible in terms of audio, image, video, and text. They must learn how to arrange and rearrange the "assets" of their video, while weighing those choices with rhetorical effect. And, they must learn to navigate collaborative knowledges among their group members while gaining help from online and in-person experts when the need arises. All of that is in addition to learning how to locate texts, ideas, and information that they include in their videos. Much of this literacy work is built into the curriculum where I am personally delivering direct instruction and guidance. However, much of the functional literacy work in this assignment is built in as an occasion for students to *learn how to learn* on their own time.

Information literacies are also a central component of the Righteous Remix process. In order to compose a compelling video, students use library databases to locate traditional scholarly sources that help them address the histories and current realities of the problem they're exploring. Aside from working with groups to ensure that they have a range of perspectives represented, we discuss concerns of fair use for education, as well as how to effectively cite sources with visual consistency in context of a hybrid medium. Additionally, we discuss how to

240

carefully blend a variety of sources—from recording local interviews with relevant stakeholders, to incorporating factual information from credible sources, to including reactions from social media or videos of US politicians addressing the issue. Essentially the "Righteous Remix" is a researched argument that blends a variety of public and scholarly sources, and as such, information literacies are central to the assignment.

Also significant to the assignment are network literacies. As a video that students will eventually choose whether they will upload to YouTube, we compose remixes from the beginning with a sense that their products will be public texts that are a relevant contribution to ongoing discourse on the problem at hand. For this reason, we discuss from the onset how to locate where the conversations are happening, and how to circulate their video in those spaces once it's finished. For instance, students might locate blogs, relevant and recent *New York Times* contributors' articles, email addresses of local politicians or NGO workers who are devoted to the issue or should be, and hashtags already circulating on Twitter about the issue. In this way, students learn how to find and enter the networks that matter, and to think about the potential impact of circulating their texts in those spaces.

Material literacies are activated through attending to the assignment's goal to make an argument for a solution or course of action; students are framing their remix in terms of what work it might do in the world. In that way, they are already recognizing how the circulation of their digital texts and arguments could have an impact. Additionally, through the project of networking arguments and histories that happens via the nature of the research questions students pose, they come to investigate how circulations of power shape the lived realities of people around the world. The act of connecting histories with material consequence is the kind of work that can work to disrupt the digital literacy myth—and arguments like it—in the global era.

Conclusion

Assignments like the one I've presented above are complex, unwieldy, and likely out of the comfort zone of some teachers—for important reasons. Also, not all teacher-scholars in rhetoric and composition will wish to take up a transnational feminist political avenue, and there are certainly complex, interesting and meaningful ways that teachers can design digital assignments that don't explicitly address these values and principles. However, I believe that in the richly networked, global, digitally-mediated landscape of the contemporary writing situation, our writing pedagogies should be as multilayered as possible in order to scaffold the literacies that students need to become the ethical and informed literate agents we hope they will be outside of the classroom.

I am really just beginning to understand how to build these frameworks into my own curriculum, but I am happy with the foundations I've laid in this chapter to help guide projects to come. In future work, I hope to move beyond assignments in which students are exclusively researching, remixing, and collaborating with one another. My goal is to help bridge knowledge work between the One-Thirds and Two-Thirds Worlds—a move that also works to honor Canagarajah's project in *A Geopolitics of Academic Literacies*. Throughout my career, I look forward to developing digital assignments that help my students engage in work that is truly transnational as it participates in flows of learning, literate agency, and activism toward social justice across borders.

Pedagogies like this one assume that there is a role for pedagogy to play in changing the world, in working through and against ideological and social currents like the digital literacy myth and the material consequences of the transnational network of literacy in the global era. A critical digital literacy pedagogy, whether coming from a layers of literacies approach or offering

another model, recognizes the role of digital literacies in our contemporary social and economic context, and ought to work hard to mitigate the university's fraught role in the material networks I've traced throughout these chapters. For me, the best path to liberatory literacy work that may benefit both individual *and* our global interdependencies is through a transnational feminist approach that, as Alexander puts it, "cannot be circumscribed with the borders of the American nation-state, which are themselves shifting in relation to global changes, but whose task of making insiders and outsiders remains the same" (108). Identifying the digital literacy myth and facing its consequences in our classrooms, I hope, will begin the long process of taking accountability for the consequences of literacy in our world and in our work.

> "Critical thinking without hope is cynicism. Hope without critical thinking is naïveté." (Maria Popova, "Some Thoughts on Hope.")

On Hope

Although I write cautiously about the geopolitical and material costs of hope throughout the preceding chapters, the core of my own ontology ultimately rests in hope. Through the process of composing this dissertation, I have walked a challenging personal journey in holding both hope and critical thinking together as I think through the global impact of the digital literacy myth. It has been my aim to avoid the cynicism and naïveté that Maria Popova warns against above, a difficult balance in the face of the poles of democratic dreams and material violence I've investigated in these pages. Yet for me, my belief in literate agency for students and teachers persists—tempered by the material realities of our transnational interdependence.

I do not wish to be dismissive, or even chiding, of those who believe that technology can, in some instances, be used to bring about social good. To do so would be equally condemning of my own hope about literacy and agency in the global era. Rather, my goal in this dissertation has been to bring our attention to the ways in which hope, when left uninvestigated and decontextualized, might speak more to ingrained ideologies and under-examined economic motives than the hopeful spirit may at first realize. I know because this has been true in my own life. What I wish for this project to accomplish is to help lift the veil of the myth, to prod all of us to be more accountable for the ways in which contemporary literacy practices in the One-Thirds World are imbricated in larger global economic networks that affect bodies and places in the Two-Thirds World.

This is not to say that these consequences are a one-way tunnel from cause in the West or Global North to effect in the Global South. Certainly, I have a career's worth of work to understand the transnational network of digital literacies and materiality. Further, I am not reading those persuaded about the good of technology as "dupes." But I do hope that my readers will work alongside me to notice how we *tend* to talk about technology and its effect in the world. And I hope we can work together to pause and contextualize our claims about technologies and their literacies within transnational colonial histories, with an eye to our position of privilege, and in ways that attend to the agency and dignity of those whose lives we're investigating and describing.

The Possibility of Multiple Myths and the Myth Across Many Spaces

Throughout this dissertation, I've described instances wherein public and government discourse convey a general hope about the promise of digital literacies in serving the US economy and spreading democracy across global borders. This is merely one myth that circulates about technologies and their literacies, one which I see as part of a long trajectory in the West that begins (among other related moments and places) in the trends Graff reveals in 19th century Upper Canada as North Americans were undergoing "social and economic changes rooted in the transition from a pre-industrial to a mercantile and, later, an industrial capitalist order" (6). As Graff's work with literacy reminds us, it is not uncommon for particular rhetorical and ideological myths to appear as people work to make sense of changing economic and social structures, myths that serve particularly regulatory and hegemonic ends. These myths are persistent and adaptable—the American Dream is one such myth. Consisting largely as pervasive and circulating rhetorical trends-turned-common beliefs, such myths make space for

disagreement, counter-examples, and conflicting trends since there is no targetable base, group, or structure to which they can be tethered. Rather they can be invoked and dismissed at will, all the while remaining culturally present and available for use as needed.

In fact, there are other myths about technologies and their literacies beyond what I have taken up here. One competing myth that counters the hope of the digital literacy myth is that of technology as killing literacy. This myth is evident in Nicholas Carr's essay and book titles, "Is Google Making Us Stupid?" and *The Shallows: What the Internet is Doing to Our Brains*, wherein he makes arguments about the ways in which the web affects cognition, such as his concluding fear that "as we come to rely on computers to mediate our understanding of the world, it is our own intelligence that flattens into artificial intelligence" ("Google"). Similarly, the "Internet killed the literacy star"[38] myth appears in articles, blogs, and conversations about how texting negatively affects youth culture's ability to read sustained texts, use "proper" language and grammar, make complex arguments, etc. That these kinds of arguments are mythic in the same way as Graff's literacy myth or the digital literacy myth is confirmed by the fact that scholars and researchers just as often draw conclusions countering them, such as the claim that the amount of texting contemporary youths engage in constitutes more reading and writing acts in a single day than we've ever seen before.

Like the digital literacy myth, there are plenty of examples that speak to the truth of the trends identified in the Internet-kills-literacy myth. And it very well may be true that the nature and character of reading and writing are changing as we move to mostly online and screen-based literacy—we can, of course, observe real changes in our everyday literate practices. But it is the

---

[38] This phrase is a pun on the song "Video Killed the Radio Star" by the band Buggles; it was the first music video to be played on MTV (which was also often accused of having a negative effect on youth).

totalizing celebration or condemnation located in myths like these, particularly when made outside of more contextualized and macro-level historical and material analysis, that gives them both their power and their potential to be damaging. This false move to grand narratives or uncomplicated conclusions are what move the digital literacy myth and those like it from merely a rhetorical trend or pattern circulated in public discourse to that of a myth. Through their circulation and recirculation, such myths become more and more deeply sedimented into our cultural norms, shaping the way we understand ourselves and our world. And their oversimplified conclusions, captured in flattened narratives like those about the use of Twitter in Iran or sexual assault in the DRC, carry our hopes and fears and manifest consequences thereof.

Some readers may wonder why we might name such myths at all, given their flexibility, the ease with which they coexist with conflicting myths, or the fact that they can turn up in such distinct locations and contexts with often vastly different results. The answer, for me, lies in ideological traffic. For Alexander, ideological traffic reflects the "imperfect erasure" of hegemonic forces from the past. As she writes:

> The idea of the "new" structured through the "old" scrambled, palimpsestic character of time, both jettisons the truncated distance of linear time and dislodges the impulse for incommensurability, which the ideology of distance creates. It thus rescrambles the "here and now" and the "then and there" to a "here and there" and a "then and now," and makes visible what Payal Banerjee calls the ideological traffic between and among formations that are otherwise positioned as dissimilar. (190)

Thus, in pulling together flattened Western narratives about the Iranian election protests from 2009, narratives from the last decade or so of US response to the problem of sexual assault and conflict minerals in the DRC, and a centuries-long evolving trend to describe literacy as economically and democratically promising in ways that serve a particular hegemonic social project in collusion with an economic agenda, we see how the consequences of a print and digital literacy myth unite places and times that might otherwise be understood as dissimilar. Further, in

returning dimension to the flattened narratives I cite through histories of colonization, patriarchy, political economic development, and activism, I can reveal how women are *particularly* affected by these rhetorics as they traffic ideological baggage.

Rather than enacting a further flattening by characterizing or portraying these very disparate places and moments as heterogeneous due to ways that the digital literacy myth has acted in and through them, my goal has been to locate the micro-examples within the macro-trend of the myth, using these spaces as one lens through which to begin to articulate the transnational network of literacy and materiality in the global Information Age. This approach seeks, with Alexander, "to hold on to the historical specificity through which those various social relations are constituted at the same time that we examine the continuity and disjunctures of practices within and among various state formations" (190-91). In identifying these rhetorical patterns of hope, while tracing their material consequences in two particular geopolitical moments, my project works to:

> destabilize that which hegemony has rendered coherent or fixed; reassemble that which appears to be disparate, scattered, or otherwise idiosyncratic; foreground that which is latent and therefore powerful in its apparent absence; and analyze that which is apparently self-evident, which hegemony casts as commonsensical and natural, but which we shall read as gestures of power that deploy violence to normalize and discipline. (192)

Herein is the power of the transnational feminist method I've borrowed from Alexander's analysis and Dingo's networking arguments approach—to see how power is trafficked, persists, and prevails even when (and perhaps because) we lose sight of it, fail to name it, and generally overlook its linkages on a global and temporal scale.

In this dissertation, I've sought to trace the print literacy myth with its roots in the nation-state to its current evolution in regards to the digital in the global era and its neoliberal economic context. This move is not meant to squelch hope for literacies and their contemporary

technologies, of course, but rather to temper it by accounting for ways in which economic, colonial, patriarchal trends and transnational relationships and histories are infused in the myth in which we place our One-Thirds World hope for peace and progress. In other words, I believe we have every reason to hold onto hope, but that we ought to do so with a sense of responsibility and attentiveness to the less democratic, material consequences of current literate practices across global borders.

The Place of Digital Literacy Education: The Role of the University

Nearly 20 years ago, Bill Readings explained in *The University in Ruins* that the trends of globalization and yielding of national culture to the whims of the market were contributing to the decline of the liberal arts university, whose mission was once deeply bound up with the values and mission of an identifiable nation-state. He explains, "the University is becoming a different kind of institution, one that is no longer linked to the destiny of the nation-state by virtue of its role as producer, protector, and inculcator of an idea of national culture" (3). For Readings:

> pedagogy cannot be understood apart from a reflection on the institutional context of education. This reflection refuses both the isolation of education in relation to wider social practices and the subjugation of education to predetermined or externally derived social imperatives. Institutional forms are always at work in teaching: forms of address, rooms, conditions of possibility. But the reminder of the institutional question is a warning against imagining that attention to pedagogic pragmatics can be essentially divorced from an attention to institutional forms. (153)

Following this logic, Readings argues for pedagogy as a *network of obligation*, one in which teachers recognize the weight of their rhetorical situation and strive for an ethically-grounded discourse between students and teachers within the constraints of the university. He notes the pitfalls of radical knowledges in the university, explaining the perspective of the managerial university that swallows such radicalism: "Produce what knowledge you like, only produce more

249

of it, so that the system can speculate on knowledge differentials, can profit from the accumulation of intellectual capital" (164). He concludes that universities can be understood as closer to transnational corporations than to the preservers of a national identity that they once were, but that we should seek to cultivate pedagogies that resist the corporatizing of the university by "[exceeding] the logic of accounting" (164).

I would argue that Readings' characterizations of the university and its corporate/ managerial leanings in appealing to "excellence" as a meaningless, yet often quantified, signifier is not dissimilar to the work I do in tracing the neoliberal pedagogy's co-occurrence with the digital literacy myth in US education policy. The university's adoption of managerial discourses and increasing rhetorical privileging of capital outcomes above its former mission of learning that Readings describes is deeply related to the rhetorical constructions in the 2010 National Education Technology Plan that connect digital literacies to the economic promise of a new American worker-subject. In many ways it seems that education is becoming more and more deeply entrenched in economic incentives, however I believe that, to some degree this is a trick of perspective. Graff's work on the literacy myth and its connection to changing economic and social arrangements reveals that literacy and institutions of public and higher education (whose work centers on literacy sponsorship) have *always* been bound up in economy. Any pedagogy that seeks to be radical or to work against or in spite of neoliberalism or the economic disenfranchisement connected to systems of literacy and privilege *has* to carefully recognize the moments of contact with those systems and the simultaneous spaces for negotiation, difference, and freedom.

In other words, I agree with Readings that, through pedagogy, there is space for rhetorical teachers and students to articulate another possible reality, moving within and beyond the

opportunities and constrains of the university context. This is the work my own pedagogical framework, presented in Chapter 5, attempts to accomplish. It comes out of my own experience in particular university contexts, and also works to synthesize the network of pedagogical scholarship in digital literacies in and beyond the field of rhetoric and composition—an appeal to the context of the contemporary academic community. I have tried to offer a pedagogy that might be adaptable for a range of different university contexts, one which I hope will be taken up toward the cause of justice and freedom. Understanding education as always in some way mutually sustaining with its political economic context can be understood as both limiting and enabling. It is, after all, the social and economic circumstances of the peasant labors Freire worked with in Brazil that helped him articulate his pedagogy of freedom, and the corporate need for a banking model of education against which he worked.

The university holds a liminal space, one in which literacy education can and does support the status quo, and one in which literacy education can and does lead to change for individuals and society. Our pedagogical work—our particular varieties of literacy sponsorship—within the university similarly can take up either path in any given moment. In the digital global era, writing teachers' role necessarily includes some form of digital literacy education. For transnational feminist teachers, this work necessarily involves "[mapping] the lines between our own location—between where we are, what we see, and what we do" in order to reveal "the contradictory positions we occupy and the internal systems of rewards and privileges we derive from those very positions" (Alexander 109, 112). In taking up this work, and attending to our complicated positionality therein, our digital writing pedagogies are perhaps the interface through which we can share with our students and local universities the path toward more just literate practice—online and off.

I hope to leave teacher-scholars then, not with a feeling of paralysis, but one of hope and perhaps duty. As professionals in a field that is *invested* in the transnational network of literacy and materiality, from the space of what Readings characterized as the transnational university, we should work to mitigate some of the material consequences of our work, to somehow disentangle our own literate practices and literacy materials from the suffering, oppression, and subjugation of others within and beyond our colleges, communities, and national borders. In our teaching and service, for instance, we might organize for more sustainable literacy practices. We might, for instance, educate students and colleagues about our role in these circulating literacies and their consequences as I try to articulate throughout this dissertation. We can also enact material literacy activism on university committees, serving to influence the contracts and policies through which our schools acquire, use, and dispose of technologies. We can work to purchase the technology with the most overall sustainable and just manufacturing and labor practices, ensure computers are updated with the latest operating systems rather than retired for newer models, and to implement donating and recycling programs for our campus technologies to ensure the most ethical disposal.

In our scholarship, we can practice a mindful pause anytime we find ourselves wanting to make encompassing claims about the economic or democratic good of technologies and literacies. I hope we will stop and ask to what extent our claims and assumptions might be shaped by the digital literacy myth. We can continue to trace the historical and emergent practices that shape the transnational network of literacy and materiality. And, we can try to understand more clearly how our literate agency is enabled and limited, and how it also has global consequences. Thus, while the government, private sector, and university have overlapping and distinctive roles and agenda when it comes to contemporary literacy, our own

professional literacy work plays into these larger systems and contexts. We cannot wholly disentangle our work from their interests, thus we should be as attentive to their processes and our roles within them as possible.

Conclusion

Many of the overall claims captured in this dissertation coalesce to build a non-determinist understanding of technology and digital literacies in the cause of social justice. I find that: 1) Technologies and their literacies should be understood in connection with their social, economic, and political histories. 2) Social practices online and off are shaped by and negotiated within historically-oriented political realities in which people have varied interests and investments, but which often work together toward particular ends. 3) Technologies can offer specific political affordances at a given moment, though they may at once serve counter interests. And 4) Economic and government interests are frequently hidden and at odds with socially just goals and affordances of technologies. Across these chapters, I have developed a working definition of the digital literacy myth and have traced its ideological traffic through neoliberal educational policies, in Western conceptions of democracy in action in other places and times, and in material production and consequences as these rhetorics circulate across the One-Third World/Two Thirds World divide. My definition of the digital literacy myth is deeply indebted to the literacy scholars and educators who have come before, however, and reflects problems that are not new in their nature or effect.

The trends of literacies and their technologies being coopted by and working in support of private interests, the state, and of capital more broadly are not novel. Consider the ways that literacy was tightly controlled by the Church throughout centuries of European and colonial

history, or how literacy tests granted or blocked access to the vote in the Jim Crow south, or even how standardized testing coupled with teacher evaluation and school funding threatens to punish already struggling student populations in today's public education debates. Yet, while literacy education has served as an ideological state apparatus, there are many moments through which individuals have used literacies sponsored by entities with conflicting interests to accomplish their own goals—both toward liberation and destruction. And, there are moments throughout history where literacy has been a site of contact, contestation, and negotiation over time and across borders, such as in sixteenth century Mexico, as Susan Romano explores, where "Roman Catholic institutional power over education… has been challenged by independence wars and revolutions and other less dramatic political means, yet the longevity and durability of institutional habit is confirmed in a wide range of contemporary cultural practices and attitudes toward reading and writing on both sides of the border" (275). Literacy is deeply complex in its constitution, implications, and possibilities, so much so that many folks have steered away from using the term at all.

I choose instead to retain vigilant attention to literacy as a social artifact and process because, use the term literacy or not, it is clear from centuries of thought that literate acts, systems of literacy education, and technologies of literacies have real material consequences for the world. This remains true, even as the forms those literacies, educational systems, and technologies are in constant flux. Hawisher and Selfe's beautiful point that literacies have lifespans signals the ways in which context is so important to the study of literacy. At any given point the same form of literacy might have deeply varied impacts on the social good or devastation experienced by people of disparate positionalities; and, these impacts could reverse or shift at any moment. For instance, Brandt writes toward the end of *Literacy in American Lives*

that "once the economy secures enough of a certain kind of literacy to move on, it does, leaving people (and places) behind" (189).[39]

For this reason, the arguments I've been making about the material and global consequences of the digital literacy myth as it circulates out of the One-Third World have deep bearing on literacy economies of the future. We should continue to pay attention, as Selfe urged, to the ways in which literacies and their technologies work to articulate a particular reality that serves some interests at the costs of others. And, we need to work to develop literacies that are rooted in a complex understanding of our transnational reality, with its emergent agencies and material constraints—literacies that are built out of a concern for one another and that work vigilantly toward life and freedom affirming material and rhetorical practices.

As I trace the constellations of the West's hope for democratic and economic benefits brought by digital literacies, and ways in which that hope serves private gains, to their material disruption of every social given in the Democratic Republic of Congo, I do so aware that this is merely one route through which scholars might locate the ideologies and consequences of the digital literacy myth. There are, unfortunately, many opportunities to study these problems as they manifest among the complex geopolitical grids connecting literacy, technology, and agency. As our economies and societies become increasingly dependent both within and outside of the container of the nation-state, connections of opportunity and obligation in terms of our shared suffering and successes become more abundant.

This is an ethical argument that in the global era, educators must understand that the literacies and literacy tools we teach are imbricated within larger systems of ideology and power

---

[39] As a native of Rochester, New York, I know these material consequences intimately as I witnessed the economic impact of the digital revolution in a city whose major industry was represented by Eastman Kodak's camera film and Xerox's paper.

that circulate across the globe. It is a fact that we bring these problems into the space of our

classrooms just as innocently as we carry our smart phones in our pockets when we enter the

room. And so, while writing teachers designing digital writing assignments with layers of

literacies in mind will not solve the problem of rape in the Congo, will not end e-waste and save

impoverished children in developing nations from exposure to the devices' toxins, will not bring

Neda back to life or dampen the persuasiveness of the digital literacy myth in the West, I believe

that small, potent gestures of critical problem-posing with students will make a difference. Not to

act in some decisive way in response to these concerns is merely to remain wholly complicit

within them.

This pedagogical commitment also reflects where I've landed with the question of

technology's overall social role. Since technologies and their literacies are effectively used

toward liberatory and oppressive ends, we ought to work to consciously apply them to the good

in as many spaces as we are able. Andrew Feenberg and Maria Bakardjieva, in their chapter in

Community in the Digital Age, explain that debates over community and technology, in part,

break down into the perspective of technological determinism, wherein the technical construction

of the particular digital spaces allows for or hinders community formation, or, the alternate

perspective that sees user agency and appropriation as the driving force (10-12). They write that

"not all nor even most online interaction conforms to our concept of community, but we will

argue that where groups seek community, they find the means to create it and use the technology

to their purposes despite the various obstacles identified by critics of networking" (4). Feenberg

and Bakardjieve offer terms like "democratic rationalization," "participatory design," and

"creative appropriation" to describe the ways in which users, designers, and technologies all

have agency with sometimes democratic results (16). Continuing the thread of design-as-agency, Feenberg and Bakardjieva write that:

> The consumption model of the Internet is a plausible version of its future given the realities of the world in which we live. The alternative community model would take much more conceptual work, design efforts, and political mobilization. Yet, as we have tried to show, there are technical formats that could potentially pave the way to a more community friendly Internet. It is the human actors, putting their competencies and resources to work, fighting for their beliefs and desires, who will determine which of the emergent structures prevail. (24)

I share Feenberg and Bakardjieva's fear of a consumption-driven media landscape that merely commodifies the participatory experience that the digital literacy myth understands to be so liberatory. But I agree, too, that "it is the human actors," with a carefully cultivated literate agency who can work to change the course of this future.

This is a fundamentally hopeful perspective, to which I ultimately return. To work against the digital literacy myth and its material consequences, teacher-scholars in rhetoric and composition can take up a number of contributing projects. We might continue tracing how the materiality of literacy has uneven consequences across global borders, with an eye to ways in which the most sensitive groups often face the most devastating costs of literacy's political economy. Scholars and teachers can work to balance students' rhetorical and literate agencies in attention to global, emergent circulations of power. We might continue to ask: how does literacy afford agency for some at the same moment that is constrained for others? Those interested in taking up the thread of transnational feminism in literacy work that runs through this dissertation might ask: how do we work within systems of literacy in ways that recognize, preserve, and enhance the unique agencies and literacies of Two-Thirds World women?

And finally, I hope that each of us will continue the project of recognizing ways in which our literacy work is fueled by these transnational networks of literacy and materiality, working to

257

decolonize our practices at every available turn. In the global era, wherein the well being of each is ultimately connected to the well being of all, we all ought to be concerned with the state of literate agency and its consequences. This project will be ongoing as long as the project of human freedom remains incomplete. As literacy educators, we risk the fruits of our labor being pulled in by the current of literacy and technology's service to exploitive global superstructures. Still, we can dig in our heels against the current to conscientiously shape our students' literate agencies, recognizing that the consequences of our pedagogies will be tiny raindrops of justice in the emergent global reality. This is the hope that will ground my continuing work under the reign of the digital literacy myth.

Works Cited

Adler-Kassner, Linda. *The Activist WPA: Changing Stories About Writers And Writing*. Logan,

UT: Utah University Press, 2008. Print.

Agamben, Giorgio. *Homo Sacer: Sovereign Power and Bare Life*. Trans. Daniel Heller-

Roazen. Stanford, CA: Stanford University Press, 1998. Print.

Arendt, Hannah. *The Human Condition*. Chicago: University of Chicago Press, 1958. Print.

Alexander, M. Jacqui. *Pedagogies of Crossing: Meditations on Feminism, Sexual Politics,*

Memory, and the Sacred. Durham, NC: Duke University Press Books, 2005. Print.

Althusser, Louis. "Ideology and Ideological State Apparatuses." *Lenin and Philosophy, and*

Other Essays. New York: Monthly Review Press, 1972. Print.

Ambinder, Marc. "The Revolution Will Be Twittered." *The Atlantic*. 15 June 2009. Web. 11

Mar. 2014. <http://www.theatlantic.com/politics/archive/2009/06/the-revolution-will-be-

twittered/19376/>.

American Library Association. Presidential Committee on Information Literacy. *Final Report*.

Chicago: American Library Association, 1989. Web. 13 April 2015.

Appadurai, Arjun. *Fear of Small Numbers: An Essay on the Geography of Anger*. London: Duke

University Press, 2006. Print.

Arola, Kristin and Anne Wysocki, Eds. *Composing (Media)=Composing (Embodiment)*. Logan,

Utah: Utah State University Press, 2012. Print.

Arola, Kristin, Jennifer Sheppard, and Cheryl Ball. *Writer/Designer: A Guide To Making*

Multimodal Projects. Boston: Bedford/St. Martin's, 2014. Print.

Association of College and Research Libraries. *Framework for Information Literacy for Higher*

Education. 2015. Web. 13 April 2015.

---. *Information Literacy Competency Standards for Higher Education*. Chicago: American

      Library Association, 2000. Print.

Autesserre, Séverine. "Dangerous Tales: Dominant Narratives on the Congo and their

      Unintended Consequences." *African Affairs* 111.443 (2012): 202-222. Print.

Àvila, JuliAnna, and Jessica Pandya, eds. *Critical Digital Literacies as Social Praxis*. New York:

      Peter Lang, 2013. Print.

Banks, Adam. *Race, Rhetoric, and Technology: Searching for Higher Ground*. Mahwah,

      Lawrence Earlbaum Associates, 2006. Print.

Batson, Trent. "The ENFI Project: A Networked Classroom Approach to Writing Instruction."

      Academic Computing (Feb.-Mar. 1988): 32-33. Print.

Beck, Estee. "Reflecting upon the Past, Sitting with the Present, and Charting our Future: Gail

      Hawisher and Cynthia Selfe Discussing the Community of Computers & Composition."

      Computers and Composition 30.4 (2013): 349-357. Print.

Berry, Patrick W., Gail E. Hawisher, and Cynthia L. Selfe. *Transnational Literate Lives in*

      Digital Times. Logan, UT: Computers and Composition Digital P/Utah State UP, 2012.

      Web. 20 October 2012.

Bogost, Ian. *Alien Phenomenology, Or, What It's Like to Be a Thing*. Minneapolis: University of

      Minnesota Press, 2012. Print.

Bouwer, Karen. *Gender and Decolonialization in the Congo: The Legacy of Patrice Lumumba*.

      New York: Palgrove Macmillan, 2010. Print.

Braun, M.J. "The Political Economy of Computers and Composition: 'Democracy Hope' in the

      Era of Globalization." *JAC* 21.1 (2001): 129-162. Print.

Bridle, James. "How to See Through the Cloud." 2013. Web. 23 April 2015.

<https://stml.makes.org/thimble/how-to-see-through-the-cloud>.

Brittain, Victoria. "Calvary of the Women of Eastern Democratic Republic of Congo

(DRC)." *Review of African Political Economy* 29.93-94 (2002): 595-601. Print.

Brown, James, et al. "Hacking the Classroom: Eight Perspectives." *Computers and Composition*

Online (2014): n.p. Web.

Bruffee, Kenneth. "Two Comments on 'Computer Conferences and Learning: Authority,

Resistance, and Internally Persuasive Discourse'." *College English* 53.8 (1991): 950–53.

Print.

Burns, Hugh. *Stimulating Rhetorical Invention In English Composition Through Computer*

Assisted Instruction. Diss. University of Texas at Austin, 1979. Print.

Canagarajah, A. Suresh. *A Geopolitics of Academic Writing*. Pittsburgh: University of Pittsburgh

Press, 2002. Print.

Carr, Nicholas G. "Is Google Making Us Stupid? What the Internet is Doing to Our Brains." *The*

Atlantic. July/August 2008. Web. 25 July 2015.

---. *The Shallows: What the Internet Is Doing to Our Brains*. New York: W.W. Norton, 2010.

Print.

Carter, Shannon. *The Way Literacy Lives: Rhetorical Dexterity and Basic Writing Instruction*.

Albany: State University of New York Press, 2008. Print.

Castells, Manual. "Flows, Networks and Identities: A Critical Theory of the Information

Society." *Critical Education in the New Information Age*. Ed. Manual Castells. Lanham:

Rowman & Littlefield, 1999. 37-64. Print.

---.*Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge, UK:

Polity Press, 2012. Print.

---. *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*. Vol.

   1. N.p.: Wiley-Blackwell, 2011. Print.

Chong, Ping, Kyle Bass, and Sara Zatz. *Cry for Peace: Voices from Congo*. Syracuse Stage

   Rehearsal Draft. Syracuse: Ping Chong & Company, 2011. Print.

Clinton, Hillary. R. "Remarks on Internet Freedom." The Newseum, Washington, D.C. 21

   January 2010. Public Address. Web.Collier, Richard M. "The Word Processor and

   Revision Strategies." *College Composition and Communication* 35 (1983): 149-155.

   Print.

Collin, Ross and Michael Apple. "New Literacies and New Rebellions in the Global Age."

   Global Crises, Social Justice, and Education. Ed. Michael Apple. New York: Routledge,

   2010. 25-60. Kindle Edition.

Cooper, Marilyn and Cynthia Selfe. "Computer Conferences and Learning: Authority,

   Resistance, and Internally Persuasive Discourse." *College English* 52.8 (1990): 847-869.

   Print.

Culp, Katie, Margaret Honey, and Ellen Mandinch. "A Retrospective on Twenty Years of

   Education Technology Policy." *Journal of Educational Computing Research* 32.3 (2005):

   279-307. Print.

Cushman, Ellen. *The Cherokee Syllabary: Writing the People's Perseverance*. Norman:

   University of Oklahoma Press, 2011. Print.

Davidson, Cathy N. *Now You See It: How the Brain Science of Attention Will Transform the Way

   We Live, Work, and Learn*. New York: Viking, 2011. Print.

Davies, William. *The Limits of Neoliberalism: Authority, Sovereignty and the Logic of

   Competition*. London: SAGE Publications, 2014. Kindle Edition.

Dingo, Rebecca. *Networking Arguments: Rhetoric, Transnational Feminism, and Public Policy Writing*. Pittsburgh: University of Pittsburgh Press, 2012. Print.

Dingo, Rebecca and Donna Strickland. "Anxieties of Globalization: Networked Subjects in Rhetoric and Composition Studies." *Teaching Writing in Globalization*. Ed. Darin Payne and Daphne Desser. Lanham: Lexington Books, 2012. 79-91. Print.

Dolmage, Jay. "Metis, Mêtis, Mestiza, Medusa: Rhetorical Bodies across Rhetorical Traditions." *Rhetoric Review* 28.1 (2009): 1-28. Print.

---. "Writing Against Normal: Navigating A Corporeal Turn." "Whose Body? Looking Critically at New Interface Designs." *Composing (Media)=Composing (Embodiment)*. Ed. Kristin Arola and Anne Wysocki. Logan, Utah: Utah State University Press, 2012. Print.

Duncan, Arne. "The New Normal: Doing More with Less." The American Enterprise Institute, Washington, D.C. 17 November 2010. Public Address. Web.

ENOUGHproject. "I'm a Mac…and I've Got a Dirty Secret." Online video clip. YouTube. YouTube, 25 Jun. 2010. Web. 16 May 2011.

The Enough Project. "A Comprehensive Approach to Congo's Conflict Minerals." Report. April 2009. 1-21. Print.

Esfandiari, Golnaz. "The Twitter Devolution." *Foreign Policy* 7 June 2010. Web. 11 Mar. 2014.

Faigley, Lester. "Material Literacy and Visual Design." *Rhetorical Bodies: Toward a Material Rhetoric*. Ed. Jack Selzer and Sharon Crowley. Madison, WI: University of Wisconsin Press, 2003. 171-201. Print.

---. "Subverting the Electronic Notebook: Teaching Writing Using Networked Computers." *The Writing Teacher as Researcher: Essays in the Theory and Practice of Class-Based Research.* Ed. Donald Daiker and Max Morenberg. Portsmouth, NH: Heinemann

Boynton/Cook, 1990. 290-311. Print.

Farman, Jason. "The Materiality of Locative Media: On the Invisible Infrastructure of Mobile

Networks" *Theories of the Mobile Internet: Materialities and Imaginaries*. Ed. Andrew

Herman, Jan Hadlaw, and Thomas Swiss. New York: Routledge,Taylor & Francis Group,

2015. Print.

Feenberg, Andrew and Maria Bakardjieva. "Consumers or Citizens? The Online Community

Debate." Ed. Andrew Feenberg, and Darin D. Barney. *Community in the Digital Age:*

Philosophy and Practice. Lanham, MD: Rowman & Littlefield, 2004. 1-28. Print.

Freire, Paulo and Donald Macedo. *Literacy: Reading the Word and the World*. South Hadley,

Mass: Bergin & Garvey Publishers, 1987. Print.

Gallagher, Chris W. "The Trouble with Outcomes: Pragmatic Inquiry and Educational

Aims." *College English* 75.1 (2012): 42-60. Print.

Gee, James Paul. "The Legacies of Literacy: From Plato to Freire through Harvey Graff."

Harvard Educational Review 58.2 (1988): 195-212. Print.

---. *Situated Language and Learning: A Critique of Traditional Schooling*. New York:

Routledge, 2004. Print.

Giroux, Henry. "Democracy, Education, and Politics of Critical Pedagogy." *Critical Pedagogy:*

Where are We Now? Ed. Peter McLaren and Joe L. Kincheloe. New York: Peter Lang,

2007. 1-5. Print.

Gladwell, Malcolm. "Small Change: Why the Revolution Will Not Be Tweeted." *The New*

Yorker 4 Oct. 2010. Web. 11 Mar. 2014.

Gladwell, Malcolm and Clay Shirky. "From Innovation to Revolution." *Foreign Affairs*. 19 Jan.

2011. Web. 11 Mar. 2014. <http://www.foreignaffairs.com/articles/67325/malcolm-

gladwell-and-clay-shirky/from-innovation-to-revolution>.

Gleason, Shannon. "Global Domination in Four Easy Steps: 'STEM' as a Disciplining

Discourse." 25 Feb. 2013. Prezi. 11 November 2014. <https://prezi.com/m2l9ka-

ddyrs/global-domination-in-four-easy-steps/>.

Goggin, Maureen D, and Beth F. Tobin. *Women and the Material Culture of Needlework and*

Textiles, 1750-1950. Farnham, England: Ashgate, 2009. Print.

Gramsci, Antonio. *Prison Notebooks: Vol. 1*. New York: Columbia University Press, 1991. Print.

Grewal, Inderpal. *Transnational America: Feminisms, Diasporas, Neoliberalisms*. Durham:

Duke UP, 2005. Print.

Grossman, Lev. "Iran Protests: Twitter, the Medium of the Movement." *Time*. 17 June 2009.

Web. 11 Mar. 2014.

Gurak, Laura. *Persuasion and Privacy in Cyberspace: the Online Protests over Lotus*

MarketPlace and the Clipper. New Haven: Yale University Press, 1997. Print.

Haghighatjoo, Fatemeh. "Women in Iran's Green Movement: Their Role in the 2009 Presidential

Election Protests." Woodrow Wilson International Center for Scholars 15-17.

Hardt, Michael, and Antonio Negri. *Commonwealth*. Cambridge, Mass: Belknap Press of

Harvard University Press, 2009. Print.

Hawisher, Gail and Cynthia Selfe. "Becoming Literate in the Information Age: Cultural

Ecologies and the Literacies of Technology." *College Composition and*

Communication 55.4 (2004): 642-692. Print.

---. *Global Literacies and the World-Wide Web*. London: Routledge, 2000. Print.

---. "The Rhetoric of Technology and the Electronic Writing Class." *College Composition and*

Communication 42.1 (1991): 55-65. Print.

Hawisher, Gail, Patrick Berry, Hannah Lee, and Synne Kjulstad, S. "Moving Images Of Literacy

In A Transnational World." *Computers and Composition Online* (2010-2011): n.p. Web.

Hawisher, Gail, Cynthia L. Selfe, Yi-Huey Guo and Lu Liu. "Globalization and Agency:

Designing and Redesigning the Literacies of Cyberspace." *College English* 68.6 (2006):

619-636. Print.

Hawk, Byron. *A Counter-History of Composition: Toward Methodologies of Complexity*.

Pittsburgh: University of Pittsburgh Press, 2007. Print.

Hesse, Doug, Nancy Sommers, and Kathleen Blake Yancey. "Evocative Objects: Reflections on

Teaching, Learning, and Living in Between." *College English* 74.4 (2012): 325-350.

Print.

Hesford, Wendy. "Rape Stories: Material Rhetoric and the Trauma of Representation." *Haunting*

Violations: Feminist Criticism and the Crisis of the "Real." Ed. Wendy Hesford and

Wendy Kozol. Chicago: University of Illinois Press, 2001. 13-46. Print.

Hesford, Wendy, and Eileen Schell. "Introduction: Configurations of Transnationality: Locating

Feminist Rhetorics." *College English* 70.5 (2008): 461-470. Print.

Hinrichsen, Juliet and Antony Coombs. "The Five Resources of Critical Digital Literacy: A

Framework for Curriculum Integration." *Research in Learning Technology* 21 (2013):

n.p. Web.

H.R. 4128--111th Congress: Conflict Minerals Trade Act. www.GovTrack.us. 2009. March 27,

2013. Web. 10 Mar. 2010.

H.R. 4173--111th Congress: Dodd-Frank Wall Street Reform and Consumer Protection Act.

www.GovTrack.us. 2009. March 27, 2013. Web. 10 Mar. 2010.

Human Rights Watch. "Triangle of Death." N.d. Web. 17 Aug. 2013.

<http://www.hrw.org/legacy/campaigns/drc/2006/katanga/victims.htm>.

hungryandmad. "My iPhone Raped a Congolese Woman." *Hungry*. Blog Post. 17 April 2012.

    Web. 10 October 2012.

Jackson, Steven. "Making a Killing: Criminality and Coping in the Kivu War Economy." *Review*

    of African Political Economy 29.93-94 (2002): 517-536.

Jenkins, Henry. "Critical Information Studies for a Participatory Culture." *Henry Jenkins*. April

    8, 2009. Web. 14 Feb. 2014 <http:// henryjenkins.org/ 2009/ 04/

    what_went_wrong_with_web_20_cr.html>.

Jenkins, Henry, et al. *Confronting the Challenges of Participatory Culture: Media Education for*

    the 21st Century. White Paper for the MacArthur Foundation. Cambridge: The MIT

    Press, 2006. Print.

Johnson-Eilola, Johndan. *Datacloud: Toward a New Theory of Online Work*. Cresskill, N.J:

    Hampton Press, 2005. Print.

Jones, John M. "CFP—Wearable Rhetorics: Quantification, Materialization, and the Body.

    Proposal for a Special Issue of *Rhetoric Society Quarterly*." Nov. 2011. Web. 12 2015.

    <http://johnmjones.org/2014/11/cfp-wearable-rhetorics-quantification-materialization-

    and-the-body-proposal-for-a-special-issue-of-rhetoric-society-quarterly/>.

Kahorha, Jack. "The Worst Places in the World for Women: Congo." *The Guardian* 14 June

    2011. Web. 12 April 2013.

Kellner, Douglas and Richard Khan. "Reconstructing Technoliteracy: A Multiple Literacies

    Approach." *E-Learning and Digital Media* 2.3 (2005): 238-251. Print.

Kennes, Erik. "Footnotes to the Mining Story." *Review of African Political Economy* 29.93-

    94 (2002): 601-607. Print.

Khan, Seth. "'Never Take More Than You Need': Tenured/Tenure-Track Faculty and Contingent

      Labor Exploitation." *Forum: Issues about Part-Time and Contingent Faculty* 16.2

      (2013): A12-A16. Print.

Khorasai, Noushin Ahmadi. Iranian Women's One Million Signatures Campaign for Equality:

      The Inside Story. Bethesda, MD: Women's Learning Partnership, 2009.

Kiesler, Sara, Jane Siegel, and Timothy W. McGuire. "Social Psychological Aspects of

      Computer-Mediated Communication." *American Psychologist* 39 (1984): 1123-34. Print.

Kisangani, Emizet. Civil Wars in the Democratic Republic of Congo, 1960-2010. Boulder, CO:

      Lynne Rienner Publishers, 2012. Print.

Koh, Adeline. "Syllabus Draft: GIS 3614, Seminar in Feminist Theory (Fall 2014)."

      AdelineKoh.org 20 August 2014. 15 April 2015. Web.

      http://www.adelinekoh.org/blog/2014/08/20/syllabus-draft-gis-3614-seminar-in-feminist-

      theory-fall-2014/

Lander, Christian. "#40: Apple Products." Stuff White People Like. Blog Post. 30 Jan. 2008.

      Web. 13 April 2010.

Luke, Allan and Peter Freebody. "A Map of Possible Practices: Further Notes on the

      Four Resources Model." *Practically Primary* 4 (1999): 5-8. Print.

Lunsford, Andrea A. *Reclaiming Rhetorica: Women in the Rhetorical Tradition*. Pittsburgh:

      University of Pittsburgh Press, 1995. Print.

Lynch, Paul and Nathaniel Rivers, eds. *Thinking with Bruno Latour in Rhetoric and*

      Composition. Carbondale: Southern Illinois University Press, 2015. Print.

Madden, Shannon. "Obsolescence in/of Digital Writing." *Computers and Composition* 33

      (2014): 29–39. Print.

Mansfield, Joanna. *Sexual Violence in Eastern Democratic Republic of Congo: Obstacles to Prosecution*. Ithaca, NY: Institute for African Development, 2010. Print.

McClure, Randall. "It's Not 2.0 Late: What Late Adopters Need to Know About Teaching Research Skills to Writers of Multimodal Texts." *The Writing Instructor* (2014): *n. pag*. Web. 12 March 2015.

McComiskey, Bruce. Review of *Rhetorical Bodies*. *JAC* 20.3 (2000): 699-703. Print.

McCorkle, Ben. "Whose Body? Looking Critically at New Interface Designs." *Composing (Media)=Composing (Embodiment)*. Ed. Kristin Arola and Anne Wysocki. Logan, Utah: Utah State University Press, 2012. Print.

McGee, Tim and Patricia Ericsson. "The Politics Of The Program: MS Word As The Invisible Grammarian." *Computers and Composition* 19 (2002): 453–470. Print.

McKerrow, Raymie. "Critical Rhetoric: Theory and Praxis." *Communication Monographs* 56 (1989): 91-111. Print.

Merger, Sara. "Rape of the Congo: Understanding Sexual Violence in the Conflict in the Democratic Republic of Congo." *Journal of Contemporary African Studies* 28.2 (2010): 119-135. Print.

Mohanty, Chandra Talpade. *Feminism without Borders: Decolonizing Theory, Practicing Solidarity*. Durham, NC: Duke University Press, 2003. Print.

Mönkedieck, Sonja. "The iPhone 4 CF (Conflict Free): The Yes Men Address the Conflict in the Democratic Republic of the Congo." *Liminalities: A Journal of Performance Studies* 7.4 (2011): 1-15. Print.

Monroe, Barbara. *Crossing the Digital Divide: Race, Writing, and Technology in the Classroom*. New York: Teachers College Press, 2004. Print.

Moran, Charles. "Access: The A-Word in Technology Studies." *Passions, Pedagogies, And 21st Century Technologies*. Ed. Gail E. Hawisher, Cynthia L. Selfe. Logan, UT: National Council of Teachers of English, 1999. 205–220. Print.

---. "*Computers and Composition* 1983-2002: What We Have Hoped For." *Computers and Composition* 20 (2003): 343-358. Print.

Morozov, Evgeny. *The Net Delusion: The Dark Side of Internet Freedom*. New York, NY: PublicAffairs, 2012. Print.

Mortensen, Peter. "Reading Material." *Written Communication* 18.4 (2001): 395-443. Print.

Moruzzi, Norma Claire. "Quiet Leadership and Pressure from Below: Women's Participation in Iranian Public Life." Woodrow Wilson International Center for Scholars 10-14.

Mukenge, Muadi, Aimée Mwadi Kady and Caitlin Stanton. *Funding a Woman's Movement against Violence in the Democratic Republic of Congo: 2004-2009*. Global Fund for Women. San Francisco: Global Fund for Women, 2010. Print.

Nakamura, Lisa. *Cybertypes: Race, Ethnicity, and Identity on the Internet*. New York: Routledge, 2002. Print.

National Council of Teachers of English. "21st-Century Literacies: A Policy Research Brief." Urbana, IL: National of Council of Teachers of English, 2007. PDF. <http://www.ncte.org/library/NCTEfiles/Resources/Magazine/Chron110721CentLitBrief. pdf>.

---."Writing Now: A Policy Research Brief." Urbana, IL: National of Council of Teachers of English, 2008. PDF. <http://www.ncte.org/library/NCTEFiles/Resources/Magazine/Chron0908Policy_Writing _Now.pdf>.

Navickas, Kathryn. *The Epistemologies They Carry: An Investigation of Feminist Writing Assignments.* Diss. Syracuse University, Forthcoming 2016. Print.

Nellemann, Christian, Ian Redmond and Johannes Refisch, eds. *Last Stand of the Gorilla: Environmental Crime and Conflict in the Congo Basin. A Rapid Response Assessment.* United Nations Environment Programme, 2010. Print.

Nest, Michael. *Coltan.* Cambridge, UK: Polity Press, 2011. Kindle Edition.

Nest, Michael, Francois Grignon, and Emizet Kisangani. *The Democratic Republic of Congo: Economic Dimensions of War and Peace.* Boulder, CO: International Peace Academy, 2006. Print.

Nzongola-Ntalaja, Georges. "Patrice Lumumba: The Most Important Assassination of the 20th Century." *The Guardian* 17 January 2011. Web. 18 March 2014.

Ohmann, Richard. "Literacy, Technology, and Monopoly Capital." *College English* (1985): 675–689. Print.

Pandey, Iswari. *Imagined Nations, Re-imagined Roles: Literacy Practices of South Asian Immigrants.* Diss. University of Louisville, 2006. Print.

Parr, Ben. "Mindblowing #IranElection Stats: 221,744 Tweets Per Hour at Peak." *Mashable* 17 June 2009. Web. 14 Dec. 2009. <http://mashable.com/2009/06/17/iranelection-crisis-numbers/>.

Peterman, Amber, Tia Palermo, and Caryn Bredenkamp. "Estimates and Determinants of Sexual Violence Against Women in the Democratic Republic of Congo." *American Journal of Public Health* 101.6 (2011): 1060-1067. Print.

Purcell, Kristen and Lee Rainie. "Technology's Impact on Workers." Pew. No Place: Pew Research Center, 2014. PDF. <http://www.pewinternet.org/files/2014/12/

PI_Web25WorkTech_12.30.141.pdf>.

The Pole Institute. "The Coltan Phenomenon: How a Rare Mineral Has Changed the Life of the
Population of War-Torn North Kivu Province in the East of the Democratic Republic of
Congo." Pole Institute. Goma, 2002. Print.

Poniewozik, James. "Iranians Protest Election, Tweeps Protest CNN." Time. 15 June 2009.
Web. 31 Aug. 2009. <http://entertainment.time.com/2009/06/15/iranians-protest-election-
tweeps-protest-cnn/>.

Popova, Maria. "Some Thoughts on Hope, Cynacism, and the Stories We Tell Ourselves." *Brain
Pickings*. 9 Feb. 2015. Web. 10 May 2015.

"President Obama On The Situation in Egypt: 'All Governments Must Maintain Power Through
Consent, Not Coercion.'" *Whitehouse.gov*. The White House, Washington D.C. 28
January 2011. Web. 20 March 2015.

Queen, Mary. "Transnational Feminist Rhetorics in a Digital World." *College English* 70.5
(2008): 471-489. Print.

Raise Hope for Congo. "Conflict Minerals." Enough Project. 2014. Web. 10 October 2011.
http://www.raisehopeforcongo.org/content/initiatives/conflict-minerals

Rawlinson, Linnie. "Protesters Always Early Adopters of Technology." CNN.com 1 Apr. 2009.
Web. 11 May 2010.

Readings, Bill. *The University in Ruins*. Cambridge, Mass: Harvard University Press, 1996.
Print.

Reich, Robert. *The Work of Nations: Preparing Ourselves for 21st-Century Capitalism*. London:
Simon & Schuster, 1991. Print.

Rheingold, Howard. *Net Smart: How to Thrive Online*. The MIT Press, 2012. Kindle Edition.

---. "Technology 101: What Do We Need To Know About The Future We're Creating?" *Hybrid Pedagogy*. http://www.hybridpedagogy.com/journal/technology-101-need-know-future-creating/

Rice, Jeff. *Digital Detroit: Rhetoric and Space in the Age of the Network*. Carbondale: Southern Illinois University Press, 2012. Print.

Ridolfo, Jim and Dànielle Nicole DeVoss. "Composing for Recomposition: Rhetorical Velocity and Delivery." *Kairos* 13.2 (2009): *n. pag*. Web.

Riedner, Rachel and Kevin Mahoney. *Democracies to Come, Rhetorical Action, Neoliberalism, and Communities of Resistance*. Lanham, MD: Lexington Books, 2008. Print.

Romano, Susan. "The Egalitarianism Narrative: Whose Story? Which Yardstick?" *Computers and Composition* 10.3 (1993): 5-28. *Computers and Composition Blog*. Web. 22 Oct. 2014. <http://computersandcomposition.candcblog.org/archives/v10/10_3_html/10_3_1_Romano.html>.

---. "Tlaltelolco: The Grammatical-Rhetorical Indios of Colonial Mexico." *College English* 66.3 (2004): 257-277. Print.

Rorabaugh, Pete and Jesse Stommel. "Twitter vs. Zombies: New Media Literacy and the Virtual Flashmob." *Twitter vs. Zombies*. 9 Aug. 2013. Web. 13 May 2015. <http://www.twittervszombies.com/blog/files/Virtual_Flash_Mob.html>.

Sassen, Saskia. *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton, N.J.; Woodstock: Princeton University Press, 2008. Print.

Schell, Eileen. "Gender, Rhetorics, and Globalization: Rethinking the Spaces and Locations of Women's Rhetorics in Our Field." *Teaching Rhetorica: Theory, Pedagogy, Practice*.

Kate Ronald and Joy S. Ritchie, eds. Portsmouth, NH: Boynton/Cook Publishers, 2006. Print.

---. *Gypsy Academics and Mother-Teachers: Gender, Contingent Labor, and Writing Instruction*. Portsmouth, NH: Boynton/Cook Publishers, 1998. Print.

---. "Think Global, Eat Local: Teaching Alternative Agrarian Literacy in a Globalized Age." *Teaching Writing in Globalization: Remapping Disciplinary Work*. Darin Payne and Daphne Desser, eds. Lanham: Lexington Books, 2011. 39-53. Print.

Schell, Eileen E, and Patricia L. Stock. *Moving a Mountain: Transforming the Role of Contingent Faculty in Composition Studies and Higher Education*. Urbana, Ill: National Council of Teachers of English, 2001. Print.

Scott, Tony and Nancy Welch. *Composition in the Age of Austerity.* Logan, UT: Utah State University Press, Forthcoming 2016. Print.

---. "One Train Can Hide Another: Critical Materialism for Public Composition." *College English* 76.6 (2014): 562-579. Print.

Seay, Laura. "What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy." CGD Working Paper 284. Washington, D.C.: Center for Global Development. PDF. <http://www.cgdev.org/content/publications/detail/1425843>.

Seigel, Marika. *The Rhetoric of Pregnancy*. Chicago: University of Chicago Press, 2013. Print.

Selber, Stuart A. *Multiliteracies for a Digital Age*. Carbondale: Southern Illinois University Press, 2004. Print.

---. "Reimagining the Functional Side of Computer Literacy." *College Composition and Communication* 55.3 (2004): 470-503. Print.

---. "Technological Dramas: A Meta-Discourse Heuristic for Critical Literacy." *Computers and Composition* 21 (2004): 171–195. Print.

Selfe, Cynthia. *Technology and Literacy in the 21st Century: The Importance of Paying Attention*. Carbondale: Southern Illinois University Press, 1999. Print.

Selfe, Cynthia and Richard Selfe. "The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones." *College Composition and Communication* 45.4 (1994): 480-504. Print.

Selzer, Jack and Sharon Crowley. *Rhetorical Bodies: Toward a Material Rhetoric*. Madison, WI: University of Wisconsin Press, 2003. Print.

Sesete, Delly Mawazo. "Tim Cook, CEO of Apple Inc.: Make a Conflict-Free Product that Includes Minerals from Eastern Congo." *Change.org*. 12 April, 2012. Web. 26 Mar. 2012.

Shapiro, Rachael. "Remixing Ethical Composition." *Computers and Composition Online* (2011): *n. pag*. Web.

Shirky, Clay. "The Political Power of Social Media." *Foreign Affairs*. 20 Dec. 2010. Web. 11 Mar. 2014. <http://www.foreignaffairs.com/articles/67038/clay-shirky/the-political-power-of-social-media>.

Shor, Ira. "What Is Critical Literacy?" *Critical Literacy in Action: Writing Words, Changing Worlds*. Ed. Ira Shor and Caroline Pari. Portsmouth, NH: Boynton/Cook, Heinemann, 1999. 1-30. Print.

Shriner, Delores K., and William C. Rice. "Computer Conferencing and Collaborative Learn-ing: A Discourse Community at Work." *College Composition and Communication* 40 (Dec. 1989): 472-78. Print.

Smith, James. "Tantalus in the Digital Age: Coltan Ore, Temporal Dispossession, and "Movement" in the Eastern Democratic Republic of the Congo." *American Ethnologist* 38.1 (Feb 2011): 17–35. Print.

Spitzer, Michael. "Writing Style in Computer Conferences." *IEEE Transactions on Professional Communications* 29 (1986): 19-22. Print.

Sreberny, Anabelle and Gholam Khiabany. *Blogistan: The Internet and Politics in Iran*. London: I.B. Tauris, 2010. Print.

Stommel, Jesse. "Critical Digital Pedagogy: A Definition." *Hybrid Pedagogy* November 18th, 2014. Web. 21 Mar. 2015.

Stone, Brad, and Noam Cohen. "Social Networks Spread Defiance Online." *The New York Times* 16 June 2009. Web. 11 Mar. 2014.

Stuckey, J E. *The Violence of Literacy*. Portsmouth, N.H: Boynton/Cook Publishers, 1991. Print.

Sullivan, Andrew. "The Revolution Will Be Twittered." *The Atlantic*. 13 June 2009. Web. 11 Mar. 2014. <http://www.theatlantic.com/daily-dish/archive/2009/06/the-revolution-will-be-twittered/200478/>.

Sutherland, Ewan. *Coltan, the Congo, and Your Cell Phone: The Connection between your Mobile Phone and Human Rights Abuses in Africa*. Working Paper. SSRN eLibrary, 2011. PDF. < http://web.mit.edu/12.000/www/m2016/pdf/coltan.pdf>.

Takayoshi, Pamela. "Building New Networks From The Old: Women's Experiences With Electronic Communications." *Computers and Composition* 11.1 (1994): 21-35. Print.

Tazmini, Ghoncheh. *Khatami's Iran: The Islamic Republic and the Turbulent Path to Reform*. London: Tauris Academic Studies, 2009. Print.

Thompson, Diane P. "Teaching Writing on a Local Area Network." *T.H.E. Journal* 15 (Sept.

1987): 92-97. Print.

Tohidi, Nayereh. "Iran's Presidential Elections: Women's Role in the Pre- and Post-Election Politics." Woodrow Wilson International Center for Scholars 4-9.

Turner, G. Marc, Noelle Sweany, and Jenefer Husman. "Development of the Computer Interface Literacy Measure." *Journal of Educational Computing Research* 22 (2000): 137-54. Print.

"Twitter Links Iran Protesters to Outside World." *Fox News* 16 June 2009. Web. 11 Mar. 2014. <http://www.foxnews.com/story/2009/06/16/twitter-links-iran-protesters-to-outside-world/>.

"UN Official Calls DR Congo 'Rape Capital of the World.'" *BBC News*. 28 April 2010. Web.

United Nations. Security Council. Final Letter from the Group of Experts on the Democratic Republic of the Congo Addressed to the Chair of the Security Council Committee Established Pursuant to Resolution 1533 (2004) Concerning the Democratic Republic of the Congo. (S/2012/843). 15 Nov. 2012. Print.

United States. Department of Commerce. *The Competitiveness and Innovative Capacity of the United States*. Washington, D.C.: GPO, 2012. Print.

---. Department of Commerce, National Telecommunications and Information Administration *Digital Literacy Initiative Fact Sheet*. 2011. Web. 14 April 2010. <http://www.digitalliteracy.gov/sites/digitalliteracy.gov/files/Digital_Literacy_Fact_Sheet_051311.pdf>.

---.Department of Commerce, National Telecommunications and Information Administration. *Falling Through the Net: Defining the Digital Divide*. Washington, D.C: GPO, 1999. Print.

---. Department of Education. Office of Educational Technology. *eLearning: Putting a World-Class Education at the Fingertips of All Children*. National Education Technology Plan. Washington, D.C.: GPO, 2000. Print.

---. ---. ---. *Toward A New Golden Age In American Education—How the Internet, the Law and Today's Students Are Revolutionizing Expectations*. National Education Technology Plan. Washington, D.C.: GPO, 2004. Print.

---. ---. ---. *Transforming American Education: Learning Powered by Technology*. National Education Technology Plan. Washington, D.C.: GPO, 2010. Print.

---. Office of the Press Secretary. "Facts Sheet: The American Jobs Act." 8 Sept. 2011. Web. 13 June 2014.

20 USC 9631. National Center for Research in Advanced Information and Digital Technologies. 2008. Print.

Vieira, Kate. "On the Social Consequences of Literacy*." Literacy in Composition Studies* 1.1 (2013): 26-32. Web.

---. "Undocumented in a Documentary Society: Textual Borders and Transnational Religious Literacies." *Written Communication* 28.4 (2011): 436-461. Print.

Villanueva, Victor. "The Material Matters: Rhetoric and Political Economy." *Meat: A Journal of Writing and Materiality* 2.2 (2007): *n. pag*. Web.

Wallerstein, Immanuel M. *European Universalism: The Rhetoric of Power*. New York: New Press, 2006. Print.

Wallström, Margaret. Special Representative of the Secretary-General Address at the United Nations Security Council's Open Meeting on ""Women, Peace and Security: Sexual Violence in Situations of Armed Conflict." New York, NY. 27 April 2010. Web. 2 Aug.

2013.

The Web Ecology Project. *The Iranian Election on Twitter: The First Eighteen Days*.

Cambridge, Massachusetts: the Web Ecology Project, 2009. Print.

Wingard, Jennifer. *Branded Bodies, Rhetoric, and the Neoliberal Nation-State*. Lanham, MD:

Lexington Books, 2013. Print.

"Witness." *Law and Order: SVU*. NBC. 17 March 2010. Television.

Wolff, Bill. "wrts Diary of Writing Technology Interactivities." *WilliamWolff.org*. n.d. Web. 13

April 2015. <http://williamwolff.org/courses/wrt-spring-2015/wrt-assignments-

s15/wrts15-diary-of-technology-activities/>.

Woodrow Wilson International Center for Scholars. *Women in the Iranian Election Campaign*

and Protest. Middle East Program Occasional Paper Series. Washington, D.C.: 2009.

Print.

The World Bank. "ICT Goods Exports (% of Total Goods Exports)." *The World Bank*. *n.d.* Web.

26 April 2015.

---."ICT Service Exports (Bop, Current US$)." *The World Bank*. *n.d.* Web. 26 April 2015.

---."Fixed (Wired) Broadband Subscriptions (Per 100 People)." *The World Bank*. *n.d.* Web. 26

April 2015.

Wresch, William, ed. *The Computer in Composition Instruction: A Writer's Tool*. Urbana, Ill:

National Council of Teachers of English, 1984. Print.

Yancey, Kathleen Blake. "Made Not Only in Words: Composition in a New Key." *College*

Composition and Communication 56.2 (2004): 297-328. Print.

Yergeau, Melanie, et al. "Multimodality in Motion: Disability and Kairotic Spaces." *Kairos* 18.1

    (2013): *n.pag*. Web. <http://www.technorhetoric.net/18.1/coverweb/yergeau-et-

    al/index.html>.

The Yes Men. *The Yes Men: The True Story of the End of the World Trade Organization*. New

    York: The Disinformation Company, 2004. Print.

Young, Morris. *Minor Re/Visions: Asian American Literacy Narratives as Rhetoric of*

    Citizenship. Carbondale, Il: Southern Illinois University Press, 2004. Print.

Rachael Shapiro

Composition and Cultural Rhetoric

239 HB Crouse Hall

Syracuse University

Syracuse, New York 13244

615 Demong Drive

Syracuse, New York 13214

(518) 569-2599

rlshapir@syr.edu

Education

Syracuse University

PhD in Composition and Cultural Rhetoric, Expected Completion Summer 2015

Dissertation: "Geopolitics of Digital Literacies: Accounting for Myths and Realities."

Committee Members: Eileen Schell, Chair; Tony Scott; Patrick W. Berry; Margaret Himley; Cynthia Selfe

Areas of interest: Digital Writing and Rhetoric, Literacy, Pedagogy, Writing Centers, Transnational Feminism, Global Rhetorics, Basic Writing, Technical and Professional Writing

Washington State University

MA in English, Concentration in Rhetoric and Composition, Spring 2008

Portfolio Title: "MySpace: A Contact Zone Community"
Committee Members: Victor Villanueva, Chair; Barbara Monroe; Kristin Arola; Robert Eddy

SUNY Plattsburgh

BA in Literature and Philosophy, Spring 2006

Publications

"Rhetorics of Hope: Complicating Western Narratives of a 'Social Media Revolution.'" *Literacy in Composition Studies.* Special Issue: "The New Activism: Composition, Literacy Studies, and Politics." Forthcoming 2015.

"The Word on Hope and Dread: Multimodal Composition and Basic Writing." *The Basic Writing e-Journal.* Double Issue 2011-2012.

"Remixing Ethical Composition." *Computers and Composition Online*. Fall, 2011.

"Investigating Immigrants: An Interview with Victor Villanueva" with Collette Caton and Brian Bailie. *Reflections: A Journal of Writing, Service Learning and Community Literacy.* Spring, 2009.

Teaching

Syracuse University

The Writing Program: Fall 2008–Present

Practicum: Teaching College Writing, Co-Facilitator

Support TAs as they teach in the Writing Program's lower division during their first year. Orient TAs to first- and second-year writing curricula. Collaborate with 670 team members to design and facilitate weekly practicum. Perform classroom observations and hold consultations. Review instructional materials. Develop and share lesson plans, evaluation materials, unit calendars, in class activities, and other teaching support documents.

Fall 2014-Spring 2015

SummerStart Writing Coordinator, The Writing Program

Coordinate summer teaching, serving as liaison between the Writing Program and SummerStart instructors and consultants. Participate in designing and administering the placement process. Address and manage instructor concerns and student needs across sections.

Summer 2014

Writing 104: Introduction to College-Level Writing

Course serves as an introduction to college-level reading and writing practices: learning to compose for college audiences, to read challenging texts actively, to make interpretations and claims, and to collaborate with others. Taught several versions of the course, each designed for the specific student populations described below.

Inquiry: "Introduction to Academic Writing: The Politics of Academic Discourse":

Higher Education Opportunity Program: Fall 2011
For traditional and non-traditional students whose financial or educational backgrounds would otherwise prohibit access to higher education.

Summer College: Summer 2011, Summer 2010
A summer immersion program for high school students seeking college experience and credit.

SummerStart: Summer 2014, Summer 2009
A pre-freshman summer transition session for newly admitted Syracuse University students.

Writing 105: Studio 1: Practices of Academic Writing

This course emphasizes the study and practice of writing processes, including critical reading, collaboration, revision, editing, and the use of technologies. Focuses on the aims, strategies, and conventions of academic prose, especially analysis and argumentation.

Inquiry: "21st Century Literacies: Genres and Practices": Fall 2014

Inquiry: "Writing about Writing": Fall 2013

Inquiry: "Deconstructing Normality": Fall 2009

Writing 205: Studio 2: Critical Writing and Research

A second-year writing course, WRT 205 centers on study and practice of critical, research-based writing, including research methods, presentation genres, source evaluation, audience analysis, and library/online research. Students complete at least one sustained research project.

Inquiry: "Researching Global Networks": Spring 2014

Inquiry: "Rhetorics and Representations of Race and Racism": Spring 2010 (Online), Spring 2009

Writing 302: Advanced Writing Studio: Digital Writing

This course features theory and practice in writing in digital environments, including document and web design, multimedia, digital video, weblogs, and many software platforms.

Inquiry: "The Digital DIY": Fall 2010

Writing 307: Professional Writing

Writing 307 prepares students for professional communication through the study of audience, purpose, and ethics. Rhetorical problem-solving principles applied to diverse professional writing tasks and situations.

Spring 2012, Fall 2009

Consultant, The Writing Center

Serve graduate and undergraduate students to improve their writing concerning organization, prose, argumentation techniques, design, grammar and other surface and global features according to students' particular needs. Services primarily accorded to English Language Learners.

Face-to-Face Consulting: Spring 2012, Fall 2011, Spring 2011, Fall 2010

Instant Message Consulting: Spring 2012, Fall 2011, Spring 2011

Email Consulting: Spring 2011

Editor, The Graduate Editing Center

Provide proofreading and editing services for graduate student manuscripts, including dissertation chapters, theses, articles for publication, and job application materials.

Fall 2012-Summer 2013

Washington State University

Department of English: Spring 2007–Spring 2008

English 101: Introductory Writing

This first-year writing course is designed to develop students' academic writing, critical thinking, rhetorical strategies, reading and library skills.

Inquiry: "Writing Through Rhetoric": Spring 2008, Fall 2007

Inquiry: "Passing: Writing About the Politics of Identity": Spring 2007

Tutor, The Writing Center: Fall 2006

English 102: Writing Tutorial

A student-centered group tutorial, English 102 focuses on writing improvement—usually supports students also enrolled in the English 101 course.

University of Idaho

Upward Bound Instructor, Summer 2007

Serving would-be first generation college students and students from low income families, this course featured development of a 16-page, full color magazine with an accompanying website complete with videos, images, and podcasts. Students developed their work using the Adobe Creative Suite applications Dreamweaver, Photoshop, as well as native Mac programs including iPhoto, GarageBand, and iMovie.

Inquiry: "Creative Journalism and Multimedia Design"

Professional Accomplishments and Service

Awards

Recipient. Travel Grant, Graduate Student Organization. Syracuse University, 2011, 2012, 2013.

Recipient. Certificate in University Teaching. Future Professoriate Program, Syracuse University: Spring 2011.

Recipient. Computers and Writing/Graduate Research Network Travel Award. 2010, 2011.

Recipient. College of Arts and Sciences Summer Fellowship. Syracuse University, 2010.

Service

Manuscript Reviewer. *Harlot*. 2014.

Member. Composition and Cultural Rhetoric Graduate Program Committee, 2012-2013.

Member. Writing Program Tenure Committee, Fall 2012.

Member. Planning Committee, Conference on Activism, Rhetoric, and Research, 2011-2012.

Web Chair. Composition and Cultural Rhetoric Graduate Circle, 2010-2012.

Technology Intern. The Writing Program, Syracuse University, 2009-2010.

Special Projects

Web designer for Margaret Himley under the Syracuse University Meredith Professorship for Excellence in Teaching, 2011.

Volunteer narrative archivist. Digital Archive of Literacy Narratives, at the Conference on College Composition and Communication. 2009, 2010.

Web assistant to Collin Brooke. College Composition and Communication Online Archive, Summer 2008.

Workshops

Co-facilitator. "The Political Turn: Writing Democracy for the 21st Century." Conference on College Composition and Communication, 2013. Las Vegas, NV.

Co-facilitator. "Tech Camp." Syracuse University Writing Program: Spring 2010.

Facilitator. "Beyond Blackboard: Wikis in Any Writing Class." Syracuse University Writing Program: Spring 2010.

Presentations

"Advocating for Others: Flattened Narratives and Failed Alliances." Accepted for Conference on College Composition and Communication, 2015. Tampa, FL.

"Pushing Boundaries: A Transnational Feminist Pedagogy for the Research Writing Classroom." Watson Conference, 2014. Louisville, KY.

"Remixing Global Problems: A Transnational Feminist Video Assignment." SUNY Council on Writing, 2014. Syracuse, NY.

"Grounding the Digital Literacy Myth." Computers and Writing, 2014. Pullman, WA.

"Defining the Digital Literacy Myth." RSA@SU Spring Forum, 2014. Syracuse, NY.

"Balancing Contextual Obligations: Designing Basic Writing Curricula in the Global Era." Conference on College Composition and Communication, 2013. Las Vegas, NV.

"Costs of the Social Media Revolution." Rhetoric Society of America, 2012. Philadelphia, PA.

"Writing Programs, Writing Subjects: Teaching Digital Literacies in the Global Era." Research Network Forum. Conference on College Composition and Communication, 2012. St. Louis, MO.

"Digital Activism and Witness in a Global Public." Roundtable. Computers and Writing, 2011. Ann Arbor, MI.

"Teachers as Rhetoricians: Audience in a Critical Classroom." SUNY Council on Writing, 2011. Binghamton, NY.

"Twitter: A Case for Public Writing in Digital Spaces." Computers and Writing, 2010. West Lafayette, IN.

"Tweeting the Value of Writing." SUNY Council on Writing, 2010. Plattsburgh, NY.

"From Tagging to Talking: What the Composition Classroom Can Learn from the Bathroom Wall." Conference on College Composition and Communication, 2010. Louisville, KY.

"Writing in Digital Spaces" Writing Spaces, The Writing Program Spring Conference, 2010. Syracuse, NY.

"A Voice for the Voiceless: How Multimodal Composition can Serve Non-Traditional Writers on a Path to College Writing." Conference on College Composition and Communication, 2009. San Francisco, CA.

"MySpace: A Contact Zone Community." Spring M.A. Conference, Washington State University, 2008. Pullman, WA.

"MySpace: A Site for Alternative Discourse and Dissent." Conference on College Composition and Communication, 2008. New Orleans, LA.

"MySpace: Socializing the Academic Site." Oregon Rhetoric Conference, 2007. LeGrande, OR.

Professional Affiliations

Conference on College Composition and Communication

Rhetoric Society of America

National Council of Teachers of English

References

Upon request, letters of support will be provided by the following:

Eileen Schell, Dissertation Chair. Associate Professor of Writing and Rhetoric. The Writing Program, Syracuse University. 203 HB Crouse Hall, (315) 443-1083, eeschell@syr.edu.

Patrick W. Berry, Assistant Professor of Writing and Rhetoric. The Writing Program, Syracuse University. 235 HB Crouse Hall, (315) 443-1912, pwberry@syr.edu.

Anne Fitzsimmons, Teacher Trainer Coordinator, Syracuse University. 239D HB Crouse Hall, (315) 443-1305, afitzsim@syr.edu.

Steve Parks, Director of Graduate Studies. Composition and Cultural Rhetoric, Syracuse University. 240 HB Crouse Hall, (315) 443-1067, sjparks@syr.edu.

Tony Scott, Associate Professor of Writing and Rhetoric and Director of Undergraduate Studies. The Writing Program, Syracuse University. 239C HB Crouse Hall, (315) 443-1893, adscot01@syr.edu.