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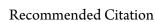
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Is approved by the final examining Jennifer Bay	g committee:
Samantha Blackmon	
Michael Salvo	
To the best of my knowledge and as understood by the student in the Thesis/Dissertation Agreement, Publication Delay, and Certification/Disclaimer (Graduate School Form 32), this thesis/dissertation adheres to the provisions of Purdue University's "Policy on Integrity in Research" and the use of copyrighted material.	
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DISRUPTING INFRASTRUCTURE: SOCIAL MEDIA AND ACCESSING DIGITAL PUBLICS

A Thesis

Submitted to the Faculty

of

Purdue University

by

Carolyn K. Grant

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Arts

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West Lafayette, Indiana

For my mom, grandma, and sister, who teach me to keep going.

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ABSTRACT

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This thesis investigates infrastructural barriers to effecting change through social media participation. Though social media is said to hold "democratic potential" by enabling open access to the digital public sphere, in reality it is often still the most privileged voices that get heard. Even in success cases of the power of social media like the Arab Spring, situational contexts lead to particular infrastructural access points that are not universally transferable, and still tend to favor mainstream perspectives. Barriers to amplifying marginalized voices include inadequate systems for digital memory and sharing algorithms that promote the visibility of the already visible. These issues become particularly evident in the social media efforts of intersectional feminist writers, which are too often and too easily ignored. This thesis proposes that biased infrastructural configurations can and should be disrupted to promote change.

INTRODUCTION

In an October 2011 blog post on TigerBeatdown.com, Flavia Dzodan writes—screams—"MY FEMINISM WILL BE INTERSECTIONAL OR IT WILL BE
BULLSHIT!" She is writing in response to the week's "shit puff pastry" of incidences of white women feminists failing to consider, then defending the lesser significance of, the implications of race and class on their actions and arguments—in this case relating to a recent SlutWalk demonstration and the use of a sign with the n-word¹. Dzodan participates in a cyclical ecology of online feminist conversations, and a long history of tension within the feminist movement over intersecting identities. Hers is a call that has been made many times before, and unfortunately will be made many times again.

This thesis endeavors to map how conversations like the one in which Dzodan participates move through the blogosphere and social media, using an infrastructural lens. I attempt to piece together an understanding of why, infrastructurally, those white women feminists still cannot hear Dzodan's and her peers' rallying cries, which continue to echo amongst themselves. How does the infrastructure of online conversation contribute to the continued marginalization of minority voices more broadly? What are the effects of these structures and how can we intervene or work around them?

¹ I am choosing not to write the n-word even in academic discussion of its use in an effort to recognize my position as a white woman and based on opinions expressed by the black feminist writers whose work I am trying to support.

While many of my examples come from intersectional feminism, and I consider the attention to social media infrastructure I advocate to be a feminist stance, this is not exclusively a "feminist thesis." Certainly it is informed by feminist beliefs and values, but it is not relevant solely to the feminist project. I see the infrastructural analysis of social media I develop throughout to be applicable to any context of online discourse in which technological and/or social infrastructure is working against the visibility of particular perspectives.

Chapter 1 looks at the "democratic potential" imagined in blogging and social media, and attempts to trace the infrastructure that enables incidences like the Arab Spring, where this democratic access is seemingly fulfilled. I start with this example in order to show how social media infrastructures can be successfully utilized to promote change, but also as a contrast to the examples in later chapters where the infrastructural odds are not working in favor of efforts for change as they did for the successes of the Arab Spring.

Chapter 2 takes one perspective on barriers to access to the digital public sphere: the way the rhetorical canon of memory has been incompletely stitched into the infrastructure of the internet. In contrast to the Arab Spring, in which social media was utilized to build upon existing momentum for change, my examples of tweets sparking controversy demonstrate how the memory structure of the web can instead foreclose effective communication toward coalition building.

Chapter 3 concludes the thesis with an example media cycle surrounding issues of race in the rape culture protest SlutWalk NYC, tracing key points of both infrastructural bias and opportunity for disruption. I argue that while communication between perspectives can

still be infrastructurally barred, disruptions in social media's infrastructure and the cycles of communicative capitalism are possible, and show promising avenues for future efforts toward change.

CHAPTER 1: THE POWER OF SOCIAL MEDIA INFRASTRUCTURE

In this chapter, I consider the ideal "democratic potential" that blogging and social media purportedly carry, and examine the infrastructure that enables "open access" in cases heralded for their success in the digital public sphere.

1.1 Social Media and the Public Sphere

When blogging exploded in the early 2000s, it was hailed for its democratizing potential. Particularly as political bloggers began impacting mainstream media by pushing under-covered stories into the spotlight, offering opposing viewpoints, and even fact-checking major coverage, some saw blogging as a powerful force to subvert and disperse the existing media model. Innovative media and communication technologies always seem to come with utopian visions of revolutionizing the power balances of the world: the printing press was going to take education out of the hands of the elite; radio was going to allow anyone with a transmitter to broadcast to audiences far and wide; the internet was going to set information free. Of course, the concept of blogging, today subsumed under the broader category of social media, isn't really new, as Tom Standage illustrates in *Writing on the Wall*. People have been using systems of "social media" for millennia, Standage argues, if we take the term to mean "two-way conversational environments in which information passes

horizontally from one person to another along social networks," distinguished from vertical delivery of content via broadcast from a central authoritative source (introduction). We've always shared information through social networks. During the Roman Empire, letters served this social sharing function, as they were often read in gatherings or copied and networked among friends; beginning in the seventeenth century, coffee house culture fostered local debate of news and opinion. The practice of spreading information through personal networks isn't in itself revolutionary.

That said, the *form* social media takes today is worth examining. While our utopian visions of the power of new technologies to conquer inequality tend to overshoot reality, technological innovations can foster change. The printing press didn't invert access to education, but it did contribute to the rise of wider literacy. Radio didn't remain an open frontier for long, but it did foster DIY technical literacy. The free file-sharing frenzy of the internet's early days has been subdued, but certainly our expanded and accelerated access to information online is here to stay, and its effects are still unfolding.

In one moderate evaluation of the democratizing potential of blogging made in 2004, Jason Gallo predicted a slow infiltration and integration of blogs into the media landscape, rather than a complete overhaul of traditional media outlets. He suggests that blogging creates "a real-time virtual feedback loop" that opens up space for anyone to publicly take part in media conversations:

Weblogs have been described as do-it-yourself journalism, Web sites through which an amateur pundit with an Internet connection and a little technical know-how can enter the wider public of voices on the Internet. Blog authors can respond in real time to news events, articles, and opinions, acting at once as sites to contest the meaning of texts, as well as challenge the veracity and integrity of news and opinion writing. The Internet, as a many-to-many media model, allows for any article, link, and commentary to be published on a Weblog to an infinite public of interconnected users who may examine the text in question and instantly respond with collaborative evidence and links or, conversely, refute the claims made therein by posting conflicting data and criticism.

Gallo, as many others since (boyd; Cammaerts; Dean; Papacharissi; Shirky; Warnick), speculates on social media's potential to meet Habermas's ideal of the public sphere. Habermas claims that in the eighteenth century, a bourgeois public sphere of citizen debate emerged with the separation of state matters from private society. Private individuals began deliberating on civic matters through an intellectual coffee house culture and a free press with publications committed to various ideological perspectives. However, according to Habermas, the full potential of the public sphere was never met, because as access to the public sphere expanded beyond the bourgeoisie, the social and political climate enabling it shifted, so that public conversation became dispersed and polarized rather than working toward the ideal of rational consensus-building.

Nancy Fraser famously argued that Habermas's public sphere of the eighteenth century was not just coincidentally exclusive to the bourgeoisie as an unfulfilled ideal, but an intentionally "masculinist ideological notion that functioned to legitimate an emergent form of class rule" (62). She points out the existence in the eighteenth century and continued importance today of a multiplicity of publics and counterpublics, as differences in social

positions cannot simply be bracketed to allow for fair debate in a post-bourgeois public sphere. Still, it's appealing to take blogging and social media as the next opportunity to render true open access to the public sphere possible. Some ten years after Gallo's projection, to what extent has this democratic potential of reaching "an infinite public of interconnected users" through blogging and social media been realized?

First, I think it's easy to confirm that Gallo was on target in his prediction that blogging would slowly infiltrate and integrate with the prior media model, rather than overthrow it. Most if not all major media sites today have blog subsections; in fact it can be difficult to even separate what counts as a blog versus a "true" published article anymore, particularly with huge aggregators like Huffington Post piling in everything with the kitchen sink. And in some ways, it's clear to see that blogging has opened access to reaching wide audiences on the internet; for some, self-started blogs have become sustainable primary sources of income through advertising and sponsorships based on individual blog readership.

Standage interprets today's broad use of social media through its historical parallels, concluding that social media fulfills its democratic potential in adding fuel to existing fires in the public sphere, through increased conversation from a greater variety of perspectives. He identifies complaints about "the coarsening of public discourse" online as "the modern incarnation of the timeless complaint of the intellectual elite, every time technology makes publishing easier, that the wrong sort of people will use it to publish the wrong sorts of things" (235). Standage ultimately dismisses this elitist fear by concluding that allowing unappealing—including prejudiced—arguments to be made in the open means that they can

be discredited through public discussion as well. However, this logic assumes that ideas will be evaluated in the online public eye based on their merit, rather than their visibility and the prestige of their source. What Standage doesn't address is the extent to which this new social media public sphere actually opens access to participating in such civic debate beyond exclusive elitist lines. In other words, Standage swallows the notion of the Habermasian public sphere whole, without attention to differentials of access.

Fraser's point remains relevant here. The technological ability to access the internet and social media does not inherently grant equal access to reaching "an infinite public" without regard to subject position. Many have pointed this out by objecting to the use of Habermas's terms to conceptualize either the current configuration or the emergent potential of online communication. Bart Cammaerts emphasizes the diversity of speakers, exigencies, and forms of discourse on the web to argue for utilizing Mouffe's concept of agonistic public space, a space of dissensus rather than consensus, to better acknowledge both the internet's potential for wider civic participation and risk of oppressive antagonism. danah boyd uses "networked publics" to emphasize both technological space and imagined collectives. An individual's imagined collective in social media participation can shift situationally from a broad sense of a general "public" audience to something more like a community with shared social context and characteristics.

Jodi Dean views the internet as an architectural system enabling communicative capitalism: where sheer volume of and access to public discourse has increased to the point of crippling potential for effecting political change, allowing institutional politics to operate seemingly independent from the endless conversations about them. We have become

intensified consumers subject to well-funded ideology more than participants in open, critical civic engagement, a "democracy that talks without responding" (*Democracy and Other Neoliberal Fantasies* 22). Dean reflects in her 2010 book *Blog Theory*, "One of the stranger aspects of communicative capitalism is new media activists' faith in the ideologies of networks and publicity. Activists continue to emphasize the democratic potential of the internet, even in the face of the increases in economic inequality and consolidation of neoliberal capitalism in and through globally networked communication" (31). Dean sees this as the very intent of communicative capitalism: to create the illusion of democratic participation online while actually rendering it impotent. Much like Fraser's point that the eighteenth century public sphere served as an ideological justification for a new form of class rule, so too is the internet as public sphere a new ideology casting a veil over the domination of networked neoliberal capitalism.

So the net is not a public sphere, at least not in the ideal Habermasian sense of open, rational debate among equal citizens. What exactly it is instead could be argued on a spectrum anywhere from a collection of communal publics to Dean's prognosis of the consummate grip of communicative capitalism, with empty consumerism disguised as democratic participation. I should pause at this point to make clear that my interest isn't really in democracy itself. Or in achieving some ideal form of the public sphere. My interest is in amplifying marginalized voices. And one barrier to doing that is if we're trying to do it with our hands tied behind our backs while *imagining* we have full use of them. If we take success stories of the power of social media—one of which I will turn to shortly—as proof that the web does operate as an accessible public sphere, we may be blinding ourselves to the ways the configuration of social media is actually stacked against us. Like the "bootstraps"

narrative of work ethic that ideologically rationalizes poverty, it's the exception that proves the rule.

In their introduction to the 2012 *Journal of Broadcasting and Electronic Media* special issue on mediated publicness, Nancy K. Baym and danah boyd summarize the gap between the ideology of the "potential" and what we actually observe:

There is little doubt that social media heighten the potential for visibility and introduce the possibility of public engagement that far exceeds what's possible in an unmediated environment. Yet, it is also true that most content online is obscure and consumed by few. As a result, social media introduce a conundrum of visibility (boyd & Marwick, 2009), as people's mediated acts are both visible and invisible in networked publics. (322)

If we were to crack open the communicative capitalism rationale here, what is it that emblematic examples of social media's potential supposedly do to stand out, to make this conundrum of visibility acceptable to us? What are the internet's bootstraps? For one, there's the fixation on the metaphor of "going viral," that a piece of media from any humble origin can suddenly and rapidly "infect" vast networks of the digital public. Though consultants will now tell you they know the secret to viral media (even as their success rates suggest otherwise), there's still a sense of luck or alchemy to it—and this mystification only plays into the communicative capitalist scheme. Just keep YouTubing, and maybe one day you'll become Justin Bieber.

In *Spreadable Media*, Henry Jenkins, Sam Ford, and Joshua Greene endeavor to shift the conversation about online circulation away from network "influencers" and viral "DNA"

to emphasize individual decision-making about sharing. In many ways this marks a return to more traditional public relations strategies: explore numerous publicity options, then cultivate the most promising few with substantive connection (ch. 1). I find merit in Jenkins, Ford, and Greene's thesis; I think their strategies are insightful and practicable. In my view, *Spreadable Media* actually makes moves to demystify the process of communicative capitalist success: they show how to work within the system—but they also help to draw out areas where the system won't help. One of the most fundamental premises laid out by Jenkins et al. is that "Content spreads...when it acts as fodder for conversations that audiences are already having" (ch. 5). But what if new content needs to be spread precisely because it's not already part of a conversation? This is almost the prerequisite for any activist effort to bring voices "from margin to center" (bell hooks), and it's diametrically opposed to the way *Spreadable Media*'s compelling research indicates the system is set up to work.

In the time between Dean's first coining of "communicative capitalism" in "Why the Net is not a Public Sphere" (2003) and her expansion of it in *Blog Theory* (2010), she understandably became less optimistic about the egalitarian potential of the web. In *Blog Theory*, Dean takes a psychoanalytic approach to the circular motions of drive: why do we buy in, keep blogging? Should we? They're worthwhile questions; however, for my own project of understanding the "how" of social media impotence and potential means of intervention, I find her earlier work more provocative.

In her introduction to the communicative capitalism of the web, Dean argues that rather than trying to hold onto the notion of the internet as a public sphere, we should acknowledge its position as a "zero institution," via Žižek's reading of Levi-Strauss,

containing no normative imperatives on its own but operating as a space in conflict and contradiction within itself ("Why the Net is not a Public Sphere" 105). Doing so, says Dean, will allow us to more clearly distinguish the mechanisms of communicative capitalism and open possibilities for more effective efforts at combating them. In this vein, she proposes a "neodemocratic" approach:

Neodemocratic politics is not rooted in figuring out the best sorts of procedures and decision rules for political deliberation. Instead, it acknowledges in advance the endless, morphing variety of political tools and tactics. What is crucial to these tactics, however, is whether they open up opportunities for contestation. Not all tactics are equal; those that are part of a neodemocratic arsenal are those that challenge rather than reinforce communicative capitalism. (109)

So rather than emphasizing the act of participation—which, even when it enacts a critical stance, seemingly plays into the cycle of communicative capitalist consumption—the possibility for empowerment lies in strategic contestation through destabilized "tools and tactics." What exactly are such powerful tools? How do we avoid falling back into reliance on the master's tools? Well, first we have to understand what the master's tools are. And by my reading, tools and tactics suggest that we must look beyond the discourse alone—we must reach for disruption at the level of infrastructure. In the rest of this chapter, I demonstrate the ways that thinking about social media in terms of its infrastructure can help identify barriers to access and open up sites for intervention.

1.2 Infrastructure Studies

In Long Island, NY, a number of overpasses hang particularly lower than usual, which means buses cannot pass through on the parkways below. As Langdon Winner demonstrates in his pioneering *Do Artifacts Have Politics?*, their designer, Robert Moses, made them this way intentionally to keep the lower classes, who often rely on public transit, out of upper class neighborhoods. This is infrastructural bias: "the technological deck has been stacked long in advance to favor certain social interests, and that some people were bound to receive a better hand than others" (125). In the case of the bridges, we have clear biographical evidence of Moses' social engineering around his bigotry, but intention is almost beside the point; inequality is so deeply embedded in our culture that it tends to emerge in almost any setting by default unless explicit steps are taken to counteract it (and even still sometimes then). So for this project, I am interested in identifying some of the bridges built into the infrastructure of the web that keep the undesirables out, or at least make access that much more difficult.

In defining infrastructure, I take Susan Leigh Star and Karen Ruhleder's premise that infrastructure is relational: it "emerges for people in practice, connected to activities and structures" (112). Though the inclination may be to classify infrastructure as an invisibly operating background on which more prominent processes run, Star and Ruhleder emphasize the significance of positioning—for a cook, how water gets to the tap to make dinner is background infrastructure; for a plumber, it's the foregrounded focus. Their caution about invisibility plays to Winner's discussion of bias as well: while the low overpasses would hardly be noticed by those in cars, just a quirk in the background

infrastructure of the city, for someone who relies on public transportation trying to reach the other side of town, the low overpass becomes a "topic or difficulty" (Star 380). And as I have tried to suggest with the notion of net as public sphere, what seems to operate seamlessly and invisibly for the social media success stories may not be working so well in facilitating visibility for conversations that push against the dominance of communicative capitalism. To get at these problematic mechanisms, Bowker proposes "infrastructural inversion," or flipping the perspective to foreground background elements of work practice ("Information Mythology"). Infrastructural inversion allows the elements that are normally invisible or given to newly show up in their situational contexts, which can illuminate dysfunctional components or processes. In other words, what "givens" shouldn't be?

My thesis works in response to Nathan Johnson's recent call for rhetorical interventions in information infrastructure, needed, he says, because "While growing bodies of research are investigating the potentials of using Twitter as a communication tool, much less work is being done to look at information infrastructures like Twitter as an object of study" (2). These infrastructures are important sites of inquiry, as they organize and therefore significantly impact our interaction with information—and that impact can be a source of inequality. Johnson cites three approaches to this infrastructural work: genealogy, protocological hacking, and rhetorical ethnography. Genealogy traces the development of infrastructure historically; protocological hacking digs into the technical building of infrastructure; and rhetorical ethnography interrogates infrastructure's effects through use.

Though I think efforts of genealogical tracing and protocological hacking of social media infrastructure with attention toward its built-in biases would be valuable for future

insights for intervention, they are beyond the scope of this project. I envision the current project as one of rhetorical ethnography, in which I examine key social media incidences with a lens focused on foregrounding the infrastructural background, to better identify the varying factors that shape the outcomes of social media participation. In short, I look at how the "givens" of social media infrastructures work for and against particular positions in social media participation.

To do this, I draw on Bowker et al.'s emphasis to "take into account the social and organizational dimensions of infrastructure. This vision requires adopting a long term rather than immediate timeframe and thinking about infrastructure not only in terms of human versus technological components but in terms of a set of interrelated social, organizational, and technical components or systems" (99). Where compositionists tend to emphasize *human use* on top of technological infrastructure systems, conversely the field of science and technology studies to whom Bowker et al. are speaking tend to look at the *technical "things"* that make up an infrastructural system. The holistic approach Bowker et al. delineate, which draws on Star's notion of infrastructure as relational, bridges between the two focal points of the human and the technological to emphasize relationships and interactions—a fitting frame for the task of a rhetorical ethnography of infrastructure looking at social media via Johnson's call.

Star's nine properties of infrastructure elaborated in "Ethnography of Infrastructure" have served as key tenants guiding my analysis. Each has critically informed my study in the generation of questions to ask of particular infrastructural configurations, and here I have

laid out these properties with prompts toward investigating the infrastructure of social media:

- Embeddedness. What coordinated components of social media are thought of as a
 monolith? How does separating these components illuminate points of impact?

 These might include multiple sharing processes, types of algorithms in feed
 population, system settings options.
- *Transparency*. Is there a difference in what is routine for bigger media outlets versus smaller ones? What is routinized that ought have attention drawn to it? These could be issues like where something is published, how it is promoted, use of particular sharing/connection options, even discursive tropes.
- Reach or scope. What systems or processes span multiple social media platforms? What are the short and long term rhythms of a particular platform? Across platforms? Of a particular community? Across communities? These might include pace of updates or conversation, standards of programming or interface, connected accounts.
- Learned as part of membership. What organizational arrangements are taken for granted by members of a community? Are there challenges to access for outsiders? Attention could be paid to protocol for posting new content, sharing and citing practices, discursive expectations.
- Links with conventions of practice. What practices have social media platforms inherited from previous systems? What limitations do these practices delimit? What possibilities do they foreclose? What conventions of practice are unique to a

- particular community? These could include hardware reliances, conventions of data organization and search, rituals or patterns of content.
- Embodiment of standards. What other systems do particular social media platforms plug into? What standards of practice become embodied in broad systems? Where do these standards come from and who do they benefit most? Are there standards of a particular community that could be better worked into their infrastructure? Patterns of discourse, organizational and algorithmic hierarchies could be significant.
- Built on an installed base. What are the elements of the installed bases for social media?
 What are the inherited limitations of these bases and how do they manifest in practical processes of particular communities?
- Becomes visible upon breakdown. What have breakdowns illuminated about how the
 system works? What are weaknesses in the system? These might be inefficient or
 ineffective protocol, linking and tagging processes, interdependent human or
 programming relationships.
- Is fixed in modular increments, not all at once or globally. What different interest groups are tied up in infrastructural functions? How do these affect change or lack thereof?

I offer these questions to open up lines of inquiry for identifying biases and barriers embedded in social media infrastructure. In turning from locating topics toward action, Bowker et al. advise: "In building cyberinfrastructure, the key question is not whether a problem is a "social" problem or a "technical" one. That is putting it the wrong way around. The question is whether we choose, for any given problem, a primarily social or a technical solution, or some combination" (102). This premise that solutions to infrastructural issues

can take a variety of forms is promising in alignment with Dean's neodemocratic tactics—I think both lead to the prospect of utilizing whatever means available to intervene in an ineffective or unjust system.

1.3 The Arab Spring

I begin with an example often used as a positive illustration of social media's democratic potential: the Arab Spring, the revolutionary series of protests in the Middle East and North Africa that began in December of 2010. Books have been and continue to be written devoted to examining the role of social media in this complex series of events, and my brief analysis here can only begin to scratch the surface. However, it can serve as a preliminary illustration of the ways social media infrastructure configurations can help or hurt the outcome of public participation online.

In Democracy's Fourth Wave? Digital Media and the Arab Spring, Howard and Hussain track patterns of social media use throughout the interconnected wave of protests starting in Tunisia, picked up by Egypt, then rippling out to numerous countries including Libya, Yemen, Syria, and Bahrain. They summatively find that social media was central to political debate surrounding the Arab Spring; online conversations increased leading up to major protest events; and information about events spread significantly beyond country borders thanks to social media on the ground. So, it's easy to see why the Arab Spring is such a hailed example of bootstraps social media: everyday citizens orchestrated revolutions, and we can't even come together about whether a game designer deserves death threats for personal relationship choices?

However, in its more nuanced analysis, Howard and Hussain's research actually indicates a division in social media success that correlates along lines of infrastructural access. Though the Arab Spring protests were certainly mutually inspired, the events in each country took place in very different social contexts and led to mixed results. Two of the firmest regime overthrows of notorious dictators occurred in locations of protest with favorable access to and literacy with information infrastructure: Tunisia and Egypt. Where the contested regimes held, protesters' social media literacy and use had shallower roots and the government was able to contain the insurgency with firmer infrastructural control.

In both Tunisia and Egypt, the insurgence was led by young, educated, middle class, tech-savvy people—and in general the two countries have low median ages and widespread cell phone use (Howard and Hussain 48). This status of organizers certainly became an infrastructural advantage for the movement—it would have affected everything from pervasive sharing practices to their ability to implement their own systems or repairs on the dispersed network infrastructure of the country. For years prior to the Arab Spring, Tunisia and Egypt both had growing social media participation, where political criticism and debate brewed outside of the controlling grasp of state media, and built momentum leading up to the eventual spark of protests. When protests did erupt first in Tunisia, reporters and experts were surprised by how little involvement came from the country's traditional political parties and ideologies—the movement really was driven by the wired middle class. Papacharissi and Oliveira found some 1.5 million tweets utilizing the most popular hashtag of the period, #egypt. Tufekci and Wilson found high rates of Facebook use for protest coordination among those who participated in Egypt's primary demonstrations in Tahrir Square. Howard and Hussain contribute data about Twitter participation occurring in nearby countries

utilizing protest hashtags, finding spikes in participation of up to 3,400 tweets per day surrounding the overthrows of Ben Ali and Mubarak—meaning social media users in nearby countries were picking up conversations about the events in Tunisia and Egypt, and using them to spark discussion about freedom in their own countries. Tunisia and Egypt's success served as models inspiring other countries to begin protests facilitated by grassroots social media buzz.

But potential protesters in other countries weren't the only ones witnessing the government overthrows come to fruition in Tunisia and Egypt: neighboring regimes also watched as governments' inability to control their countries' information infrastructures meant they also couldn't control the revolutions. In Tunisia, hacktivists took down the country's stock exchange. In Egypt, Mubarak attempted to shut down protest network access in a number of ways, beginning with social media, which protesters circumvented through proxies (McGrath), building up to complete broadband shutdown, which happened at such a moment that it seemed to only provoke greater protest turnout. As organizer Waleed Rasheed wrote, "I would like to thank Mubarak so much...he disconnected mobile phones on January 27. More people came down into the streets on the 28th of January because he disconnected" (qtd. in Howard and Hussain 70).

In countries where protests started later, some governments got a better handle on controlling information networks sooner and with more force. This worked in combination with population internet literacy and access rates that were already lower than in Tunisia and Egypt (which, for some countries, was already due in part to longstanding government censorship). In Libya, turning off internet access was Gaddafi's first instinct when protests

started. In Bahrain, after several days of uncontainable demonstrations, the government cut out network access just before opening fire on protesters, leaving them unable to reach out for aid. Syria had been cutting off portions of internet access periodically since 2007, but during early protests the web was kept open, likely intending to track and entrap protesters' movement. In Morocco, Syria, and Bahrain, the state spammed activists' hashtags with progovernment messages and meaningless puff piece news. It's too simple to say these actions purely caused the continuance of the existing regimes—not all of these social media savvy governments even actually managed to suppress their revolutions: Libya eventually overthrew Gaddafi, though it took eight months of bloodshed; Syria is still in civil war today stemming from the protests that began during the Arab Spring. But it is clear that these governments had enough infrastructural dexterity to be able to put up stronger fights than the initial sensations of the overthrows in Tunisia and Egypt.

As my later examples will echo, the battles here became in large part over infrastructure: whoever has more powerful access and control wins. Looking at the Arab Spring this way helps to highlight that the "power of social media" it demonstrates is, in Bowker's frame, not a simple fact of either technological or social power, but an interaction of the complex elements and processes that unfolded differently in each country's context. Howard and Hussain conclude: "It does not make sense to argue that digital media cause civil society leaders or dictators to be more effective at their work. Technology tools and the social actors who use them, together, make or suppress political uprising" (31). In the cases of Tunisia and Egypt, the insurgence had clear infrastructural advantages in the reach of their habituated practices through interconnected systems: when one social media platform was infiltrated or shut off, protesters could easily implement a social fix and switch to

another platform already in their repertoire for strategic communication, or, they could take the technical route and use established protocol for proxies or other workarounds. For the Tunisian and Egyptian governments, adapting to situations seemed much less systematic. Though they could occasionally figure out how to make a move on the installed base of the network shared between protesters and regime, it's clear they didn't have solid social process infrastructure in place. Their efforts left holes, like when internet service providers only partially disconnected internet access in Egypt, because the government had never required this before, and the urgency and expectations of the situation weren't well established (unlike the situation in Syria, where network censorship occurs frequently and is a fairly smooth process as such).

In the network battle, Tunisian and Egyptian protesters had only to occasionally switch routes or repair small breaks, whereas the regimes were trying to lay brand new tracks for every move they made. When we look to the Arab Spring as our inspiration for effecting change with social media, we have to realize that, in effect, Tunisian and Egyptian protesters were not using the master's tools. The systems were not set up to work with the governments' infrastructural processes. The master's tools would have been the state media, which were completely in the regimes' pockets, and established political parties and unions, which had led protests many times before to rarely the level of success of the Arab Spring—they had become too much a part of the governments' established systems. The situations in Libya and Syria were more like this; social media strategy had been worked into the governments' processes, and so using social media didn't give such a boost to the protesters' cause.

In the U.S., we also don't gain an easy advantage in achieving our purposes, whatever they are, just by our access to social media infrastructure. Police already use the newest form of anonymous location-based social media, YikYak, to locate illegal activities on college campuses. First Lady Michelle Obama just went viral on short form video network Vine. We are the social media nation. This doesn't inherently mean that social media can't be used to effect change, but as I have argued throughout this chapter, social media doesn't automatically do it. In fact, for many of the noblest purposes, infrastructure may be working heavily against success—it's more like marginalized voices find themselves in the position of the Egyptian government: the system was not designed for them.

It's also significant that the protesters in the Arab Spring were ideologically mainstream. As *Spreadable Media* articulates, social media is really set up for the mainstream: whatever's popular is most visible and so becomes more popular. In the examples in the following chapters, the mainstream advantage is not the case. Part of this also has to do with communicative capitalism. Even with cultures of digital public debate taking shape in Tunisia and Egypt, they weren't really facing same challenges of excess that exist in U.S. conversation. Mainstream citizens were able to use social media to coordinate unified action against an obviously oppressive government. In America, certainly many activists see the problems with our government as obvious, but disagreement over what those problems are can be radical, and political debate in all forms of media is so constant and entrenched in opposing sides that coalition building and strategizing for substantial change can seem an insurmountable challenge. My argument in this thesis is that this cycle of endless, unproductive debate is infrastructurally embedded, with built-in bias against non-mainstream

perspectives. And if we're going to use social media to effect change, we have to disrupt the patterns and privileges of its infrastructure.

CHAPTER 2: MEMORY BEYOND CAPACITY: AFFECT AND RHYTHM IN DIGITAL MEMORY

[S] top mansplaining to us the purpose of The Onion's tweet. We get it! It was an attempt at satire given the sexist, racist, homophobic comedy on display at the Oscars. We are fully aware that The Onion doesn't actually think Quvenzhané Wallis a "cunt" but was mocking the Awards. We're not idiots. We're pissed that a 9-year-old, regardless of the intention, was exploited in such a sick way for laughs.

-- Rania Khalek, February 2013

The guises of "satire," "irony," and "humor" are not shields of armor against criticism. We did not misunderstand satire, "The Colbert Report," or white liberals. They misunderstood us, and we fought back.

-- Suey Park and Eunsong Kim, March 2014

In this chapter, I examine the movement of online discourse through the lens of rhetorical ecologies, leading to the identification of challenges with a particularly fluid element of infrastructure: memory, and its relationship to community.

2.1 Digital Media Ecologies

During the 2013 Oscars, *The Onion* tweeted a joke calling Quvenzhané Wallis, a nine-year-old black girl nominated for best actress, the c-word (qtd. in Daley). The *Onion* writer was attempting to join online conversation about the racist and sexist undertones of host

Seth MacFarlane's commentary with this "satirical" contribution, but he clearly crossed a line. Words with such oppressive histories, even when used in an effort to humorously call out oppression, most often end up just perpetuating it. The tweet was debated across the web for a week following the incident.

Organizations and public figures botch social media interactions, especially on Twitter, all the time. Often errors are the result of a total lack of attention, like when the official Twitter account for the National Rifle Association's journal, *American Rifleman*, tweeted, "Good morning, shooters. Happy Friday! Weekend plans?" the morning after a deadly shooting at the midnight premiere of *The Dark Knight Rises* (qtd. in Sutter). The person who posted the NRA tweet was unaware of the evening's events, and attempted to "join" the dance of conversation on Twitter by bursting onto the floor with earplugs on, without any regard for what song was even playing. But incidents like the *Onion* tweet take part in a more insidious pattern of a sort of tone-deaf attention that plagues online media when an individual or brand representative is aware of current conversations happening online, but doesn't really *listen* to them. They hear the song, but join the dance painfully off the beat.

As a theoretical framework toward mending these ruptures in online discourse, I find Jenny Edbauer Rice's rhetorical ecologies to be especially useful. Drawing on network theory and cultural geography, Edbauer Rice re-envisions the seminal rhetorical situation model of discrete parts in a closed system instead as a framework of rhetorical ecologies, providing space for movement and affect in the "mixture of processes and encounters" (13) that make up real scenarios of composition. Through an ecological model, "we begin to see that public

rhetorics do not only exist in the elements of their situations, but also in the radius of their neighboring events" (20). This expanded view of the rhetorical situation is essential to effective participation in social media, as we can see from the aforementioned Twitter debacles. Rhetors can be held accountable in online public forums for not paying attention to the context in which they are placing their writing, which is especially problematic because memory works differently in a digital environment.

Thinking about an ecological framework for digital media lends itself to considering the circulation of online discourse in terms of ecological (and infrastructural) cycles. Like water cycles between the atmosphere, precipitation, and ground, online media seems to similarly travel in a dynamic system that has no beginning or end, but can still be understood as a circular pattern of movement, a practice of conversation routinized so as to become an invisible part of social media infrastructure. Cycles of media interactions seem to "begin" (though cycles really just keep rotating) with some inciting event, like the Onion tweet. Responses to the event happen most quickly via social media, especially in the space where the event originated or was first discussed. So in this case, immediate reactions unfolded on Twitter through retweets and tagging. Then bloggers and journalists pick up the story for more extended reflection/reporting, which stimulates further response, in both short and long form, within and among the particular communities surrounding these various media sites. And so it was with business communications sites writing about the tweet as a social media failure, culture magazines writing about the nature of satire, and intersectional feminist blogs writing about the inextricability of race and gender in such "satire." At this point, conversation responding to the event slows as another cycle gains momentum. It is significant to note that the cycle surrounding the Onion's tweet can't be cleanly extracted

from its ties to the online media cycle of the larger event of the Oscars as a whole, but the two cycles also aren't one and the same. In other words, looking at the ecological cycles of online media provides a lens that both emphasizes the messiness of the mixture of rhetorical forces at play while also bringing a sense of rhythm by which to make meaning in the mess.

The rhetorical choices that go behind positioning one's writing within the ecology of online media fall under the rhetorical canon of delivery. The digital age has brought about a renewed focus on delivery, a canon nearly forgotten as rhetoric's historical focus shifted from speech to writing. In his theoretical framework for digital delivery, James Porter identifies distribution/circulation as a key element: "Distribution refers then to the initial decision about how you package a message in order to send it to its intended audience. Circulation refers to the potential for that message to have a document life of its own and be re-distributed without your direct intervention" (214). So a question of distribution would be whether a blogger decides to post her writing to her personal website/blog, a community collective blog, or a bigger media site. Circulation concerns involve the "the technological and rhetorical procedures for helping that document cycle in digital space" (214). Circulation decisions might be things like participating in trending hashtags on Twitter, using Trackbacks to connect an article to other articles in the conversation, and finding the perfect timing for a contribution. These questions of digital delivery are tied up with heretofore under-considered questions of memory, the other forgotten canon of rhetoric.

Historically, reducing the classical rhetorical canon of memory to a matter of storage has been all too easy. As Edward Corbett famously said in his 1965 reclamation of classical rhetoric: "not much can be said, in a theoretical way, about the process of memorizing; and

after rhetoric came to be concerned mainly with written discourse, there was no further need to deal with memorizing" (5). Even in recent efforts to update the canons for the digital age, there remains an inclination to distill memory to the capacity for storage—not helped by the fact that our label for the quantity of data a computer can hold is "memory." If the rise of print made discussions of memory superfluous, then our endless capacity for digitally storing information nowadays should make memorization a flagrant anachronism.

I argue instead that digital media necessitates renewed attention to the rhetorical canon of memory precisely *because* of our newfound storage capabilities. To some extent the digital turn is an intensification of the data storage made possible by print. Today we can access personal archives of every small thought we've ever expressed via our Facebook "timeline." Collin Brooke's work on rebuilding the canons for new media looks at these new feats of storage, but also adds the dimension of practice. Brooke argues that we construct our memories through patterns, and digital tools such as syndication feeds and tag clouds externalize these construction practices, as well as offer detection and processing of our patterns. Here I will take up Brooke's attention to digital practices of memory, but with a focus on their public nature.

Unlike personal journals and libraries in the age of print, our digital archives are highly communal and openly accessible in a new way. In the ecological cycles of conversation on social media, members of niche communities relate to one another by drawing on their shared digitally stored memory—this operates as an unconscious function of community infrastructure. However, as I'll later demonstrate with the two cases of controversial satire referenced in the epigraph to this chapter, presumptions about shared

memory storage can cause problems for cross-community communication, because we forget how much memory is also about feeling—remembered in the body, not our Facebook timeline. We need a more robust rhetorical framework for how the infrastructure of memory operates in online discourse, as well as new strategies to address the challenges digital memory presents. Toward these ends, I seek to first recover some of the nuance latent in the ancient Greek canon of memory, before looking toward bringing these echoes from classical rhetoric to bear on digital media.

2.2 Ancient Greek Roots for Digital Memory

In her 1966 Art of Memory, Frances Yates opens up the rhetorical canon of memory circling out from Rhetorica ad Herennium, which contains the fullest surviving account of memory in the Greek tradition. The challenge of ad Herennium as well as earlier works on rhetoric is that they address memory merely as review for audiences presumed to already be well versed in its significance and uses. Initially, ad Herennium identifies two categories of memory: natural and artificial. Natural memory is that "which is imbedded in our minds, born simultaneously with thought" (section 16). Artificial memory is that "which is strengthened by a kind of training and system of discipline" (section 16). Training in the art of artificial memory involved building "places" (loa) in the mind, in which one would place "images" for remembering either "things" (res) or "words" (verba). Yates points out that things and words have precise meaning for the Greeks here. As Cicero delineates them, "things" are subject matters relating to truths; and "words" are "the language in which that subject matter is clothed" (Yates 9).

From here it's easy to see how one might summarize memory as a method simply for storing information by memorization. However, there are signposts pointing toward deeper roots. As Cicero tells us, "Memory is the firm perception in the soul of things and words" (Cicero qtd. in Yates 8-9). Here we have not just presence but perception, not just a fact but a subjective construction. And it's not in the mind but the soul. Cicero was likely responding at least in part to Plato's views on memory. Of course Plato is notorious for his proclamation that writing would ruin memory: "If men learn this, it will plant forgetfulness in their souls; that they will cease to exercise memory because they rely on that which is written, calling things to remembrance no longer from within themselves, by means of external marks" (551). Brooke argues, following Ulmer, that Plato's distrust of writing stems from a detestation for sophistic artificial memory training altogether, as it was taught by the sophists and obscured truth. Memory in the soul, however, Yates argues, was deeply embedded in Plato's rhetoric:

The *Phaedrus* is a treatise on rhetoric in which rhetoric is regarded, not as an art of persuasion to be used for personal or political advantage, but as an art of speaking the truth and of persuading hearers to the truth. The power to do this depends on a knowledge of the soul and the soul's true knowledge consists in the recollection of the Ideas. Memory is not a 'section' of this treatise, as one part of the art of rhetoric; memory in the Platonic sense is the groundwork of the whole. (37)

While we might not share Plato's understanding of truth, this reading of the significance of memory and its connection to the soul offers a rich foundation for the canon of memory. Kathleen Welch nicely adds to Yates's reading that "Memory is also the

existence of the past within the present. It is there that culture and rhetoric largely exist, for Plato and for us" (Welch 98).

Sophistic artificial memory training in ancient Athens gymnasia also add complexity to classical notions of memory, Plato's objections aside. As Debra Hawhee recovers in her 2002 article and 2005 book, gymnasia were popular public sites where young men gathered to develop their citizen êthos. A significant focus at the gymnasia was, as our inheritance of the word suggests, physical training in such athletics as running and wrestling. Gymnasia were also sites at which sophists were known to instruct young Athenians in the art of rhetoric. As Hawhee explains, athletic training at the gymnasium was conducted to music (146). And while rhetorical training likely took place in different rooms in the gymnasium, the music undoubtedly could be heard throughout the space, and so rhetorical and athletic training took up a common rhythm. Hawhee argues that the coexistence of athletic and rhetorical training in these spaces created "a curious syncretism between athletics and rhetoric, a particular crossover in pedagogical practices and learning styles, a crossover that contributed to the development of rhetoric as a bodily art: an art learned, practiced, and performed by and with the body as well as the mind" ("Bodily Pedagogies" 144). In this lineage, building the artificial memory took part in rhetorical training as an embodied practice.

Reading deep embodiment and knowledge in the soul back onto the rhetorical tradition of memory certainly offers richer ground for a contemporary canon of memory than rote memorization or size of storage. In "The Future of Forgetting," Pruchnic and Lacey contribute to the revival of historical complexity of memory for digital rhetoric by

recovering the Greek concept of *mnemosyne* or "remembrance" from mythology, which "was consistently invoked to both assay the divides and bridges between human interiority and cultural exteriority as well as to delineate the spiritual or intellectual capacities of humans from their affective and biological facilities" (474). These functions of *mnemosyne* seem to fit well with Yates's and Welch's arguments for the positioning of memory—it is something that connects data about the past with humans' interpretive perception.

Pruchnic and Lacey separate out the "programs" that structure memory, like the classical containers of "places" and "images," from the "content" of memory, like the classical "things" and "words." Doing so allows them to argue that in our contemporary moment, emphasis shifts from shared "content" of memory used for persuasion to shared externalized "programs" that offer infrastructure for holding the data of personal memory:

Analyzing contemporary practices of rhetorical memory in reference to their "program" rather than "content" aspects, however, suggests that the externalization of memory has become its own "framework" very different than the one we might attribute to history; here the "universality" comes not from a static representation that all are meant to share, but a dynamic process of exchange in which all shared aspects of personal memory become variables for the flexible sequences of identification, targeting, and marketing that mark contemporary media environments. (481)

While the structures of memory still echo those of ancient Greece, their *use* today is novel. No longer does shared memory necessarily mean shared content, but shared systems. The infrastructural mechanisms for identifying someone's particular memory content is what's

universal, not the content itself. Pruchnic and Lacey argue that this shift means externalized individual memory content can be individually targeted by marketers through these standardized systems.

However, as memory programs are externalized, not all individual memory content is actually exported to them. According to Pruchnic and Lacey, affective associations with memory become internalized. By affect here they refer to Massumi's notion of precognitive embodied feeling—"the role of biology in human subjectivity" (Pruchnic and Lacey 483). Pruchnic and Lacey demonstrate this affective memory internalization with such research in psychology and neuroscience as a study showing that participants in "The Pepsi Challenge" preferred Pepsi when they tasted both Pepsi and Coke in unlabeled cups. But when the sodas were properly labeled, participants claimed the Coke tasted better. Researchers found that the regions of the brain associated with memory were activated as participants were tasting whatever was labeled as Coke, illustrating the tight link between precognitive memory and affective associations (488). So as our systems for storing memory data become digitally externalized, our memory tied to feeling remains fiercely internal, infrastructure of the mind, to the point that we can be totally unaware when our affective memory is activated.

I find that Pruchnic and Lacey's discussion of the separation of affective memory from processed experiential memory, or what I'm calling "memory data," is perhaps predicted in the most basic of categorizations in *ad Herennium*—and the most contentious for Plato: "natural" versus "artificial" memory. While most obviously distinguishing a person's memory abilities before and after training, it might also suggest a distinction between "natural" memory as attached to feeling (or for Plato, the soul) and "artificial" memory

trained to hold data. The implications of the externalization of memory programs and internalization of affective memory come together for Pruchnic and Lacey with the rise of niche demographic political targeting. Campaigning is no longer (only) about marketing to broad audiences with a universal appeal to affective memory—it has become instead significantly a process of data-aggregating micro groups to target with precise cocktails of words and images that appeal to personal memory and illicit an affective response. But the splitting of memory data from affective memory also has significant implications for the way public discourse plays out online more broadly.

2.3 Memory and Cross-Community Communication

The Twitter hashtag #CancelColbert started when the Colbert Report show Twitter account tweeted, "I am willing to show #Asian community I care by introducing the Ching-Chong Ding-Dong Foundation for Sensitivity to Orientals or Whatever." This tweet was an abbreviation of a longer joke made on a recent episode of the Colbert Report meant to satirize Washington Redskin team owner Daniel Snyder's creation of the Washington Redskins Original Americans Foundation. Twitter activist Suey Park soon responded to the tweet with, "The Ching-Chong Ding-Dong Foundation for Sensitivity to Orientals has decided to call for #CancelColbert. Trend it."

The ensuing debate was plagued by what Krista Ratcliffe would call dysfunctional silence—people weren't really listening to each other. Or particularly, Colbert's defenders weren't really listening to Suey Park and her supporters. The most common reaction from

Colbert fans was along the lines of: "@suey_park It would be awesome [if] you could understand satire...#CancelSueyPark" (Chris Abraham). The thing is, Suey Park and others critiquing the tweet did know it was satire. They just didn't think it was funny. Park was attempting to make a nuanced critique about turning Asians into the easy punchline of jokes, and the racism still inherent to the joke even as it was satirizing racism seen as "worse." But even in subsequent long form coverage of the debate, few Colbert supporters were able to accurately represent her point.

The issue of the externalization of memory programs and the internalization of affective memory surfaces here as an infrastructural barrier, in that multiple niche communities were communicating within the same memory system, but they were calling upon completely different memory content and affective associations. In other words, the shared memory space seems to lead to conversation that presupposes shared memory—which causes problems for cross-community communication.

To illustrate by contrast, Aristotle says that, "Well known actions should [only] be recalled, [not described in detail]. Thus many [epideictic speeches] have no need of narrative, for example, if you wish to praise Achilles; for all know of his actions..." (239). Aristotle is pointing out that a speaker doesn't need to repeat what's stored in his audience's shared memory. In ancient Greece, such an expectation of broad public knowledge could be assumed. To extrapolate this logic to the digital: if memory is now stored externally, accessible by all, and infinite in size, what need would there ever be to repeat a memory? Here we see the problematic assumptions of shared digital memory systems: 1) that operating in the same memory network means you've seen and have memory of the same

things; 2) that if you don't have memory of the same things, you will take the time to research those things you didn't know and therefore gain memory of them; and 3) in retrieving those memories you originally missed, you will also gain memory of the corresponding affective associations you missed.

Instead, what actually stays present for people is only the affective memory of individual experience—the memory itself drops out, "stored" externally. Groups are still able to communicate intra-communally because they have shared experience and thus common affective memory. Pruchnic and Lacey predict:

[T]he future of memory as a rhetorical force, will be tied to the "future of forgetting": the ways in which our experiences are externalized in various media and forgotten by us or become embedded in our very affective dispositions and responses—their obscurity to our present consciousness is in many ways proportional to their effect on our future actions. (491)

In the #CancelColbert controversy, from someone who follows intersectional feminist debates online, I felt the echo of dozens of previous controversies about racism and privilege. I immediately *felt* what Suey Park was talking about. But I remembered the *content* particularly of one controversy I've recently been writing about (and likely because I've recently been writing about it): the scandal over the Onion calling Quevenzhané Wallis a c-word on Twitter during last year's Oscars. The incident has much in common with #CancelColbert concerning the nature of satire, the medium of Twitter, and the social embeddedness of racism. And yet I can find only one explicit reference to the Oscars Onion controversy in the #CancelColbert fallout: it's someone calling out MSNBC host Touré for

flip-flopping to the side of the satire defenders, after last year being outraged over the Quavenzhané Wallis tweet. Perhaps this has something to do with different community associations, and thus different affective memories evoked by the different events.

Beyond hyper-targeted marketing and divisive arguments between groups on social media, the externalization of memory programs has obviously made some positive feats of memory newly possible: our social media profiles act as digital scrapbooks archiving the details of our lives. Collaborative communication within groups seems to certainly be enriched by the easy activation of shared memory in digital systems. And I still think there's significant potential for cross-community collaboration to be enabled by these very same systems that store communities' memories with such open access. But we first need to recognize that shared memory space does not necessarily mean shared memory—or affective response. We need a better way to activate memories than telling people to "educate themselves" when they stumble into a conversation calling on memories they don't share. This is why I pose that digital issues of memory are tied up with matters of delivery, and why we need a new rhetorical training for digital memory in order to operate more effectively within the shared memory systems through which digital media circulates.

2.4 Rhythm and Listening: Toward Rhetorical Training of Digital Memory

I want to propose an embodied rhetorical training of memory built from the three tenants of sophistic pedagogy that Hawhee restores: repetition, response, and rhythm.

Isocrates articulates these tenants especially well in his discussion of the fusion of rhetorical

and athletic disciplines as "complementary, interconnected, and consistent with each other" (239) and taught by similar means. After physical and rhetorical trainers have

given [their students] experienced and detailed knowledge of these, they again exercise the students and make them accustomed to hard work and then force them to synthesize everything they have learned in order that they may have a more secure understanding and their views (doxai) may be better adapted to the right moments (kairoi). It is not possible to learn this through study, since in all activities, these opportune moments elude exact knowledge (episteme), but in general those who are particularly attentive and can understand the consequences most often apprehend them. (240)

Here we see the coalescence of the three R's in Isocrates' description of training. That "opportune moments elude exact knowledge" suggests that instead a sense of the correct response must be acquired through "attention," or rhythmic repetition of the hard work of exercise and synthesis of one's rhetorical/athletic training. This conveys a feeling for kairos as embodied through an athletic rhythm. For digital memory training, I argue that one has to become attuned to the rhythm of the ecological cycles of digital media moving through the built memory systems of the web. This means listening better in situations like the #CancelColbert controversy.

The version of "listening" to media ecologies that took place with #CancelColbert was self-interested and uncritical, "dysfunctional silence," as previously mentioned, as opposed to what Krista Ratcliffe would qualify as "rhetorical listening." Ratcliffe's theory focuses particularly on building a "code of cross-cultural conduct" through a "stance of

openness" in listening that recognizes troubled identifications of gender and whiteness (17). Those who rushed quickly to assumptions that Suey Park misunderstood the satire of the #ColbertReport tweet were not listening rhetorically to the implications of gender and whiteness in this situation. I think Ratcliffe offers a useful framework for thinking about how to more effectively find the rhythm of the ecologies of one's surroundings. She suggests,

[U]nderstanding means more than simply listening for a speaker/writer's intent. It also means more than simply listening for our own self-interested readerly intent

Instead, understanding means listening to discourses not for intent but with intent—with the intent to understand not just the claims but the rhetorical negotiations of understanding as well. (28, emphasis in original)

Rhetorical listening means pausing before jumping to our intuitive self-interested reactions to consider the other understandings at play in the discourse. It means "identifying the various discourses embodied within each of us and listening to hear and imagine how these discourses might affect not only ourselves but others" (28). It means training our affective memory.

In the case of the *Onion* writer, I think he was listening to the situation at the Oscars, and picked up on host Seth McFarlane's intent and affective associations behind numerous jokes laced with racism and sexism. The tweet was a satirical response to this understanding, fostered by the *Onion* writer's self-interested intent of finding a way to make a kairotic joke. What the Onion writer did not do was listen to the rhetorical negotiations of understanding

at play: he failed to identify the ways in which his response would reinscribe MacFarlane's troubled associations of gender and whiteness in the surrounding ecology.

If the challenge of affective memory is that we react to it before we even realize it, one potential solution I draw here is to consciously slow down reaction time. But another could be to develop more memory tools, via Brooke, to facilitate means of at least accessing archives of the specific memory content that has contributed to the affective associations at play in a particular discourse. I'm imagining here a program that runs alongside all our memory storage systems and detects differing memory data patterns—so that if we aren't going to remember the events of the last controversial satire cycle, perhaps we can train our artificial memory machines to at least point us to the appropriate memory data. I see both of these possibilities as infrastructural interventions, one social, one technological, for addressing this problem of the ill-fittedness of the rhetorical canon of memory into the infrastructure of social media.

CHAPTER 3: THE INFRASTRUCTURAL ECOLOGY OF SLUTWALK

Where chapter 2 offered an extended consideration of one problematic element of online infrastructure, this chapter attempts to trace the coordination of many infrastructural mechanisms through the online ecological cycle surrounding one event: SlutWalk NYC, a feminist demonstration that took place in October of 2011, precipitated by a February 2011 comment by a Toronto police officer leading a campus safety session, that women should avoid dressing like sluts in order to prevent being sexually assaulted (slutwalknyc.com). SlutWalks quickly popped up all over the U.S. and Canada, and later internationally, in which men and women in varying degrees of dress marched to reclaim the term. This chapter looks at how the infrastructure of social media can hold biases that stunt the potential of conversation and community building.

3.1 The Defensiveness and the Deletion

Following the ecological cycle of online conversation as discussed in the previous chapter, Flavia Dzodan's "MY FEMINISM WILL BE INTERSECTIONAL OR IT WILL BE BULLSHIT!" blog post was sparked by a photograph from SlutWalk NYC of a young woman holding a sign that says "Woman is the N* of the World." This photo was featured in online articles about the event before it was added to the SlutWalk NYC Facebook page, whereupon an all-out comment war ensued. After the first few critical comments, an event

organizer responded that SlutWalk NYC did not support the sign and, once they noticed it, had a conversation with its holder about why it was problematic and asked that it be put away. This was the only response posted by a SlutWalk organizer.

Then, in the photo's comments on the SlutWalk NYC Facebook page, the defensiveness began. As some started trying to argue for the sign's appropriateness in context, we again see the pattern of dysfunctional silence, in which real communication is barred:

Amina Ali This is the title of a song written and performed by John Lennon and Yoko Ono in the 1970s. You have to listen to the whole song to understand it. It is not offensive to anyone other than sexists in its entirety and was a very powerful message, then and now. I can understand how the sign out of this context would be disturbing. But I urge everyone to check out the full lyrics and listen to the song and judge for themselves.

Tyrra Kiri Adrien Ramos Whether the Lennon song is meant to be offensive, that word should just not be said by any white person.

Amina Ali I think it is more productive to look into the deeper meaning of things than to exercise censorship.

Christina Jaus @ Amina, did you talk to any Black people (women or men) in the 60's and did they themselves tell you at that time that they felt empowered by that John Lennon song?

(qtd. in Peterson)

The conversation continues like this, an endless back and forth of women of color and allies trying to convey, with varying degrees of patience, why the sign was offensive, while

(presumably) white women and men continued to defend its use. The woman in the photo herself chimed in, apologizing for "being photographed with" the sign and explaining that she did not intend to offend anyone, while still insisting that "The word and its meaning is wrong, but the sign is true. There is no contest about it" (qtd. in Peterson).

As mentioned briefly in the introduction, this issue of white women feminists not being able to take criticism from feminists of color is a pattern of discourse with a history extending back well beyond social media. Drawing from Audre Lorde, Sara Ahmed discusses anger as a productive feminist stance, but "white feminists refuse to hear [women of color's] anger by returning this anger in the form of defensiveness (Lorde 1984: 124)." (Ahmed 178). Instead Ahmed proposes that feminists must learn to receive other feminists' anger as well, rather than solely channel their own (178).

In the last chapter, I introduced the possibility of rhetorical listening as a strategy to adjust for issues of the infrastructural split of memory in online discourse. In a similar vein, I want to consider for a moment the implications of reading the discursive phenomenon of defensiveness as infrastructural. If white women's defensiveness in the face of women of color's anger is a routinized protocol as part of a biased infrastructure, then we can talk about making it visible and changing that protocol to a stance of openness in steps of small increments. It's possible I'm pushing my frame too far here, but I find I'm drawn to this posing of the problem to work in response to feminist allies, usually white men, who say, "I agree with you—Racism! Sexism! But you can't ask people not to defend themselves." When viewed within an infrastructural system, the discursive pattern of defensiveness perhaps can be seen better to scale with its role in infrastructural bias.

The photo with which this initial comment debate erupted was soon deleted from the SlutWalk NYC Facebook page, taking all of the debate along with it. Luckily, Latoya Peterson documented most of the conversation and transferred it over to a post on Racialicious. This is an area where I would argue the intersectional feminist community online has adapted to one way social media infrastructure works against them: deletion. This trope of deleting something controversial is a pervasive infrastructural protocol of the web. It's particularly common in contexts like this one, where rather than break the pattern of discursive defensiveness and rupture infrastructural invisibility, many rely on the learned practice of deletion to destroy all evidence of a disruption.

3.2 The Comment and the Link / The Community and the Public

From Peterson's post on Racialicious, conversation continued in the comments, though at that point it became primarily amongst intersectional feminists agreeing in disbelief, with just a few people from the Facebook page who had located the blog. This raises questions about audience and linking. There are (at least) two audiences in play in the ecology of online intersectional feminism: the intersectional feminist community, and an offending community and/or some sense of a broader "public."

On what I'm calling "collective community blogs" like Racialicious and Crunk

Feminist Collective, the mission statements and comments make it clear that these are first

and foremost spaces of intra-communal support, which come with their own infrastructure

of discursive standards. This comment, responding to one by Latoya Peterson about getting

"racism fatigue" and having to stop documenting the Facebook photo debate, illustrates the Racialicious environment nicely:

k.eli LOL @ racism fatigue. There needs to a PSA for that condition:

Hello POC. Have you read asinine comments on the internet that made you want to throw your computer against the wall? Have you overheard conversations that made you wonder what century you were living in? If so, you may be suffering from racism fatigue. As many as 99.9% of POC have suffered from this condition at some point in their life, but there is hope. Racialicious.com - a place where you can be surrounded by rational, intelligent human beings that will help restore your faith in humanity.

But these are also anti-racist writers who want to promote change. Racialicious reports that over 70% of their readership is of color, which suggests that they do have a not-insignificant white readership. Their "Comment Moderation Policy" also gives advice that seems especially targeted toward outlining for white readers what's appropriate in this space. Crunk Feminist Collective's mission statement explicitly defines it as a "space of support and camaraderie for hip hop generation feminists of color, queer and straight, in the academy and without." But, at least in CFC's SlutWalk posts, there seems to be much dialogue between white feminists and feminists of color. I actually think that the collective community blogs are good spaces for white feminists to quietly and respectfully learn more about intersectional feminism. The discussions on these sites are articulate, informal, and funny, and allow readers to observe intersectional feminism in practice. But how do you attract those from the SlutWalk photo debate, without inviting madness into your comment infrastructure?

Before the sign controversy began, women of color had been blogging critiques of SlutWalk since the first event took place in Toronto in April 2011. Brittney Cooper at Crunk Feminist Collective positioned a response to SlutWalk in careful solidarity with it if it were to present itself as a movement that speaks specifically to white women's struggles. Keli Goff wrote on Huffington Post in firm opposition to SlutWalk, because its tactics still ultimately signal that women will always be willing to take their clothes off for attention. Civil and human rights organization Black Women's Blueprint wrote an open letter to SlutWalk, posted on Huffington Post, asking that they "be even more radical and break from what has historically been the erasure of Black women and their particular needs, their struggles as well as their potential and contributions to feminist movements and all other movements." These pieces seem more targeted toward SlutWalk participants and the broader public. Based on the response from white feminist Shira Tarrant citing these critiques in her "call to end the SlutWars," they did reach that audience at least in part. Tarrant's article was published following the sign controversy, but whether news of the blatant racism present at SlutWalk didn't reach her or she willfully ignored it is unclear. Rather, she asks why critics of SlutWalk couldn't just write about the problem of rape, instead.

But the lines between community and public space aren't explicitly clear. For one, some blogs seem to be speaking to different audiences at different times, but do everything from their home site. At least for CFC, it seems that posts follow the same process for sharing with any purpose. Keli Goff's article on the Huffington Post Politics Blog, which apparently did reach a broader audience, became host to a slew of comments rife with privilege, but without even the balanced opposition that was on the SlutWalk NYC Facebook photo. The presence of such unopposed comments would seem to have a

negative impact on the article's reception, particularly for those not well-versed in intersectionality--who would be the very target of an article published outside the community's spaces. This poses an infrastructural conundrum of choosing a sharing route with a wider reach, but in a space that might undermine the message, versus staying within the controlled infrastructure of your own space, but with a more challenging route for exposure.

3.3 The Shout, the Disruption

On Tiger Beatdown, Dzodan writes addressing all of this and more as "layers" of the week's shit puff pastry. She writes about her sadness and anger that the young woman holding the sign couldn't do a minimum amount of homework beforehand to understand how it could be hurtful. She writes in reaction to the photo debate on Facebook, "These people were supposed to be my fellow feminists. This, I've often been told, IS MY SISTERHOOD!" She writes that it was inexcusable for SlutWalk NYC to allow attacks on women of color to go on for so long, then, instead of taking responsibility for letting it happen, to just delete everything, erasing the opposition to the attacks as well. She writes about how, per Tarrant's article, "if I am angry at any of the above, I should weep in silence and not tell anyone. Because if I say as much as one word, I am ruining Slut Walk for everybody." She then turns to two other happenings online that week: how Twitter erupted in cheers of "a victory for feminism!" when three African women won the Nobel Prize, and how there has been little response from feminists to recent reports about the corporations profiting from the detention and deportation of undocumented immigrants. In bringing in

these other issues, Dzodan says she cannot help but play "connect the dots" with the intersectional landscape of oppression—all part of "the same gigantic, oppressive shit puff pastry."

Dzodan's piece is a call to arms, a lament, screaming "at nobody and everybody." It's a direct appeal to feminists to *do better*:

You, person I might have never heard from who might have not even commented on this blog or any of the other publications where I can be regularly found scribbling my discombobulated ideas. Even though we never met before, I AM ACTUALLY, SCREAMING AT YOU RIGHT NOW. MY FEMINISM WILL BE INTERSECTIONAL OR IT WILL BE BULLSHIT!. [...]

And here's the thing: while I am screaming at you, I am also asking, nay,
DEMANDING that you scream with me. And I am asking that you become as
angry as I have been this past week. Because without anger and without righteous
indignation and without the deep, relentless demand for change, my feminism,
YOUR feminism, everyone's feminism will fail. It will be bullshit.

Dzodan's writing in this piece is powerful and her message important, and that's been well recognized within the online intersectional feminist community. "My feminism will be intersectional or it will be bullshit!" has become a rallying cry—an "Ain't I a woman?" (with, I concede, similar issues of being pulled from context and flattened) for the 2010s digital world.

Even the comments section takes a subversive turn with privileged and racist comments:

STELLA wrote:

link to A Certain John Lennon Song. The caption under the song tells us all to "listen before you make judgments." I thought this would be super-productive! Because I'm Stella, and this is how I

Hi, I'm Stella! I know I just met you all, but I had a swell idea! I thought I would post a YouTube

roll. Sadly, since I did not include an actual comment, Sady now gets to edit my comment to tell you

what I was actually saying, which is "stupid ladies of color worryin' bout racism and gettin' mad,

why can't you chillax and listen to the luscious vanilla-flavored tones of a dead hippie as he tells you

I'm oppressed?"

<3

Stella

STELLA:

WE AT TIGER BEATDOWN HAVE CONSIDERED YOUR COMMENT
SUBMISSION. REGRETTABLY, WE ARE NOT PUBLISHING ANY MORE
STUPID COMMENTS IN THIS ISSUE. ATTACHED, PLEASE FIND A
YOUTUBE VIDEO WE FIND SUITABLE TO REPRESENT OUR DETAILED
RESPONSE.

LOVE,

TIGER BEATDOWN

PS: YOU LOSE. GOOD DAY, STELLA.

I feel compelled to pay tribute to Dzodan's work here because I think she somehow is able to transcend the communicative capitalist cacophony in this moment—she breaks the

standards of appropriate public debate and respectability politics, writes in all caps and bold, undoes comment moderation protocol, to SCREAM at us, to channel her anger as Lorde tells us and Ahmed writes, because to be against something through anger is to be for something else, even if we cannot fully articulate what that something else might be yet, except that if it's not intersectional, it's bullshit. She's disrupting social media infrastructure.

Yet I find the biggest infrastructural bias for marginalized voices trying to make themselves heard on the internet is still this conundrum of exposure. To return to that key premise of Jenkins et al.'s spreadability: media spreads when it's adds to conversations people are already having. And to a large degree, intersectional feminist bloggers are already doing this with the ecological cycles of their conversations as they reach those already *within* their community: all of these SlutWalk pieces emerged around the same series of events, and spoke in response to one another, fitting exactly the spreadability theory that "Often, a media text spreads particularly far when it depicts a controversy a community cares about at the precise time it is looking for content which might act as its rallying cry" (ch. 5). This fits the uptake of "My feminism will be intersectional or it will be bullshit!" to a T.

But again, what about reaching audiences that are not already having the conversation? What about reaching an audience having a parallel conversation? Even if Dzodan transcended communicative capitalism and disrupted the infrastructure with something to say, she still was likely caught in the net of infrastructural bias in terms of reach. A major question that *Spreadable Media* leaves unaddressed in looking "through" rather than "at" social media infrastructure (Johnson, 2), is what actually happens to the information between one person's decision to share and another person's decision to click. Take, for example, Facebook, and the algorithms it uses to determine what "stories" to

populate in someone's newsfeed. It seems clear that it, too, follows the confirmation bias algorithm: you'll only see more of what you already want to see. But what would it take to get an intersectional feminist blog post to show up toward the top of a mainstream feminist's newsfeed? To get the girl from the "Women are the N* of the World" photo to make the jump from the conversation on Facebook to the blog post at Racialicious? To read "My Feminism Will Be Intersectional or It Will Be Bullshit"?

3.4 The Memory

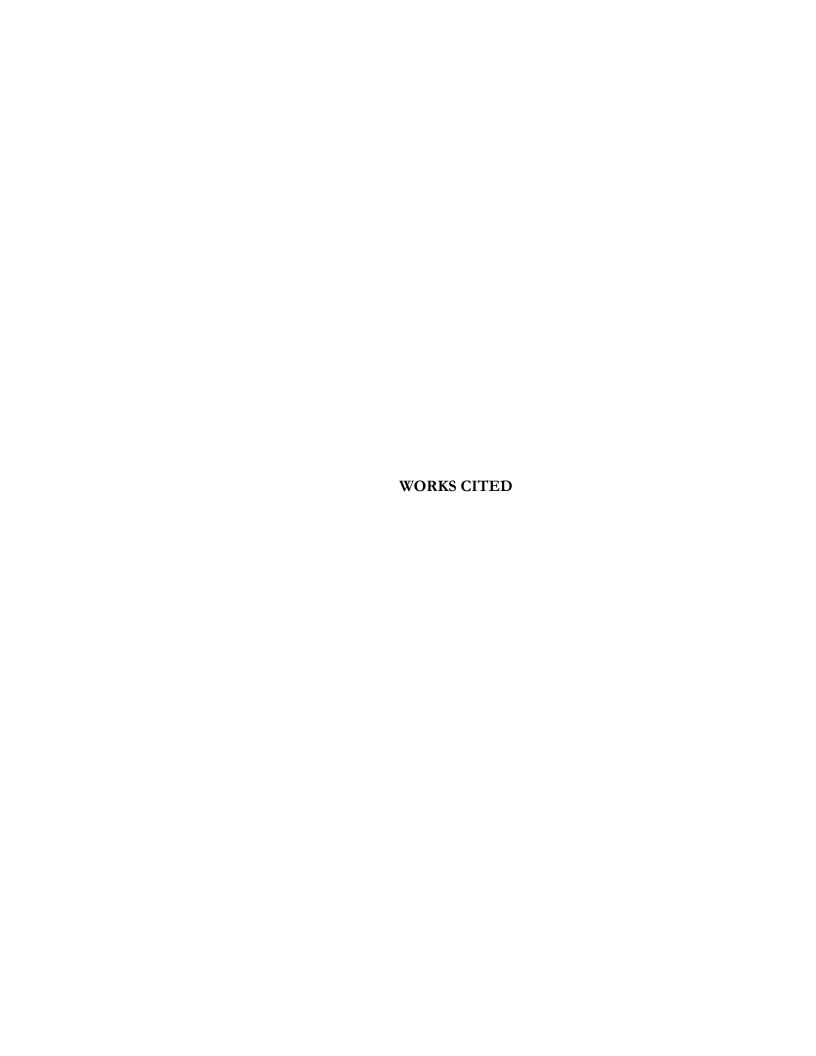
I finally swing back around to memory in order to account for the ways in which the work done in response to SlutWalk did bring about change. SlutWalk NYC actually slowly but quietly fell apart in the aftermath of the controversy over the photo. SlutWalk Toronto and others wrote anti-racism statements. The intersectionality slogan is certainly not insignificant. And the communal affective memory of this carries on into new conversations in the intersectional feminist community.

But the nature of SlutWalk NYC's disbanding points back to the challenges of digital public memory for the ecological cycles of these conversations. The fact of and events leading up to SlutWalk NYC's death were not the easiest to uncover. After digging through abandoned webpages and social media sites, I found that they did hold a meeting with Black Women's Blueprint to discuss how to move forward. Then, after a silence of a couple months, they came back in January 2012 with a big event and a new name. And then, nothing. The only thing I could find resembling an official statement on their disbandment was a Facebook post made in March 2012. There are dozens of SlutWalks still happening across the country each year, and I can find very few critiques of the event or references to

the controversy made in the two years since, and no articles following up about the fate or SlutWalk NYC.

Variations on this conversation cycle keep repeating. Controversies pop up; intersectional feminists respond; some concrete change may take place, but more often it doesn't; and then it fades away, staying in the memory of the intersectional feminist community, but not the broader public. Records of these cycles can be difficult to locate even for those who actually remember them, not to mention for those new to the conversation. The infrastructure of digital memory is not working in intersectional feminists' favor. And SlutWalkers continue on undisrupted.

They should be disrupted.



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